TENDER REFERENCE NO.: KK/372/2025/LAB(TC)

MINISTRY OF HEALTH
NEGARA BRUNEI DARUSSALAM

TO SUPPLY AND DELIVER AUTOMATED MYCOBACTERIA LIQUID CULTURE & ANTIBIOTIC SUSCEPTIBLITY TESTING WITH EQUIPMENT RENTAL FOR NATIONAL MYCOBACTERIA REFERENCE LABORATORY, DEPARTMENT OF LABORATORY SERVICES, MINISTRY OF HEALTH FOR A PERIOD OF FIVE (5) YEARS USAGE

TENDER FEES : $500.00

RECEIPT NO. :

CLOSING DATE : ON TUESDAY, 13/01/2026

TIME : 2.00 PM

FOA :

THE CHAIRMAN
MINI TENDER BOARD, TENDER BOX
GROUND FLOOR, MINISTRY OF HEALTH
COMMONWEALTH DRIVE
BANDAR SERI BEGAWAN BB3910
NEGARA BRUNEI DARUSSALAM

(CLUSTERING)

SECTION 2

SPECIFICATIONS AND REQUIREMENTS

TENDER REFERENCE NO: KK/372/2025/LAB(TC)

INVITATION TO TENDER
TO SUPPLY AND DELIVER AUTOMATED MYCOBACTERIA LIQUID CULTURE & ANTIBIOTIC SUSCEPTIBLITY TESTING WITH EQUIPMENT RENTAL FOR NATIONAL MYCOBACTERIA REFERENCE LABORATORY, DEPARTMENT OF LABORATORY SERVICES, MINISTRY OF HEALTH FOR A PERIOD OF FIVE (5) YEARS USAGE

DELIVERY PERIOD AFTER PO ISSUED	**PREFERABLY 4 – 8 WEEKS AND NO LATER THAN 12 WEEKS AFTER ISSUE OF PURCHASE ORDER**

NO.	ITEM DESCRIPTIONS AND SPECIFICATIONS	PACKAGING SIZE	TOTAL ESTIMATE USAGE / YEAR
1	**FLUORESCENT GROWTH DETECTION TUBES (7 ML) FOR AUTOMATED MYCOBACTERIAL CULTURE SYSTEM;** compatible with existing automated liquid culture instrument in use at the National Mycobacteria Reference Laboratory	100 tubes/ kit	220 kits
2	**ENRICHMENT SUPPLEMENT KIT FOR LIQUID MYCOBACTERIAL CULTURE MEDIUM, CONTAINING GROWTH SUPPLEMENT AND ANTIBIOTIC MIXTURE FOR CONTAMINATION CONTROL**, compatible with existing automated liquid culture system in use at the National Mycobacteria Reference Laboratory	100 tubes/ kit	220 kits
3	**SPECIMEN DIGESTION-DECONTAMINATION REAGENT KIT (NALC-NAOH BASED) FOR MYCOBACTERIAL CULTURE PROCESSING;** compatible with existing automated liquid culture system in use at the National Mycobacteria Reference Laboratory	10 X 75mL/ kit	360 kits
4	**DRUG SUSCEPTIBILITY REAGENT KIT FOR FIRST-LINE ANTI-TUBERCULOSIS DRUGS (STREPTOMYCIN, ISONIAZID, RIFAMPICIN, ETHAMBUTOL)** for use with automated liquid mycobacterial culture system use at the National Mycobacteria Reference Laboratory	40 tests/ kit	20 kits
5	**DRUG SUSCEPTIBILITY REAGENT KIT FOR PYRAZINAMIDE TESTING** in automated liquid mycobacterial culture system use at the National Mycobacteria Reference Laboratory	25 tubes/ kit	45 kits
6	**SPECIALIZED LIQUID CULTURE MEDIUM FOR PYRAZINAMIDE SUSCEPTIBILITY TESTING,** compatible with existing automated liquid mycobacterial culture instrument in use at the National Mycobacteria Reference Laboratory	50 tests/ kit	25 kits
7	**DRUG SUSCEPTIBILITY REAGENT KIT FOR ISONIAZID (0.4 UG/ML) TESTING** in automated liquid mycobacterial culture system use at the National Mycobacteria Reference Laboratory	1 kit	2 kits
8	**SOLID EGG-BASED MYCOBACTERIAL CULTURE MEDIUM (LOWENSTEIN-JENSEN TYPE), READY-TO-USE SLANTS**	100 tubes/ kit	40 kits

NO.	ITEM DESCRIPTIONS AND SPECIFICATIONS	PACKAGING SIZE	TOTAL ESTIMATE USAGE / YEAR
9	**TB STAIN (KINYOUN) - CARBOLFUCHSIN SOLUTION**	4 X 250mL/ kit	6 kits
10	**TB STAIN (KINYOUN) - METHYLENE BLUE SOLUTION**	4 X 250mL/ kit	6 kits
11	**TB STAIN (KINYOUN) - ACID ALCOHOL SOLUTION**	4 X 250mL/ kit	8 kits
12	**TB STAIN (AURAMINE O) - ACID ALCOHOL SOLUTION**	4 X 250mL/ kit	5 kits
13	**TB STAIN (AURAMINE O) - AURAMINE O SOLUTION**	4 X 250mL/ kit	7 kits
14	**TB STAIN (AURAMINE O) - COUNTERSTAIN SOLUTION**	4 X 250mL/ kit	7 kits
15	**AFB QUALITY CONTROL SLIDE**	50 slides/ kit	15 kits
16	**CALIBRATORS KIT**	51 vials/ kit	3 kits
17	**MCFARLAND REFERENCE STANDARDS KITS**	Set of 5 McFarland Standards/ kit	1 kit
18	**16MM GLASS TUBES AND CAPS**	1000 tubes/ kit	1 kit
19	**GLASS BEADS 3-5 MM FOR MCFARLAND**	1kg/ pack	1 pack

NO	SPECIFICATIONS AND REQUIREMENTS
1.0	**PROVISION OF EQUIPMENT**
1.1	Supply, deliver, install and commission free of charge to the Government of **AUTOMATED LIQUID BASED, NON- RADIOMETRIC CULTURE SYSTEM USING MYCOBACTERIAL GROWTH INDICATOR TUBES (MGIT) FOR MYCOBACTERIAL DETECTION.** This system is for both liquid culture and antibiotic susceptibility testing (AST) which includes: - Two (2) new units of the automated MGIT system, each with a minimum capacity of 960 tubes, annual change of filters and calibration of alcohol thermometers. - PPM, annual change of filters and calibration of alcohol thermometers for One (1) existing unit of the automated liquid culture system (Model, Brand: **BD MGIT 960 system**. BME no.: BME21199) - One (1) new unit of Densitometer for AST including PPM - One (1) unit of PC with the latest Windows OS and monitor, pre-installed with and fully compatible with the latest version of the required Advanced Data Management System (Middleware) Software. - One (1) unit of network-ready printer capable of double-sided printing and compatible with BruHIMS, including a supply of black and color ink cartridges. An external hard drive for data backup must be included. - Full LIS connectivity of the Advanced Data Management System (Middleware) Software to the existing unit (BME no.: BME21199) and the two new units from both a dedicated lab PC and an office PC. - Full integration of the middleware to BruHIMS (current or any updated version), with the capability to automatically upload patient results. - Three (3) units of Uninterruptible Power Supply (UPS). - Upgrade of the Advanced Data Management System software to the newest version if available/required.
2.0	**EQUIPMENT SPECIFICATION**
2.1	<u>Overall Performance for Automated Mycobacteria Liquid Culture & Antibiotic Susceptibility Testing System</u> 2.1.1 Unprecedented 960 tubes space saving capacity 2.1.2 Must perform non-radiometric, fluorescence-based growth detection for both culture and AST. 2.1.3 Must be fully automated, continuously monitoring and flagging positive and negative tubes without manual intervention. 2.1.4 Accentuates operator safety with plastic tubes, no sharps and no need to handle or transfer tubes once the system is loaded 2.1.5 Power requirement: 220-240V, 50/ 60 Hz 2.1.6 The system must have an integrated battery backup to maintain operation during short power interruptions. 2.1.7 Must be supplied with external UPS units.
2.2	<u>Overall Performance for Densitometer</u> 2.2.1 Compact and portable densitometer for use inside and outside of a biological safety cabinet. 2.2.2 Independent power supply or battery operated (to include supply of batteries if required) 2.2.3 LED light source with wavelength range 560-570nm 2.2.4 Measure McFarland (McF) from 0.00 to 15.00 2.2.5 Display LCD with 0.01 McF
3.0	**TECHNICAL SPECIFICATIONS**

NO	SPECIFICATIONS AND REQUIREMENTS
3.1	**Main system** 3.1.1 An on-board, interactive troubleshooting guide must be available within the system's software. 3.1.2 List details on daily and periodic maintenance including time required to perform the maintenance and to restart analysis. This includes annual change of filters. 3.1.3 Calibration and periodic temperature checks are available. This includes calibration of alcohol thermometers placed in the MGIT system. 3.1.4 The system must have the inherent capability for bidirectional interfacing with BruHIMS. The vendor is responsible for all middleware and software updates required to maintain this connectivity.
3.2	**Reagent System** 3.2.1 State the shelf-life of individual test reagents and the handlings of short- life reagents (willing to replace those reagents nearer to expiry date if not used up). 3.2.2 The operator should carry out nil or minimum reagent preparation. 3.2.3 A reagent inventory should be kept and updated in real- time. 3.2.4 Stock of the test kits and accessories should be available at the local representative as contingency. **3.2.5 Compatibility Clause: All reagents, consumables, and kits offered must be fully physically, functionally, and software-compatible with the existing automated mycobacterial liquid culture and susceptibility testing system installed at the National Mycobacteria Reference Laboratory, including the existing unit (Model, Brand: BD MGIT 960 system. BME no.: BME21199).**
4.0	**SERVICE AND AFTER SALES SUPPORT**
4.1	All reagent test kits / consumables supplied throughout this tender shall have a minimum expiry date of **six (6) months on delivery**. Should the reagent or consumable be urgently needed, provision of a reagent test kit or consumable with expiry date of less than **six (6)** months should be first agreed by the User of the particular laboratory before delivery is made.
4.2	Letter of Undertaking (LOU) shall be produced upon each delivery of test kit or consumable with expiry date of less than **six (6)** months and vendor shall declare in the LOU that unused, unopened, expired kits will be replaced accordingly. For items which are known to have short expiry date such as those containing red blood cells, list down all such items and vendor shall declare in this tender submission of such items and shall be exempted from submitting LOU upon delivery.
4.3	Staggered delivery every 3 months period directly to the User.
4.4	User shall have the rights to refuse delivery of items that do not meet the acceptance criteria such as, but not limited to, the following: 1. Tampered or damaged box 2. Leakage upon delivery 3. Items stored pre-delivery not in accordance to manufacturer's instructions 4. Expiry date not meeting requirement
4.5	User shall have the rights to return any items, and to be replaced at no extra cost, if found not meeting the acceptance criteria upon opening a pack such as, but not limited to, the following: 1. Tampered or damaged packaging **2.** Evident of leakage or damaged products **3.** Expired products that are evidently less than the requirement mentioned in para 4.1 calculated from delivery date **4.** Leakage upon delivery
4.6	Please supply details of the arrangement for 24-hour service support. There should preferably be remote diagnostic facility available. This should include the number of engineers and application specialist, their qualification/training with the system, response time during office hours, after office hours, weekdays and weekends.

NO	SPECIFICATIONS AND REQUIREMENTS
4.7	The supplier SHALL be responsible for the preventive maintenance (Weekly, Monthly, and Quarterly as needed) and breakdown maintenance of the following: - - All the automated mycobacterial liquid culture and AST system (rental and existing units). - Densitometer. - Any breakdown should be quickly attended to within 2 hours.
4.9	A copy of service report must be submitted to the laboratory whenever service work is done on the instrument.
4.10	Spare parts SHALL be supplied by the supplier should any replacement is required during preventive and breakdown maintenance.
4.11	Vendor shall aid the user with verification of a comprehensive methods performance for all of the tests listed above including, but not limited to, precision, accuracy, linearity, sensitivity, specificity, carryover, limit of detection or as required by the User depending on the nature of testing. Report of the verification study shall be submitted to the User for approval by the Director of Laboratory Services.
4.12	In the event of test results cannot be produced due to equipment failure or unavailable reagent supplies within the specified turnaround time, the vendor shall arrange and bear all costs for analysis of tests to an accredited laboratory (ISO 15189).
4.13	Backup is particularly important for all aspects of the system. The proposed system should be provided with backup instruments and should be able to perform the same test parameters.
4.14	All reagents and consumables used for troubleshooting are borne by the supplier.
4.15	All reagents and consumables used for method validation studies for tests used in the automated liquid culture system, namely culture and antibiotic susceptibility testings (AST) are borne by the supplier.
5.0	**ENVIRONMENTAL AND INFRASTRUCTURE REQUIREMENTS**
5.1	The system shall occupy space not more than the present system in the laboratory. If any renovation (electrical and/or environmental) is required, costs shall be borne by Vendor.
5.2	Should any renovation is required, Vendor shall comply with the Ministry's procedure for infection control risk assessment (ICRA), implementation and monitoring as set out in the document titled Construction and/or Renovation, Maintenance, Repair and Demolition in the Health Care Setting.
5.3	Power and water requirements: No or low water consumption. If water is required, state how much and what purity, with provision of water purification system included. Please provide specification for power requirement. All costs for installing electrical and water requirements shall be borne by the Vendor. All the electrical wires shall be covered with PVC trunk properly for safety precautions.
5.4	Electrical Safety – Vendor shall test for and maintain the electrical safety of all equipment and accessory devices installed throughout their usage period. This include conducting electrical safety testing upon installation & during preventive maintenance (at least every six (6) months) using calibrated device. Electrical safety testing report shall be submitted to the laboratory for acceptance.
5.5	Temperature and humidity requirement: preferably 22 – 28 ^{o}C and up to 80% relative humidity.
5.6	Floor area and drainage requirements: preferably adaptable to present facilities.
5.7	Heat and noise generation: preferably less than 7,000 BTU per unit and ≤ 65 dBA at the front of the unit while at full operation.
5.8	Low generation of hazardous chemical or biological waste.

NO	SPECIFICATIONS AND REQUIREMENTS
5.9	If biological liquid waste is generated, the supplier shall provide the following for suitable waste containers; i. Two waste containers shall be capped, have an inlet and outlet, easy to handle and do not hold more than 15L of liquid waste ii. When the production of waste liquid is more than 15L/day, a direct waste pipe shall be installed. A pre-dilution container shall be provided with easy access to add disinfectant and dispose of waste liquid. A preventive pipe shall be installed to prevent overflowing liquid waste from the waste containers Proper guidelines to disinfect the liquid waste that is acceptable to ISO 15189 shall be provided
5.10	The successful vendor shall keep the area behind of the equipment tidy and clean at all times. All wires and cables shall be properly covered using PVC trunk, flexible wire and cable cover or equivalent that is acceptable to the laboratory.
6.0	**MISCELLANEOUS**
6.1	If in any event where the laboratory needs to be relocated, the supplier is responsible to decontaminate, transport and recommission the equipment where applicable. This includes method validation of the instrument, connectivity to BruHIMS and resetting of the analysers to the new lab location.
7.0	**LITERATURE**
7.1	To supply one (1) CD or one (1) set of hard copy of the Operating Manual and Service Manual including circuit diagrams of the equipment shall be provided upon commissioning.
7.2	To supply the laboratory with one (1) set of Material Safety Data Sheet (MSDS)
7.3	To supply hardcopy of maintenance log with list of details of daily, weekly or scheduled maintenance
8.0	**TRAINING**
	TRAINING - <u>FOR 5 YEARS TERM CONTRACT</u>
8.1	Training shall be provided, at no additional cost, as follows:
8.2	On-site training for ALL staff members expected to handle the machine. Please ensure that adequate time is allocated such that training will take place in small groups to minimize staff shortage in the laboratory.
8.3	Certificate of competence is to be issued to all trainees after completion of training.
8.4	The successful tenderer needs to ensure the key users are updated on any relevant information related to the laboratory testing. **They shall provide ONE off-site training for two (2) key users per year of contract.** All expenses for attending the training shall be borne by the vendor; full registration, air ticket, daily allowance, accommodation, transport to and from the airport and place of training. **Training may be in the form of operator's training, workshop, congress, international conference including 3rd-party conference, or other forms of training that is deemed appropriate and relevant.**
8.5	Inviting speakers from overseas to give talks or presentations to the users on topics related to the laboratory testing as part of users' continuous education. Certificate of attendance and competence is to be issued to all trainees after completion of training.
9	**FINANCIAL AGREEMENT**

NO	SPECIFICATIONS AND REQUIREMENTS
9.1	A rental agreement is required over a period of **five (5)** years for the provision of the reagent kits as per estimated total costs for this contract. However, contract agreement shall be terminated when total expenditures of supplies exceed the estimated total costs regardless of **five (5)** years contract.
9.2	Supply of the test kit including reagents, consumables and accessories is based on the number of kits required in the Purchase Order according to an agreed schedule period.
9.3	Buffer stock of the test kit including reagents, consumables and accessories should be available at the local representative as contingency.
9.4	The equipment supplied should include reagents, consumables, calibrators, maintenance record sheet, maintenance cleaning kit and quality control for initially setting up of the instruments.
9.5	Should there be any discontinuity of reagents due to non-compliance in the manufacturing of reagents; the vendor must be able to provide an alternative so that the test requests are still available for the customers.
9.6	All costs incurred for the supply and delivery of test kit including reagents, consumables and accessories, equipment and other accessories required by the tender will be borne by the successful vendor.
9.7	**EXIT CLAUSE**: The tender contract shall be automatically terminated even though tender has not yet expired and this shall be in effect due to, but not limited to, the following: 1. When the testing is no longer required or relevant i.e. test is obsolete, to the laboratory or department. 2. When the item(s) set out in this tender is/are no longer required by the laboratory or the Department. 3. When the approved budget allocation for this tender contract has been used up before the tender contract expires whereby a renewal of tender shall be submitted by the user for an open advertisement subject to approval by the Mini Tender Board (*Lembaga Tawaran Kecil*).
10	**DELIVERY PERIOD:** Preferably 4 – 8 weeks and no later than 12 weeks after issue of Purchase Order
11	**PRICE VALIDITY:** The quotation shall remain valid for **12 MONTHS** from the final date for the submission of the quotation and no supplier may withdraw his/her quotation within that period. The Government reserves the right to extend this period if deemed necessary provided that such extension to the quotation validity period shall have written consent of the supplier(s).

* 6 months validity required for <$50K or 12 months for >$50K

NO.	GENERAL SPECIFICATIONS
A	**Model & Brand**
B	**Country of Origin**
C	**Total Price Per Test (CIF): B$**
D	**Price Ranking:**
E	**Where marketed**
F	**Year of Manufacture**
G	**Warranty:**
H	**Delivery Time:**
I	**Power Requirements:**
J	**Battery Back-up:**
K	**International Safety Standard:**
L	**Technical Support:**
M	**Equipment Whole Life Support**
N	**Dimensions (WxHxD) cm:**
O	**Weight (kg):**
P	**User Manuals**
Q	**Service Manuals**
R	**Spare-parts & Consumables Listing**
S	**Technical Training On-Site:**
T	**Site Requirements:**

*To all participating companies, please fill in the table above along with your other documents during submission of tender.

DELIVERY PERIOD AFTER PO ISSUED	**Preferably 4-8 weeks and no longer than 12 weeks**	
Lab/Section/Unit	National Mycobacteria Reference Laboratory	
Lab/Section/Unit Ref No.:	DLS/PU/MYB/2025/>50K/003	
Person to Contact	Name : Muhammad Mu'iz Ehsannudin bin Abu Bakar	
	E-mail : Ehsannudin.bakar@moh.gov.bn	
	Tel. No. : 8211818	Fax No.: 2220869
FOR ADMINISTRATION USE ONLY		
PPM/PROC Ref. No.	PPM/PROC/2025/>50K/028(MYB)	
Advertisement Ref. No.		Date :

SECTION 3

FORMS TO BE USED

CONTENTS

SCHEDULE 1

TENDER FORM

To:

TENDER REFERENCE NO: KK/372/2025/LAB(TC)

INVITATION TO TENDER
TO SUPPLY AND DELIVER AUTOMATED MYCOBACTERIA LIQUID CULTURE & ANTIBIOTIC SUSCEPTIBLITY TESTING WITH EQUIPMENT RENTAL FOR NATIONAL MYCOBACTERIA REFERENCE LABORATORY, DEPARTMENT OF LABORATORY SERVICES, MINISTRY OF HEALTH FOR A PERIOD OF FIVE (5) YEARS USAGE

TENDER OF (*name of tenderer*) _____

Company/Business Registration No _____

Tender Closing Date _____

DELIVERY PERIOD	

NO.	**USER'S REQUIREMENTS**			**VENDOR'S OFFER**					
	ITEM DESCRIPTIONS AND SPECIFICATIONS	**PACKAGING SIZE**	**TOTAL ESTIMATE USAGE / YEAR**	**ITEM DESCRIPTIONS AND SPECIFICATIONS**	**PART/ CATALOGUE NUMBER AND BRAND**	**PACKAGING SIZE**	**TOTAL QUANTITY OFFERED / YEAR**	***COST PER UNIT (B$)**	**TOTAL COSTS (B$)**
1	**FLUORESCENT GROWTH DETECTION TUBES (7 ML) FOR AUTOMATED MYCOBACTERIAL CULTURE SYSTEM;** compatible with existing automated liquid culture	100 tubes/ kit	220 kits						

NO.	USER'S REQUIREMENTS			VENDOR'S OFFER					
	ITEM DESCRIPTIONS AND SPECIFICATIONS	**PACKAGING SIZE**	**TOTAL ESTIMATE USAGE / YEAR**	**ITEM DESCRIPTIONS AND SPECIFICATIONS**	**PART/ CATALOGUE NUMBER AND BRAND**	**PACKAGING SIZE**	**TOTAL QUANTITY OFFERED / YEAR**	***COST PER UNIT (B$)**	**TOTAL COSTS (B$)**
	instrument in use at the National Mycobacteria Reference Laboratory								
2	**ENRICHMENT SUPPLEMENT KIT FOR LIQUID MYCOBACTERIAL CULTURE MEDIUM, CONTAINING GROWTH SUPPLEMENT AND ANTIBIOTIC MIXTURE FOR CONTAMINATION CONTROL**, compatible with existing automated liquid culture system in use at the National Mycobacteria Reference Laboratory	100 tubes/ kit	220 kits						
3	**SPECIMEN DIGESTION-DECONTAMINATION REAGENT KIT (NALC-NAOH BASED) FOR MYCOBACTERIAL CULTURE PROCESSING;** compatible with existing automated liquid culture system in use at the	10 X 75mL/ kit	360 kits						

NO.	USER'S REQUIREMENTS			VENDOR'S OFFER					
	ITEM DESCRIPTIONS AND SPECIFICATIONS	**PACKAGING SIZE**	**TOTAL ESTIMATE USAGE / YEAR**	**ITEM DESCRIPTIONS AND SPECIFICATIONS**	**PART/ CATALOGUE NUMBER AND BRAND**	**PACKAGING SIZE**	**TOTAL QUANTITY OFFERED / YEAR**	***COST PER UNIT (B$)**	**TOTAL COSTS (B$)**
	National Mycobacteria Reference Laboratory								
4	**DRUG SUSCEPTIBILITY REAGENT KIT FOR FIRST-LINE ANTI-TUBERCULOSIS DRUGS (STREPTOMYCIN, ISONIAZID, RIFAMPICIN, ETHAMBUTOL)** for use with automated liquid mycobacterial culture system use at the National Mycobacteria Reference Laboratory	40 tests/ kit	20 kits						
5	**DRUG SUSCEPTIBILITY REAGENT KIT FOR PYRAZINAMIDE TESTING** in automated liquid mycobacterial culture system use at the National Mycobacteria Reference Laboratory	25 tubes/ kit	45 kits						
6	**SPECIALIZED LIQUID CULTURE MEDIUM FOR PYRAZINAMIDE SUSCEPTIBILITY**	50 tests/ kit	25 kits						

NO.	USER'S REQUIREMENTS			VENDOR'S OFFER					
	ITEM DESCRIPTIONS AND SPECIFICATIONS	**PACKAGING SIZE**	**TOTAL ESTIMATE USAGE / YEAR**	**ITEM DESCRIPTIONS AND SPECIFICATIONS**	**PART/ CATALOGUE NUMBER AND BRAND**	**PACKAGING SIZE**	**TOTAL QUANTITY OFFERED / YEAR**	***COST PER UNIT (B$)**	**TOTAL COSTS (B$)**
	TESTING, compatible with existing automated liquid mycobacterial culture instrument in use at the National Mycobacteria Reference Laboratory								
7	**DRUG SUSCEPTIBILITY REAGENT KIT FOR ISONIAZID (0.4 UG/ML) TESTING** in automated liquid mycobacterial culture system use at the National Mycobacteria Reference Laboratory	1 kit	2 kits						
8	**SOLID EGG-BASED MYCOBACTERIAL CULTURE MEDIUM (LOWENSTEIN-JENSEN TYPE), READY-TO-USE SLANTS**	100 tubes/ kit	40 kits						
9	**TB STAIN (KINYOUN) – CARBOLFUCHSIN SOLUTION**	4 X 250mL/ kit	6 kits						
10	**TB STAIN (KINYOUN) - METHYLENE BLUE SOLUTION**	4 X 250mL/ kit	6 kits						
11	**TB STAIN (KINYOUN) -**	4 X 250mL/ kit	8 kits						

NO.	USER'S REQUIREMENTS			VENDOR'S OFFER					
	ITEM DESCRIPTIONS AND SPECIFICATIONS	PACKAGING SIZE	TOTAL ESTIMATE USAGE / YEAR	ITEM DESCRIPTIONS AND SPECIFICATIONS	PART/ CATALOGUE NUMBER AND BRAND	PACKAGING SIZE	TOTAL QUANTITY OFFERED / YEAR	*COST PER UNIT (B$)	TOTAL COSTS (B$)
	ACID ALCOHOL SOLUTION								
12	**TB STAIN (AURAMINE O) - ACID ALCOHOL SOLUTION**	4 X 250mL/ kit	5 kits						
13	**TB STAIN (AURAMINE O) - AURAMINE O SOLUTION**	4 X 250mL/ kit	7 kits						
14	**TB STAIN (AURAMINE O) - COUNTERSTAIN SOLUTION**	4 X 250mL/ kit	7 kits						
15	**AFB QUALITY CONTROL SLIDE**	50 slides/ kit	15 kits						
16	**CALIBRATORS KIT**	51 vials/ kit	3 kits						
17	**MCFARLAND REFERENCE STANDARDS KITS**	Set of 5 McFarland Standards/ kit	1 kit						
18	**16MM GLASS TUBES AND CAPS**	1000 tubes/ kit	1 kit						
19	**GLASS BEADS 3-5 MM FOR MCFARLAND**	1kg/ pack	1 pack						
TOTAL PRICE PER YEAR (B$)									
TOTAL PRICE FOR FIVE (5) YEARS (B$)									

NO.	SPECIFICATIONS AND REQUIREMENTS	VENDOR'S OFFER (PLEASE STATE)
1.0	**PROVISION OF EQUIPMENT**	
1.1	Supply, deliver, install and commission free of charge to the Government of **AUTOMATED LIQUID BASED, NON- RADIOMETRIC CULTURE SYSTEM USING MYCOBACTERIAL GROWTH INDICATOR TUBES (MGIT) FOR MYCOBACTERIAL DETECTION.** This system is for both liquid culture and antibiotic susceptibility testing (AST) which includes: - Two (2) new units of the automated MGIT system, each with a minimum capacity of 960 tubes, annual change of filters and calibration of alcohol thermometers. - PPM, annual change of filters and calibration of alcohol thermometers for One (1) existing unit of the automated liquid culture system (Model, Brand: **BD MGIT 960 system**. BME no.: BME21199) - One (1) new unit of Densitometer for AST including PPM - One (1) unit of PC with the latest Windows OS and monitor, pre-installed with and fully compatible with the latest version of the required Advanced Data Management System (Middleware) Software. - One (1) unit of network-ready printer capable of double-sided printing and compatible with BruHIMS, including a supply of black and color ink cartridges. An external hard drive for data backup must be included. - Full LIS connectivity of the Advanced Data Management System (Middleware) Software to the existing unit (BME no.: BME21199) and the two new units from both a dedicated lab PC and an office PC. - Full integration of the middleware to BruHIMS (current or any updated version), with the capability to automatically upload patient results. - Three (3) units of Uninterruptible Power Supply (UPS). - Upgrade of the Advanced Data Management System software to the newest version if available/required.	
2.0	**EQUIPMENT SPECIFICATION**	
2.1	<u>Overall Performance for Automated Mycobacteria Liquid Culture & Antibiotic Susceptibility Testing System</u> 2.1.1 Unprecedented 960 tubes space saving capacity 2.1.2 Must perform non-radiometric, fluorescence-based growth detection for both	

NO.	SPECIFICATIONS AND REQUIREMENTS	VENDOR'S OFFER (PLEASE STATE)
	culture and AST. 2.1.3 Must be fully automated, continuously monitoring and flagging positive and negative tubes without manual intervention. 2.1.4 Accentuates operator safety with plastic tubes, no sharps and no need to handle or transfer tubes once the system is loaded 2.1.5 Power requirement: 220-240V, 50/ 60 Hz 2.1.6 The system must have an integrated battery backup to maintain operation during short power interruptions. 2.1.7 Must be supplied with external UPS units.	
2.2	<u>Overall Performance for Densitometer</u> 2.2.1 Compact and portable densitometer for use inside and outside of a biological safety cabinet. 2.2.2 Independent power supply or battery operated (to include supply of batteries if required) 2.2.3 LED light source with wavelength range 560-570nm 2.2.4 Measure McFarland (McF) from 0.00 to 15.00 2.2.5 Display LCD with 0.01 McF	
3.0	**TECHNICAL SPECIFICATIONS**	
3.1	**Main system** 3.1.1 An on-board, interactive troubleshooting guide must be available within the system's software. 3.1.2 List details on daily and periodic maintenance including time required to perform the maintenance and to restart analysis. This includes annual change of filters. 3.1.3 Calibration and periodic temperature checks are available. This includes calibration of alcohol thermometers placed in the MGIT system. 3.1.4 The system must have the inherent capability for bidirectional interfacing with BruHIMS. The vendor is responsible for all middleware and software updates required to maintain this connectivity.	
3.2	**Reagent System** 3.2.1 State the shelf-life of individual test reagents and the handlings of short- life reagents (willing to replace those reagents nearer to expiry date if not used up). 3.2.2 The operator should carry out nil or minimum reagent preparation. 3.2.3 A reagent inventory should be kept and updated in real- time. 3.2.4 Stock of the test kits and accessories should be available at the local representative as contingency.	

NO.	SPECIFICATIONS AND REQUIREMENTS	VENDOR'S OFFER (PLEASE STATE)
	3.2.5 Compatibility Clause: All reagents, consumables, and kits offered must be fully physically, functionally, and software-compatible with the existing automated mycobacterial liquid culture and susceptibility testing system installed at the National Mycobacteria Reference Laboratory, including the existing unit (Model, Brand: BD MGIT 960 system. BME no.: BME21199).	
4.0	**SERVICE AND AFTER SALES SUPPORT**	
4.1	All reagent test kits / consumables supplied throughout this tender shall have a minimum expiry date of **six (6) months on delivery**. Should the reagent or consumable be urgently needed, provision of a reagent test kit or consumable with expiry date of less than **six (6)** months should be first agreed by the User of the particular laboratory before delivery is made.	
4.2	Letter of Undertaking (LOU) shall be produced upon each delivery of test kit or consumable with expiry date of less than **six (6)** months and vendor shall declare in the LOU that unused, unopened, expired kits will be replaced accordingly. For items which are known to have short expiry date such as those containing red blood cells, list down all such items and vendor shall declare in this tender submission of such items and shall be exempted from submitting LOU upon delivery.	
4.3	Staggered delivery every 3 months period directly to the User.	
4.4	User shall have the rights to refuse delivery of items that do not meet the acceptance criteria such as, but not limited to, the following: 1. Tampered or damaged box 2. Leakage upon delivery 3. Items stored pre-delivery not in accordance to manufacturer's instructions 4. Expiry date not meeting requirement	
4.5	User shall have the rights to return any items, and to be replaced at no extra cost, if found not meeting the acceptance criteria upon opening a pack such as, but not limited to, the following: 1. Tampered or damaged packaging 2. Evident of leakage or damaged products 3. Expired products that are evidently less than the requirement mentioned in para 4.1 calculated from delivery date 4. Leakage upon delivery	

NO.	SPECIFICATIONS AND REQUIREMENTS	VENDOR'S OFFER (PLEASE STATE)
4.6	Please supply details of the arrangement for 24-hour service support. There should preferably be remote diagnostic facility available. This should include the number of engineers and application specialist, their qualification/training with the system, response time during office hours, after office hours, weekdays and weekends.	
4.7	The supplier SHALL be responsible for the preventive maintenance (Weekly, Monthly, and Quarterly as needed) and breakdown maintenance of the following: - - All the automated mycobacterial liquid culture and AST system (rental and existing units). - Densitometer. Any breakdown should be quickly attended to within 2 hours.	
4.9	A copy of service report must be submitted to the laboratory whenever service work is done on the instrument.	
4.10	Spare parts SHALL be supplied by the supplier should any replacement is required during preventive and breakdown maintenance.	
4.11	Vendor shall aid the user with verification of a comprehensive methods performance for all of the tests listed above including, but not limited to, precision, accuracy, linearity, sensitivity, specificity, carryover, limit of detection or as required by the User depending on the nature of testing. Report of the verification study shall be submitted to the User for approval by the Director of Laboratory Services.	
4.12	In the event of test results cannot be produced due to equipment failure or unavailable reagent supplies within the specified turnaround time, the vendor shall arrange and bear all costs for analysis of tests to an accredited laboratory (ISO 15189).	
4.13	Backup is particularly important for all aspects of the system. The proposed system should be provided with backup instruments and should be able to perform the same test parameters.	
4.14	All reagents and consumables used for troubleshooting are borne by the supplier.	
4.15	All reagents and consumables used for method validation studies for tests used in the automated liquid culture system, namely culture and antibiotic susceptibility testings (AST) are borne by the supplier.	
5.0	**ENVIRONMENTAL AND INFRASTRUCTURE REQUIREMENTS**	

NO.	SPECIFICATIONS AND REQUIREMENTS	VENDOR'S OFFER (PLEASE STATE)
5.1	The system shall occupy space not more than the present system in the laboratory. If any renovation (electrical and/or environmental) is required, costs shall be borne by Vendor.	
5.2	Should any renovation is required, Vendor shall comply with the Ministry's procedure for infection control risk assessment (ICRA), implementation and monitoring as set out in the document titled Construction and/or Renovation, Maintenance, Repair and Demolition in the Health Care Setting.	
5.3	Power and water requirements: No or low water consumption. If water is required, state how much and what purity, with provision of water purification system included. Please provide specification for power requirement. All costs for installing electrical and water requirements shall be borne by the Vendor. All the electrical wires shall be covered with PVC trunk properly for safety precautions.	
5.4	Electrical Safety – Vendor shall test for and maintain the electrical safety of all equipment and accessory devices installed throughout their usage period. This include conducting electrical safety testing upon installation & during preventive maintenance (at least every six (6) months) using calibrated device. Electrical safety testing report shall be submitted to the laboratory for acceptance.	
5.5	Temperature and humidity requirement: preferably 22 – 28 ^{o}C and up to 80% relative humidity.	
5.6	Floor area and drainage requirements: preferably adaptable to present facilities.	
5.7	Heat and noise generation: preferably less than 7,000 BTU per unit and ≤ 65 dBA at the front of the unit while at full operation.	
5.8	Low generation of hazardous chemical or biological waste.	
5.9	If biological liquid waste is generated, the supplier shall provide the following for suitable waste containers; i. Two waste containers shall be capped, have an inlet and outlet, easy to handle and do not hold more than 15L of liquid waste ii. When the production of waste liquid is more than 15L/day, a direct waste pipe shall be installed. A pre-dilution container shall be provided with easy access to add disinfectant and dispose of waste liquid. A preventive pipe shall be installed to prevent overflowing liquid waste from the waste containers	

NO.	SPECIFICATIONS AND REQUIREMENTS	VENDOR'S OFFER (PLEASE STATE)
	Proper guidelines to disinfect the liquid waste that is acceptable to ISO 15189 shall be provided	
5.10	The successful vendor shall keep the area behind of the equipment tidy and clean at all times. All wires and cables shall be properly covered using PVC trunk, flexible wire and cable cover or equivalent that is acceptable to the laboratory.	
6.0	**MISCELLANEOUS**	
6.1	If in any event where the laboratory needs to be relocated, the supplier is responsible to decontaminate, transport and recommission the equipment where applicable. This includes method validation of the instrument, connectivity to BruHIMS and resetting of the analysers to the new lab location.	
7.0	**LITERATURE**	
7.1	To supply one (1) CD or one (1) set of hard copy of the Operating Manual and Service Manual including circuit diagrams of the equipment shall be provided upon commissioning.	
7.2	To supply the laboratory with one (1) set of Material Safety Data Sheet (MSDS)	
7.3	To supply hardcopy of maintenance log with list of details of daily, weekly or scheduled maintenance	
8.0	**TRAINING**	
	TRAINING - <u>FOR 5 YEARS TERM CONTRACT</u>	
8.1	Training shall be provided, at no additional cost, as follows:	
8.2	On-site training for ALL staff members expected to handle the machine. Please ensure that adequate time is allocated such that training will take place in small groups to minimize staff shortage in the laboratory.	
8.3	Certificate of competence is to be issued to all trainees after completion of training.	

NO.	SPECIFICATIONS AND REQUIREMENTS	VENDOR'S OFFER (PLEASE STATE)
8.4	The successful tenderer needs to ensure the key users are updated on any relevant information related to the laboratory testing. **They shall provide ONE off-site training for two (2) key users per year of contract.** All expenses for attending the training shall be borne by the vendor; full registration, air ticket, daily allowance, accommodation, transport to and from the airport and place of training. **Training may be in the form of operator's training, workshop, congress, international conference including 3rd-party conference, or other forms of training that is deemed appropriate and relevant.**	
8.5	Inviting speakers from overseas to give talks or presentations to the users on topics related to the laboratory testing as part of users' continuous education. Certificate of attendance and competence is to be issued to all trainees after completion of training.	
9	**FINANCIAL AGREEMENT**	
9.1	A rental agreement is required over a period of **five (5)** years for the provision of the reagent kits as per estimated total costs for this contract. However, contract agreement shall be terminated when total expenditures of supplies exceed the estimated total costs regardless of **five (5)** years contract.	
9.2	Supply of the test kit including reagents, consumables and accessories is based on the number of kits required in the Purchase Order according to an agreed schedule period.	
9.3	Buffer stock of the test kit including reagents, consumables and accessories should be available at the local representative as contingency.	
9.4	The equipment supplied should include reagents, consumables, calibrators, maintenance record sheet, maintenance cleaning kit and quality control for initially setting up of the instruments.	
9.5	Should there be any discontinuity of reagents due to non-compliance in the manufacturing of reagents; the vendor must be able to provide an alternative so that the test requests are still available for the customers.	
9.6	All costs incurred for the supply and delivery of test kit including reagents, consumables and accessories, equipment and other accessories required by the tender will be borne by the successful vendor.	
9.7	**EXIT CLAUSE**: The tender contract shall be automatically terminated even though tender has not yet expired and this shall be in effect due to, but not limited to, the following:	

NO.	SPECIFICATIONS AND REQUIREMENTS	VENDOR'S OFFER (PLEASE STATE)
	1. When the testing is no longer required or relevant i.e., test is obsolete, to the laboratory or department. 2. When the item(s) set out in this tender is/are no longer required by the laboratory or the Department. 3. When the approved budget allocation for this tender contract has been used up before the tender contract expires whereby a renewal of tender shall be submitted by the user for an open advertisement subject to approval by the Mini Tender Board (*Lembaga Tawaran Kecil*).	
10	**DELIVERY PERIOD:** Preferably 4 – 8 weeks and no later than 12 weeks after issue of Purchase Order	**(Yes / No)** **(If No, please specify)**
11	**PRICE VALIDITY:** The quotation shall remain valid for **12 MONTHS** from the final date for the submission of the quotation and no supplier may withdraw his/her quotation within that period. The Government reserves the right to extend this period if deemed necessary provided that such extension to the quotation validity period shall have written consent of the supplier(s).	

* 6 months validity required for <$50K or 12 months for >$50K

NO.	GENERAL SPECIFICATIONS	VENDOR'S OFFER
A	**Model & Brand**	
B	**Country of Origin**	
C	**Total Price Per Test (CIF): B$**	
D	**Price Ranking:**	(leave blank)
E	**Where marketed**	
F	**Year of Manufacture**	
G	**Warranty:**	
H	**Delivery Time:**	
I	**Power Requirements:**	
J	**Battery Back-up:**	
K	**International Safety Standard:**	
L	**Technical Support:**	

NO.	GENERAL SPECIFICATIONS	VENDOR'S OFFER
M	**Equipment Whole Life Support:**	
N	**Dimensions (WxHxD) cm:**	
O	**Weight (kg):**	
P	**User Manuals**	
Q	**Service Manuals**	
R	**Spare-parts & Consumables Listing:**	
S	**Technical Training On-Site:**	
T	**Site Requirements:**	

*To all participating companies, please fill in the table above along with your other documents during submission of tender.

1. We offer and undertake on your acceptance of our Tender to supply and deliver the above mentioned goods in accordance with your Invitation To Tender.

2. Our Tender is fully consistent with and does not contradict or derogate from anything in your Invitation To Tender. We have not qualified or changed any of the provisions of your Invitation To Tender.

3. We shall execute a formal agreement in the appropriate form set out in Section 4 – Contract of the Invitation to Tender together with such further terms and conditions, if any, agreed between the Government and us.

4. OUR OFFER IS VALID FOR **TWELVE (12)** CALENDER MONTHS FROM THE TENDER CLOSING DATE.

5. When requested by you, we shall extend the validity of this offer.

6. We further undertake to give you any further information which you may require.

Dated this_____day of_____, 20_____

Tenderer's official stamp:

_____
[Signature of authorised officer of Tenderer]
Name:
Designation:

SCHEDULE 2 - INFORMATION SUMMARY

2.1 Tenderers shall provide in this Schedule the following information:

(a) Management summary

(b) Company profile (including Contractor and sub-contractor(s), if any)

(c) Years of experience (as of the Tender Closing Date) of the Contractor and sub-contractor(s) in the:

- *Supply & Delivery Of Laboratory Equipment, Test Kits and Consumables.*

(d) Other information which is considered relevant

SCHEDULE 3 – SUB-CONTRACTS

1.1 Tenderers shall complete Table 3.1 with information about all the companies involved in the provision of the services and items specified in this tender. This shall include details about the Contractor and each sub-contractor involved, as well as their respective responsibilities.

3.2 Tenderers shall also indicate in Table 3.1 any alliance relationship established with each sub-contractor. An alliance is defined as a formal and binding business relationship between the allied parties.

Table 3.1 - Responsibility Table

Company Name	Responsibility Description	Alliance Relationship between Contractor and Sub-contractor(s)		
		Alliance Exists? (Y/N)	Date Established	Alliance Description
Contractor				
		Not Applicable	Not Applicable	Not Applicable
Sub-contractor(s)				

SCHEDULE 4 – COMPANY'S BACKGROUND

4.1 Each of the companies involved in this tender, including Contractor and sub-contractor(s) (if any), shall provide information on the company's background, scope of operations, financial standing and certified copy of its Certificate of Incorporation or Certificate of Registration (as the case may be).

SCHEDULE 5 – REFERENCES

5.1 Tenderers shall submit a list of customers in Table 5.1 to whom the Contractor has provided similar services and items as specified in this tender in the recent 5 years as of the Tender Closing Date.

Table 5.1 - References of previous customers

Customer Name and Address	Customer Type (Govt or Quasi Govt)*	Contact Person	Title	Contact Number, Fax Number and E-mail Address

***Note: Tenderers shall indicate whether the customer is a Government or Quasi Government organisation. A Quasi Government is defined as an organisation which (1) is managed and controlled by the Government; or (2) has at least 50% shares being held by the Government. Please leave the column blank if the customer is neither a Government or Quasi Government organisation.**

5.2 The Ministry of Health shall treat all the information submitted under this schedule in strict confidence.

5.3 The Ministry of Health reserves the right to contact the references for tender assessment purposes.

SCHEDULE 6 - SUBMISSION OF SAMPLE

6.1 Tenderers shall submit the Submission of Sample form below in respect of the items specified in this tender.

6.2 Samples of the items to be submitted shall be:

a) identical in packing and manufacture to the items to be offered by the Tenderer; and

b) marked with the corresponding item number of the tender.

SUBMISSION OF SAMPLE FORM

To:

TENDER REFERENCE NO: KK/372/2025/LAB(TC)

INVITATION TO TENDER
TO SUPPLY AND DELIVER AUTOMATED MYCOBACTERIA LIQUID CULTURE & ANTIBIOTIC SUSCEPTIBLITY TESTING WITH EQUIPMENT RENTAL FOR NATIONAL MYCOBACTERIA REFERENCE LABORATORY, DEPARTMENT OF LABORATORY SERVICES, MINISTRY OF HEALTH FOR A PERIOD OF FIVE (5) YEARS USAGE

SUBMISSION OF SAMPLE FORM OF (*NAME OF TENDERER*)

NO.	TEST/REAGENT NAME	SAMPLE SUBMITTED (indicate with ✓)	SAMPLE NOT SUBMITTED (indicate with ✕)	OFFERED/ NOT OFFERED (indicate as appropriate)
1	**FLUORESCENT GROWTH DETECTION TUBES (7 ML) FOR AUTOMATED MYCOBACTERIAL CULTURE SYSTEM;** compatible with existing automated liquid culture instrument in use at the National Mycobacteria Reference Laboratory			
2	**ENRICHMENT SUPPLEMENT KIT FOR LIQUID MYCOBACTERIAL CULTURE MEDIUM, CONTAINING GROWTH SUPPLEMENT AND ANTIBIOTIC MIXTURE FOR CONTAMINATION CONTROL**, compatible with existing automated liquid culture system in use at the National Mycobacteria Reference Laboratory			
3	**SPECIMEN DIGESTION-DECONTAMINATION REAGENT KIT (NALC-NAOH BASED) FOR MYCOBACTERIAL CULTURE PROCESSING;** compatible with existing automated liquid culture system in use at the National Mycobacteria Reference Laboratory			
4	**DRUG SUSCEPTIBILITY REAGENT KIT FOR FIRST-LINE ANTI-TUBERCULOSIS DRUGS (STREPTOMYCIN, ISONIAZID, RIFAMPICIN, ETHAMBUTOL)** for use with automated liquid mycobacterial culture system use at the National Mycobacteria Reference Laboratory			
5	**DRUG SUSCEPTIBILITY REAGENT KIT FOR PYRAZINAMIDE TESTING** in automated liquid mycobacterial culture system use at the National Mycobacteria Reference Laboratory			
6	**SPECIALIZED LIQUID CULTURE MEDIUM FOR PYRAZINAMIDE SUSCEPTIBILITY TESTING,** compatible with existing automated liquid mycobacterial culture instrument in use at the National Mycobacteria Reference Laboratory			

NO.	TEST/REAGENT NAME	SAMPLE SUBMITTED (indicate with ✓)	SAMPLE NOT SUBMITTED (indicate with ✕)	OFFERED/ NOT OFFERED (indicate as appropriate)
7	**DRUG SUSCEPTIBILITY REAGENT KIT FOR ISONIAZID (0.4 UG/ML) TESTING** in automated liquid mycobacterial culture system use at the National Mycobacteria Reference Laboratory			
8	**SOLID EGG-BASED MYCOBACTERIAL CULTURE MEDIUM (LOWENSTEIN-JENSEN TYPE), READY-TO-USE SLANTS**			
9	**TB STAIN (KINYOUN) – CARBOLFUCHSIN SOLUTION**			
10	**TB STAIN (KINYOUN) - METHYLENE BLUE SOLUTION**			
11	**TB STAIN (KINYOUN) - ACID ALCOHOL SOLUTION**			
12	**TB STAIN (AURAMINE O) - ACID ALCOHOL SOLUTION**			
13	**TB STAIN (AURAMINE O) - AURAMINE O SOLUTION**			
14	**TB STAIN (AURAMINE O) - COUNTERSTAIN SOLUTION**			
15	**AFB QUALITY CONTROL SLIDE**			
16	**CALIBRATORS KIT**			
17	**MCFARLAND REFERENCE STANDARDS KITS**			
18	**16MM GLASS TUBES AND CAPS**			
19	**GLASS BEADS 3-5 MM FOR MCFARLAND**			

We understand as stated in the Instructions to Tenderers that Tenders without samples shall not be considered.

Tenderer's official stamp:

_____

[signature of authorized officer of Tenderer]

Name:

Designation:

Date:

FOR OFFICE USE

Date of receipt : _____

Receiving Officer : _____