

TENDER REF. NO.: KK/233/2026/LAB(TC)

**MINISTRY OF HEALTH
NEGARA BRUNEI DARUSSALAM**

**PROVISION OF CONTINUED DEVELOPMENT,
ENHANCEMENT, MAINTENANCE AND SUPPORT FOR THE
BLOODKAD MANAGEMENT SYSTEM AND MOBILE
APPLICATION FOR BLOOD DONATION CENTRE AND
DISTRICT BLOOD BANKS, DEPARTMENT OF
LABORATORY SERVICES, MINISTRY OF HEALTH FOR A
PERIOD OF THREE (3) YEARS**

TENDER FEE : \$30.00

RECEIPT NO. :

CLOSING DATE : ON TUESDAY, 20th October 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/233/2026/LAB(TC)

INVITATION TO TENDER

PROVISION OF CONTINUED DEVELOPMENT, ENHANCEMENT, MAINTENANCE AND SUPPORT FOR THE BLOODKAD MANAGEMENT SYSTEM AND MOBILE APPLICATION FOR BLOOD DONATION CENTRE AND DISTRICT BLOOD BANKS, DEPARTMENT OF LABORATORY SERVICES, MINISTRY OF HEALTH FOR A PERIOD OF THREE (3) YEARS

ITEM	LOCATION
Provision Of Enhancement, Maintenance And Support For The Bloodkad Management System And Mobile Application	Blood Donation Centre, Raja Isteri Pengiran Anak Saleha Hospital
	Blood Bank, Suri Seri Begawan Hospital
	Blood Bank, Pengiran Muda Mahkota Pengiran Muda Haji Al-Muhtadee Billah Hospital
	Blood Bank, Pengiran Isteri Hajjah Mariam Hospital

REQUIREMENTS & SPECIFICATIONS

1. GENERAL

1.1 Tenderers are sought from professional contractors who wish to be considered for the provision of enhancement, maintenance and support services for the existing blood donation management system and mobile application for the Blood Donation Centre and District Blood Banks under the Department of Laboratory Services (hereinafter referred to as 'Department').

1.2 The BloodKad Management System shall be utilised by the Department at the following locations:

- 1.2.1 Blood Donation Centre, Raja Isteri Pengiran Anak Saleha Hospital;
- 1.2.2 Blood Bank, Suri Seri Begawan Hospital;
- 1.2.3 Blood Bank, Pengiran Muda Mahkota Pengiran Muda Haji Al-Muhtadee Billah Hospital;
- 1.2.4 Blood Bank, Pengiran Isteri Hajjah Mariam Hospital; and
- 1.2.5 Any other blood donation venue, mobile blood donation campaign, or location designated by the Department.

1.3 The BloodKad Management System shall support the complete blood donor management workflow, including but not limited to:

- 1.3.1 Blood donor registration;
- 1.3.2 Blood donor appointment management;

- 1.3.3 Blood donation campaign and event management;
- 1.3.4 Donor pre-donation health screening and eligibility screening workflow;
- 1.3.5 Blood donation queue management;
- 1.3.6 Donor communication and notification;
- 1.3.7 Reporting and operational dashboards;
- 1.3.8 Administrative and user management; and
- 1.3.9 Additional functions as specified in the agreed project scope or, where applicable, subject to mutual agreement, a separate quotation and written approval by the Department.

1.4 Donation Types

The system shall support multiple donation types including, but not limited to:

- Whole blood donation
- Platelet (apheresis) donation
- Any other blood collection procedure defined by the Department

1.5 Platelet Management

The system shall support platelet donation workflows, including capture of platelet-specific clinical and operational data, and reporting of platelet donor activity.

1.6 The duration of the Contract shall be for **THREE (3) YEARS**.

1.7 The Contractor shall ensure that the BloodKad Management System remains fully operational throughout the Contract period, including the provision of approved enhancements, preventive and corrective maintenance, technical support, software updates, and security patches.

1.8 The Contractor shall ensure that all existing donor records, historical information, system configurations, and operational data are successfully migrated, retained, and protected without data loss, where reasonably practicable.

1.9 The Contractor shall comply with all applicable laws and regulations, policies, standards, and guidelines issued by the Authority for Infocommunications Technology Industry (AITI), the Ministry of Health (MOH) and the Government of Brunei Darussalam relating to information security, ICT governance, and personal data protection.

2. SCOPE OF WORK

2.1 The Contractor shall provide all professional services, personnel, software development, system enhancement, implementation, maintenance, and technical support necessary for the continued operation and enhancement of the BloodKad Management System to all the locations stated in para 1.2.

2.2 The scope of work shall include the implementation, configuration, enhancement, maintenance and support of the BloodKad Management System and BloodKad Mobile Application, not limited to the following:

- 2.2.1 Enhancement of existing BloodKad functionalities;
- 2.2.2 Development and implementation of additional modules in accordance with the agreed project scope;
- 2.2.3 Enhancement of the BloodKad Mobile Application for Android and iOS platforms or any other systems;
- 2.2.4 Enhancement of the BloodKad Management System;
- 2.2.5 Enhancement of administrative functionalities within the BloodKad Management System;
- 2.2.6 User interface (UI) and user experience (UX) improvements;
- 2.2.7 System integration with Ministry of Health systems, where applicable, shall be subject to a separate quotation and written approval by the Department;
- 2.2.8 Database enhancement and optimisation;
- 2.2.9 Data migration;
- 2.2.10 System installation and configuration;
- 2.2.11 System testing including System Integration Testing (SIT), User Acceptance Testing (UAT), and performance testing;
- 2.2.12 User training;
- 2.2.13 User documentation;
- 2.2.14 Preventive maintenance;
- 2.2.15 Corrective maintenance;
- 2.2.16 Technical support for issues escalated by the Department relating to the subscribed services;
- 2.2.17 Software updates relating to the subscribed services;
- 2.2.18 Security patches;
- 2.2.19 Bug fixes;
- 2.2.20 Minor enhancements as mutually agreed by both parties during the Contract period;
- 2.2.21 Development and implementation of platelet donation and venesection workflow and associated data capture;

- 2.2.22 Development and implementation of queue management system with advanced operational workflow features;
- 2.2.23 Development and implementation of donation process timing and operational efficiency tracking;
- 2.2.24 Development and implementation of adverse donor reaction recording and reporting functionality;
- 2.2.25 Development and implementation of additional clinical workflow modules as specified in the agreed project scope

3. DONOR MANAGEMENT MODULE

3.1 General Requirement

- 3.1.1 The system shall provide a comprehensive Donor Management Module to support the registration, maintenance, monitoring, and lifecycle management of all blood donors within the BloodKad Management System.
- 3.1.2 The module shall ensure that all donor information is accurately captured, securely stored, and made available only to authorised users in accordance with role-based access control.

3.2 Donor Registration

- 3.2.1 The system shall allow authorised users to register new blood donors into the system.
- 3.2.2 The system shall capture, at minimum, the following donor information:
 - Full name
 - Identification number
 - Date of birth
 - Gender
 - Contact details
 - Blood group (if known)
 - Address
 - Medical history relevant to blood donation eligibility
- 3.2.3 The system shall validate mandatory fields prior to submission of donor registration.
- 3.2.4 The system shall generate a unique donor identification number for each registered donor.
- 3.2.5 The system shall prevent duplicate donor registration by performing identity matching using predefined identifiers.

3.3 Donor Profile Management

- 3.3.1 The system shall allow authorised users to view, update, and maintain donor profiles.
- 3.3.2 The system shall maintain a complete audit trail of all changes made to donor profiles, including user identity, timestamp, and modification details.

3.3.3 The system shall ensure that historical donor information is retained and not overwritten without audit traceability.

3.3.4 The system shall allow controlled editing of donor demographic and contact information based on user role permissions.

3.4 Donor Eligibility Management

3.4.1 The system shall store and manage donor eligibility status based on donation history and health screening outcomes.

3.4.2 The system shall automatically update donor eligibility status based on predefined rules configured by the Department.

3.4.3 The system shall allow authorised personnel to manually override eligibility status with mandatory justification and audit logging.

3.4.4 The system shall display real-time eligibility status during appointment booking and donor check-in.

3.5 Donation History

3.5.1 The system shall maintain a complete historical record of all donor blood donations.

3.5.2 The system shall record at minimum:

- Date of donation
- Donation location
- Type of donation (including platelet and other types)
- Blood component collected
- Donation outcome
- Procedure duration (where applicable)

3.5.3 The system shall allow donors to view their donation history via the mobile application.

3.5.4 The system shall allow authorised staff to access donor history for operational and clinical purposes.

3.6 Deferral Management

3.6.1 The system shall record donor deferral status and reasons for deferral.

3.6.2 The system shall support both temporary and permanent deferral categories.

3.6.3 The system shall automatically enforce deferral periods where applicable.

3.6.4 The system shall notify donors of deferral status through available communication channels.

3.7 Donor Search and Retrieval

3.7.1 The system shall provide a search function to retrieve donor records using, at minimum:

- Name
- Identification number
- Donor ID
- Contact number

3.7.2 The system shall return search results in real time or near real time.

3.7.3 The system shall restrict search functionality based on user access level.

3.8 Data Integrity and Security

3.8.1 The system shall ensure donor data integrity through validation rules and controlled data entry mechanisms.

3.8.2 The system shall implement role-based access control for all donor-related data.

3.8.3 The system shall encrypt sensitive donor data both at rest and in transit.

3.8.4 The system shall maintain audit logs for all donor data access and modifications.

3.9 Reporting (Donor Module Specific)

3.9.1 The system shall generate donor-related reports, including but not limited to:

- Active donors
- Deferred donors
- Donation frequency
- Inactive donors
- Donation frequency
- Platelet donor statistics
- Adverse event reports

3.9.2 The system shall allow export of donor reports in standard formats including PDF and Excel.

3.10 System Performance Requirement

3.10.1 The system shall retrieve donor records within an acceptable response time under normal operational conditions.

3.10.2 The system shall support concurrent access by multiple authorised users without degradation of performance.

4. BLOODKAD MOBILE APPLICATION (iOS & ANDROID)

4.1 General Requirements

- 4.1.1 The BloodKad Mobile Application shall be available on both iOS and Android platforms.
- 4.1.2 The application shall provide secure access for registered blood donors to interact with the BloodKad Manament System.
- 4.1.3 The application shall ensure consistent functionality across supported mobile devices and operating system versions.

4.2 Authentication & Access

- 4.2.1 The application shall require user authentication prior to access.
- 4.2.2 The application shall support secure login using credentials defined by the system.
- 4.2.3 The application shall support password reset functionality.
- 4.2.4 The application shall implement session timeout for inactive users.

4.3 Donor Dashboard

- 4.3.1 The application shall provide a donor dashboard displaying relevant donor information.
- 4.3.2 The dashboard shall display eligibility status, upcoming appointments, and donation history.

4.4 Appointment Booking

- 4.4.1 The application shall allow donors to book blood donation appointments.
- 4.4.2 The application shall display available time slots based on centre capacity.
- 4.4.3 The application shall prevent double booking of appointments.

4.5 Notifications

- 4.5.1 The application shall deliver push notifications for appointments, reminders, and announcements.
- 4.5.2 The application shall allow users to enable or disable notification preferences.

4.6 Performance

- 4.6.1 The application shall load primary screens within acceptable response times under normal network conditions.
- 4.6.2 The application shall operate reliably under variable network conditions.

4.7 The mobile application shall display donation history including differentiation between whole blood and platelet donations.

5. APPOINTMENT MANAGEMENT MODULE

5.1 General

5.1.1 The system shall provide an appointment management module for blood donation scheduling and management.

5.2 Scheduling Rules

5.2.1 The system shall allow configuration of donation centre schedules.

5.2.2 The system shall enforce maximum donor capacity per time slot.

5.3 Rescheduling & Cancellation

5.3.1 The system shall allow donors to reschedule appointments.

5.3.2 The system shall allow cancellation of appointments within defined rules.

5.4 Optional Clinical Appointment Management

The system shall support appointment scheduling for therapeutic venesection procedures.

6. HEALTH SCREENING MODULE

6.1 The system shall support donor health screening and eligibility assessment.

6.2 The system shall record screening results prior to donation.

6.3 The system shall automatically update donor eligibility status based on screening outcomes.

6.4 The system shall support platelet-specific screening fields where applicable.

6.5 The system shall support recording of adverse donor reactions during screening and post-donation stages.

7. BLOOD DRIVE & EVENT MANAGEMENT MODULE

7.1 The system shall support creation and management of blood donation campaigns and events.

7.2 The system shall allow configuration of mobile blood drives.

7.3 The system shall track donor participation per event.

8. QUEUE MANAGEMENT MODULE

8.1 The system shall provide real-time queue management for donor flow.

8.2 The system shall assign queue numbers upon donor check-in.

8.3 The system shall display queue status at donation centres.

8.4 Optional Patient Queue Management

Where the Venesection Management Module is implemented, the system shall support patient queue management and procedure workflow for therapeutic venesection.

8.5 The system shall support:

- Real-time donor calling and skipping
- Multi-stage queue progression
- Optional barcode-based donor verification
- Chair/station assignment

8.6 The system shall:

- Record donor waiting time and service time
- Integrate timing with donation workflow
- Support performance monitoring reporting

9. NOTIFICATION & COMMUNICATION MODULE

9.1 The system shall support SMS, email, and push notification capabilities. The Contractor shall provide the necessary technical integration and configuration to enable these notification services.

9.2 Where third-party notification services (such as SMS gateway services) are required, the Contractor shall propose the recommended service requirements, including technical specifications, subscription arrangements, and associated costs for the Department's consideration and approval.

9.3 The Department reserves the right to determine whether such services will be implemented based on operational requirements, budget availability, and applicable approvals.

9.4 The system shall send automated notifications for appointments and eligibility updates.

10. REPORTING & DASHBOARD MODULE

10.1 The system shall provide real-time operational dashboards.

10.2 The system shall generate reports on donor activity and donation statistics.

10.3 The system shall support enhanced reporting including:

- Platelet donation analytics
- Adverse event reports
- Queue performance metrics
- Process timing analysis

11. DONOR ENGAGEMENT MODULE

11.1 The system shall support donor engagement features including reminders and donation encouragement.

11.2 The system may include gamification or recognition features as defined by the Department.

12. SYSTEM ADMINISTRATION MODULE

12.1 The system shall provide administrative controls for user and role management.

12.2 The system shall maintain system configuration settings.

12.3 The system shall maintain audit logs of all administrative actions.

13. TECHNICAL REQUIREMENTS

13.1 The system shall be scalable to support increasing user demand.

13.2 The system shall support secure hosting environment approved by the Department.

13.3 The system shall ensure high availability and resilience.

14. INTEGRATION REQUIREMENTS

14.1 The system shall support integration with Ministry of Health systems, where applicable and mutually agreed by both parties.

14.2 Where system integration is implemented, the system shall use secure API-based communication for data exchange.

15. MAINTENANCE & SUPPORT

15.1 The Contractor shall provide corrective maintenance services.

15.2 The Contractor shall provide preventive maintenance services.

15.3 The system shall be supported throughout the Contract period.

16. SERVICE LEVEL AGREEMENT (SLA)

The Service Level Agreement (SLA) shall apply to issues within the Contractor's control.

16.1 Critical system issues shall be resolved within 24 hours.

16.2 High priority issues shall be resolved within 3 working days.

16.3 Minor issues shall be resolved within 7–14 working days.

17. TRAINING

- 17.1 The Contractor shall provide end-user training.
- 17.2 The Contractor shall provide administrative training.
- 17.3 Training materials shall be provided in documentation format.

18. DELIVERABLES

- 18.1 The Contractor shall deliver the Bloodkad Management System and Bloodkad Mobile Application, including the agreed enhancements and additional modules in accordance with the agreed project scope.
- 18.2 The Contractor shall provide user documentation and user training.
- 18.3 The Contractor shall provide deployment, implementation and post-deployment support.

19. WARRANTY

The Contractor warrants that it has the requisite manpower/personnel, equipment, machinery, material, skill and expertise to the satisfactory provision of the required services for the Department.

20. CONTRACT PRICE AND PAYMENT

- The Contractor shall submit a breakdown of the contract price.
 - The Ministry of Health reserves the right to reduce or extend the contract price to any additional requirements according to the rate set out in the Contract Price.
 - The Contractor shall submit the invoice of the previous month in the first week of each month.
- All claims shall be addressed to:

Director of Laboratory Services Ministry of Health RIPAS Hospital Bandar Seri Begawan BA1710 Negara Brunei Darussalam

- All claims/invoices must be submitted together with some form of service or workorder forms or monthly reports and shall be verified by end users.
- Payment will be made within forty-five (45) days after submission of the invoice and other related documents.
- Payment claims will be verified based on the performance checklist form received from the Head of Blood Donation Centre. Refer to Appendix 1.
- Written warnings will be sent to the Contractor if the quality of work is proven to be unsatisfactory. The Department is entitled to make deductions or penalty charges impose upon unsatisfactory works (following advice from the Ministry of Health), with regards to the amount payable to the Contractor. The deductions will be based on the following categories:

Average monthly performance	Payment Due	Payment Due After 3 rd Warning
90 - 100 %	100 %	-
80 - 89 %	90 %	50 %
70 - 79 %	80 %	50 %
0 - 69 %	50 %	50 %

BLOODKAD MONTHLY SERVICE VERIFICATION CHECKLIST

Contract Title: Provision Of Continued Development, Enhancement, Maintenance And Support Of Bloodkad Management System And Mobile Application For Blood Donation Centre And District Blood Banks, Department Of Laboratory Services, Ministry Of Health For A Period Of Three (3) Years

Contractor: _____
Month/Year: _____

Invoice No.: _____
Date of Verification: _____

A. AVERAGE MONTHLY SERVICE PERFORMANCE VERIFICATION SCORING

NO.	PERFORMANCE CRITERIA	WEIGHT (%)	SCORING (%)
1	BloodKad Application Availability and System Performance - Application is accessible, stable, and functioning according to agreed requirements. Any system downtime or service interruption is properly managed and reported.	30%	
2	Maintenance and Technical Support Services - Technical support is provided within the agreed response time. User issues, faults, and service requests are attended to and tracked until resolution.	20%	
3	Issue/Bug Resolution and Corrective Actions - Reported defects or system issues are investigated, corrected, and closed within the agreed timeframe.	20%	
4	Enhancement and Development Activities - Approved enhancements, modifications, and new features are delivered according to the agreed timeline and requirements.	15%	
5	Monthly Reporting and Documentation - Monthly reports, incident reports, maintenance records, and other required documents are submitted accurately and on time.	10%	
6	Data Security, Backup and System Integrity - Appropriate measures are maintained to ensure protection, backup, and integrity of BloodKad data.	5%	
	Total	100%	

B. PERFORMANCE / ISSUES (if applicable)

NO.	ISSUE / ENHANCEMENT	STATUS	REMARKS
1		☐ Completed ☐ Pending ☐ Under Review	
2		☐ Completed ☐ Pending ☐ Under Review	

C. PAYMENT VERIFICATION

- ☐ Services have been satisfactorily delivered according to the contract requirements.
- ☐ Invoice verified and recommended for payment.
- ☐ Payment withheld pending corrective action.

Verified by Head of Blood Donation Centre

Name: _____
Designation: _____
Signature: _____
Date: _____

SECTION 3
FORMS TO BE USED
CONTENTS

SCHEDULE 1 – TENDER FORM

SCHEDULE 2 – INFORMATION SUMMARY

SCHEDULE 3 – SUB-CONTRACTS

SCHEDULE 4 – COMPANY’S BACKGROUND

SCHEDULE 5 – REFERENCES

SECTION 3

SCHEDULE 1 - TENDER FORM

To:

TENDER REFERENCE NO.: KK/233/2026/LAB(TC)

INVITATION TO TENDER

**PROVISION OF CONTINUED DEVELOPMENT, ENHANCEMENT, MAINTENANCE AND SUPPORT FOR THE BLOODKAD MANAGEMENT SYSTEM
AND MOBILE APPLICATION FOR BLOOD DONATION CENTRE AND DISTRICT BLOOD BANKS, DEPARTMENT OF LABORATORY SERVICES,
MINISTRY OF HEALTH FOR A PERIOD OF THREE (3) YEARS**

TENDER OF (name of Supplier) : _____

Company/Business Registration No. : _____

Tender Closing Date : _____

ITEM	LOCATION	MONTHLY RATE (B\$)
Provision Of Enhancement, Maintenance and Support for The Bloodkad Management System and Mobile Application	Blood Donation Centre, Raja Isteri Pengiran Anak Saleha Hospital	
	Blood Bank, Suri Seri Begawan Hospital	
	Blood Bank, Pengiran Muda Mahkota Pengiran Muda Haji Al-Muhtadee Billah Hospital	
	Blood Bank, Pengiran Isteri Hajah Mariam Hospital	
PRICE PER MONTH (B\$)		
PRICE PER YEAR (B\$)		
TOTAL PRICE FOR THREE (3) YEARS (B\$)		

USER REQUIREMENTS	DETAILS OF THE OFFER
Company Registration	
Enhancement and Development of Blood Donation Management System and Mobile Application	
Maintenance and Support of Blood Donation Management System and Mobile Application	
User Acceptance Testing	
End user Training	
Experience in the Required Services	

- Dated this day of 2026

Name:
Designation:
Contact No.:

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 is the Tender Closing Date) of the Contractor and sub-contractor(s) in the:
 - **Provision of Management System and Mobile Application**
 - d. Other information which is considered relevant.

SCHEDULE 3 – SUB-CONTRACTS

- 3.1 Tenderers shall complete Table 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 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 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 of Certificate of Registration (as the case may be).

SCHEDULE 5 – REFERENCES

- 5.1 Tenderers shall submit a list of customers in Table 2 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 2 - References of previous customers

Customers 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 nor 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 purpose.