REFERENCE OF TENDER	DESCRIPTION OF TENDER	TIME PERIOD OF TENDER	DEPARTMENT/ DIVISION/UNIT REQUESTING TENDER	FEES	CLOSING DATE NOT LATER THAN 12.00PM	FOCAL PERSON
KK/57/2025/SSBH	SUPPLY, DELIVEY, INSTALLATION, TESTING AND COMISSIONING SURGICAL MOBILE C-ARM IMAGING SYSTEM FOR RADIOLOGY DEPARTMENT, SSB HOSPITAL KUALA BELAIT	-	SURI SERI BEGAWAN HOSPITAL KUALA BELAIT	$30.00	25TH MARCH 2025	*Muhd Amirul Fazleen bin Haji Khalidin* *Biomedical Engineer* *Suri Seri Begawan Hospital, Kuala Belait* *Ministry of Health* *Negara Brunei Darussalam* *Contact No: 3335331 ext 4222* *email : fazleen.khalidin@moh.gov.bn*

TENDER REFERENCE NO.: KK/57/2025/SSBH

MINISTRY OF HEALTH
NEGARA BRUNEI DARUSSALAM

SUPPLY, DELIVEY, INSTALLATION, TESTING AND COMISSIONING SURGICAL MOBILE C-ARM IMAGING SYSTEM FOR RADIOLOGY DEPARTMENT, SSB HOSPITAL KUALA BELAIT

TENDER FEES : $30.00

RECEIPT NO. :

CLOSING DATE : ON TUESDAY, 25TH MARCH 2025

TIME : 12.00 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/57/2025/SSBH

INVITATION TO TENDER

SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING SURGICAL MOBILE C-ARM IMAGING SYSTEM FOR RADIOLOGY DEPARTMENT, SSB HOSPITAL KUALA BELAIT

	SECTION 1 – USER REQUIREMENTS
REF. NO.	**DESCRIPTION**
1	**ONE (1) UNIT OF SURGICAL MOBILE C-ARM IMAGING SYSTEM**
2	**END-USER AND TECHNICAL TRAINNING**
3	**BRUHIMS AND PACS INTEGRATION**
4	**WARRANTY**
5	**SHENA REGISTRATION**

1	**ONE (1) UNIT OF SURGICAL MOBILE C-ARM IMAGING SYSTEM**
1.1	Mid-level multipurpose surgical mobile c-arm imaging system to be used in the operating theatre for interventional and surgical imaging procedures.
1.2	Main clinical application: Orthopaedic
1.3	Other clinical application: General and vascular surgery
	FEATURES
1.4	Proposed system has the following features:
1.4.1	C-arm unit
1.4.2	Flat-panel detector (FD)
1.4.3	Collimator system
1.4.4	X-ray generator
1.4.5	X-ray tube
1.4.6	Viewing Station
1.4.7	X-ray release switches
	C-ARM UNIT
1.4.1.1	Compact with narrow width for easy manoeuvring inside the Operating theatre
1.4.1.2	One touch adjustment button that adjust kV, contrast, brightness, gamma, edge-enhance to display optimized quality images at instant real time

1.4.1.3	Multiple imaging modes, including but not limited to:
1.4.1.3.1	Continuous fluoroscopy
1.4.1.3.2	Pulsed fluoroscopy
1.4.1.3.3	Boost pulsed fluoroscopy
1.4.1.3.4	Low-dose fluoroscopy
1.4.1.3.5	Last image hold
1.4.1.3.6	High-resolution spot imaging
1.4.1.3.7	Digital spot radiography
1.4.1.3.8	Serial radiography
1.4.1.3.9	Digital subtraction angiography (DSA)
1.4.1.4	C-arm locking system: Electromagnetic lock
1.4.1.5	C-arm has doctor handle switch to allow single-handed C-arm positioning by the doctor
1.4.1.6	C-arm depth/FPD to tube distance: more than 750mm
1.4.1.7	C-arm rotation: can go up to 120^0
1.4.1.8	C-arm can travel up and down at least 450mm or better
1.4.1.9	C-arm can travel forward and reverse at least 150mm or better
1.4.1.10	C-arm axial rotation: able to do -100^0 to 200^0 or better
1.4.1.11	C-arm swivel: $\pm 12.5^0$
1.4.1.12	Large Touch panel display: 8” or better [Please Specify]
1.4.1.13	Double wheels for easy manoeuvring
1.4.1.14	Integrated anti-virus software
1.4.1.15	Comes with laser pointer
1.4.1.16	Radiation dose measurement recorded per procedure. Able to display during end of procedures in PACS with or without images.
1.4.1.17	User friendly with essential function buttons clearly labelled or with large icons (Please attach picture)
1.4.1.18	Wireless transfer of images to PACS with a touch of a button with ease. (Please attach steps or guide for reference)
	FLAT-PANEL DETECTOR (FD)
1.4.2.1	C-arm is fully flat-panel detector technology
1.4.2.2	Detector size: Standard 8 x 8 inch or 21cm x 21cm or 30cm x 30cm or equivalent
1.4.2.3	FD is fixed type
1.4.2.4	Pixel pitch must be between: 200 to 300 µm

	COLLIMATOR SYSTEM
1.4.3.1	Inclusive of removable anti scattering x-ray grid for paediatric patient
1.4.3.2	Specify the type of collimator available
	X-RAY GENERATOR
1.4.4.1	Power: Between 15kW to 25kW or better
	X-RAY TUBE
1.4.5.1	Stationary anode tube with high heat capacity to support long fluoroscopic procedures
1.4.5.2	Specify the focal spot size
	VIEW STATION
1.4.6.1	Inclusive of monitor cart with two units of (2) medical-grade LCD display monitor
1.4.6.2	Two (2) display monitor size: at least 19”
1.4.6.3	Height adjustable car
1.4.6.4	Monitors can be folded for easy storage
	X-RAY RELEASE SWITCHES
1.4.7.1	Comes with both wired and wireless hand switch to expose
1.4.7.2	Inclusive of foot switch
1.5	**ADDITIONAL ACCESSORIES**
1.5.1	Two (2) units of lightweight lead apron; WHO certified specification; 0.35mm equivalent lead; wrap around protection
1.5.2	Eight (8) pairs of OT clogs shoes; antistatic and washable; toe enclosed; Size: 4 x Medium, 2 x Large, 2 x Extra Large
2	**END-USER & TECHNICAL TRAINNING**
2.1	Inclusive of **clinical application training** for all radiographers and x-ray technician for at least three (3) working days on-site for all the operation and applications offered with the system **by Manufacturer’s Application Specialist** which includes but not limited to:
2.1.1	Basic user operation, user troubleshooting and user maintenance
2.1.2	CPACS guide through (if necessary)
2.1.3	RPACS guide through (if necessary)
2.2	Include training for QC radiographers on Quality Control procedures.
2.3	**Training certificate must be provided by manufacturer** or tenderer after completion of training sessions.
2.4	On-site follow up application training by application specialist after three (3) months of clinical use to ensure the system is fully optimised
2.5	**Introductory Technical Training** to Biomedical Engineers and Technicians at BME RIPASH Office by competent Tenderer’s Engineer/Technicians that includes but not limited to: ▪ Troubleshooting and basic corrective maintenance

	▪ Handling and basic inspection maintenance *(Two sessions/groups if required)
3	**BRU-HIMS AND PACS INTEGRATION**
3.1	Comply to HIL 7 and DICOM 3.0 and activated for integration with Bru-HIMS and PACS
3.2	Capable to perform DICOM Modality Performed Procedure Step (MPPS), storage, worklist, query/retrieve and print, Radiation Dose Structure Report (RDSR)
3.3	Tenderer to include the cost of Bru-HIMS integration quoted from Bru-HIMS vendor. Tenderer may contact the quotation of Bru-HIMS integration for this project directly to the MOH's Bru-HIMS vendor or through the Healthcare Technology Department, Ministry of Health
4	**WARRANTY**
4.1	Tenderer to include warranty period of **at least two (2) years**
4.2	Tenderers to **INCLUDE** a Warranty Undertaking Letter stating the terms of warranty provided for the equipment in the tender. This includes but not limited to (Refer to form at the next section)
4.2.1	Duration and warranty coverage
4.2.2	Excluded from Warranty
4.2.3	Two times (2x) Warranty Planned Preventive Maintenance (one of which includes, if applicable, PM kit) on the sixth month after date of commissioning and end of warranty period.
4.2.4	Scope of Planned Preventive Maintenance
5	**SHENA REGISTRATION**
5.1	Tenderer must be registered with Safety, Health and Environment National Authority (SHENA), Brunei Darussalam for relevant radiation licenses to be able to import radiation equipment. **[Proof of Active Registration must be included]**

SECTION 2 – PROCUMENT AND TECHNICAL SPECIFICATION

BRAND	**MODEL**
COUNTRY OF ORIGIN	**UNIT PRICE (B$)**
WARRANTY PERIOD	**TOTAL PRICE (B$)**
YEAR INTRODUCED TO MARKET	**PRICE VALIDITY** [AT LEAST ONE (1) YEAR PRICE VALIDTY]
LAST COUNTRY SOLD TO	**DELIVERY TIME**
WARRANTY UNDERTAKING LETTER	
DETAILED BROCHURE INCLUDED	
USER AND SERVICE MANUALS	
MAINS POWER SUPPLY	
BATTERY	
POWER RATINGS	
EQUIPMENT AMBIENT OPERATING TEMPERATURE RANGE	
INTERNATIONAL SAFETY STANDARD List of Safety Standards and certification (Please attached the copy of stated standards and certifications)	
NO OF TECHNICAL SUPPORT (ENGINEER/TECHNICIAN)	
DIMENSIONS AND WEIGHT OF MAIN UNIT	
EQUIPMENT WHOLE LIFE TIME SUPPORT	

SECTION 3 – WARRANTY UNDERTAKING FORM

WARRANTY UNDERTAKING FORM

Tenderer, on behalf of the manufacturer, acknowledged and agrees that when equipment is under Warranty period, must cover the scope of normal warranty below at no additional cost:

NORMAL WARRANTY

- Warrants the supplied medical equipment and its accessories to be in good condition, in working order and free from defects to the extend such equipment do not comply with specifications, under normal use for the warranty period. The scope of warranty covers to its maximum extent permitted by applicable law.
- During warranty, tenderer must rectify issues arise from any mechanical, technical or software faulty as soon as it is reported.
- **Exchange warranty**; Providing replacement units:
  - **A.** Warranty against defects – Manufacturing defects or Equipment malfunction resulted from mechanical, electrical or software failure during Commissioning or within the first _____ months of use
  - **B.** Faulty workmanship or unsatisfactory condition during delivery or commissioning
  - **C.** If a unit or accessory is deemed used item or refurbished item (not a new unit) by the user and BME Unit.
- **Two time Planned Preventive Maintenance (PPM) PER YEAR** according to Manufacturer's Preventive Maintenance Guideline, including one-time replacements of PM Kits, batteries and any relevant parts to prolong equipment lifespan.

EXCLUSION FROM WARRANTY

MOH understand that the following circumstances are not covered in the warranty and Tenderer may quote for repair and subject to MOH approval:

- Unauthorized modifications - an alteration or repair by anyone other than the Manufacturer or Authorized agent during warranty period.
- Accidental damage or problems caused by negligence or mishandling, subject to appropriate justification by both parties.
- Vandalism and Natural disasters
- Normal wear and tear

POST WARRANTY COMPREHENSIVE MAINTENANCE SERVICE

Tenderer must provide a comprehensive maintenance service after the warranty period.
The scope for **Comprehensive Maintenance Service** consists of:

- **A. Inspection Maintenance (IM)**
- **B. Corrective Maintenance (CM) and**
- **C. Planned Preventive maintenance (PPM)**
- **D. Breakdown calls**

A. Inspection Maintenance (IM)

- Must be conducted every six (6) months starting from warranty expiry date
- Issuance of IM Report to End User and Biomedical Engineering Unit of respective Facilities (BME)
- Physical hardware checks on main unit/system and all supplied accessories
- System, Software and Application checkup – Update to latest version when available
- Performance and Functional testing
- Servicing/Cleaning of dust

B. Corrective Maintenance (CM):

- Repair and replacement of parts with new, quality, and compatible parts within thirty (30) days after receipt of reported problem by BME
- Post repair tests with reports to ensure Electrical Safety Test, Performance Test and Functional Test is conducted.

C. Planned Preventive Maintenance (PPM):

- **Two times a year** Comprehensive PPM for every warranty year to ensure equipment is working in maximum condition. (Inclusive of one time PM kits and replaceable items)
- Provide Maintenance Due Date stickers after each PPM

D. Breakdown Call

- Attend to any breakdown call within 24 hours after receipt of reported problem by BME Unit of Respective Facilities preferably during office hours, else after office hours or public holidays (only if it is necessary and urgent)
- Response to Breakdown call: within 30 mins (Office hours) / within 60 mins (non-Office hours)
- Downtime: Not more than 24 hours after receipt of reported problem by BME unit of Respective Facilities
- If Downtime is expected to be more than 24 hours, Tenderer must provide notice to BME unit indicating the reason of delay with estimation of:
    - Estimated time of parts to arrive and
    - Expected no of days for repair completion
    - Estimated time for loan unit to arrive if not in stock (Leasing).

ADDITIONAL WARRANTY SCOPE FOR LEASING:

Tenderer need to plan and provide a **LOAN UNIT** to End User as soon as possible if equipment downtime is expected to be more than 24 hours after receipt of reported problem from BME (not repairable or need to be remove from service due to requiring parts replacement until the equipment is return back to service.)

ANY OTHER EXCLUSION

Tenderer may propose below to include items or terms which is not listed in the exclusion list above for MOH consideration

SECTION 3

TENDER FORM

To:

TENDER REFERENCE NO: KK/57/2025/SSBH

INVITATION TO TENDER
SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING SURGICAL MOBILE C-ARM IMAGING SYSTEM FOR RADIOLOGY DEPARTMENT, SSB HOSPITAL KUALA BELAIT

TENDER OF *(name of tenderer)* *:* _____

Company/Business Registration No. : _____

Tender Closing Date : _____

DELIVERY PERIOD	

	SECTION 1 – USER REQUIREMENTS			
REF. NO.	**DESCRIPTION**	**Tick (✓)**		**STATE OR SPECIFY**
		YES	**NO**	**REMARKS/ BROCHURE PAGE**
1	**ONE (1) UNIT OF SURGICAL MOBILE C-ARM IMAGING SYSTEM**			
2	**END-USER AND TECHNICAL TRAINNING**			

	SECTION 1 – USER REQUIREMENTS			
REF. NO.	**DESCRIPTION**	**Tick (✓)**		**STATE OR SPECIFY**
		YES	**NO**	**REMARKS/ BROCHURE PAGE**
3	**BRUHIMS AND PACS INTEGRATION**			
4	**WARRANTY**			
5	**SHENA REGISTRATION**			
1	**ONE (1) UNIT OF SURGICAL MOBILE C-ARM IMAGING SYSTEM**			
1.1	Mid-level multipurpose surgical mobile c-arm imaging system to be used in the operating theatre for interventional and surgical imaging procedures.			
1.2	Main clinical application: Orthopaedic			
1.3	Other clinical application: General and vascular surgery			
	FEATURES			
1.4	Proposed system has the following features:			
1.4.1	C-arm unit			
1.4.2	Flat-panel detector (FD)			
1.4.3	Collimator system			

	SECTION 1 – USER REQUIREMENTS			
REF. NO.	DESCRIPTION	Tick (✓)		STATE OR SPECIFY
		YES	NO	REMARKS/ BROCHURE PAGE
1.4.4	X-ray generator			
1.4.5	X-ray tube			
1.4.6	Viewing Station			
1.4.7	X-ray release switches			
	C-ARM UNIT			
1.4.1.1	Compact with narrow width for easy manoeuvring inside the Operating theatre			
1.4.1.2	One touch adjustment button that adjust kV, contrast, brightness, gamma, edge-enhance to display optimized quality images at instant real time			
1.4.1.3	Multiple imaging modes, including but not limited to:			
1.4.1.3.1	Continuous fluoroscopy			
1.4.1.3.2	Pulsed fluoroscopy			
1.4.1.3.3	Boost pulsed fluoroscopy			
1.4.1.3.4	Low-dose fluoroscopy			

	SECTION 1 – USER REQUIREMENTS			
REF. NO.	**DESCRIPTION**	**Tick (✓)**		**STATE OR SPECIFY**
		YES	**NO**	**REMARKS/ BROCHURE PAGE**
1.4.1.3.5	Last image hold			
1.4.1.3.6	High-resolution spot imaging			
1.4.1.3.7	Digital spot radiography			
1.4.1.3.8	Serial radiography			
1.4.1.3.9	Digital subtraction angiography (DSA)			
1.4.1.4	C-arm locking system: Electromagnetic lock			
1.4.1.5	C-arm has doctor handle switch to allow single-handed C-arm positioning by the doctor			
1.4.1.6	C-arm depth/FPD to tube distance: more than 750mm			
1.4.1.7	C-arm rotation: can go up to 120^0			
1.4.1.8	C-arm can travel up and down at least 450mm or better			
1.4.1.9	C-arm can travel forward and reverse at least 150mm or better			
1.4.1.10	C-arm axial rotation: able to do -100^0 to 200^0 or better			

	SECTION 1 – USER REQUIREMENTS			
REF. NO.	**DESCRIPTION**	**Tick (✓)**		**STATE OR SPECIFY**
		YES	**NO**	**REMARKS/ BROCHURE PAGE**
1.4.1.11	C-arm swivel: $\pm 12.5^0$			
1.4.1.12	Large Touch panel display: 8” or better [Please Specify]			
1.4.1.13	Double wheels for easy manoeuvring			
1.4.1.14	Integrated anti-virus software			
1.4.1.15	Comes with laser pointer			
1.4.1.16	Radiation dose measurement recorded per procedure. Able to display during end of procedures in PACS with or without images.			
1.4.1.17	User friendly with essential function buttons clearly labelled or with large icons (Please attach picture)			
1.4.1.18	Wireless transfer of images to PACS with a touch of a button with ease. (Please attach steps or guide for reference)			
	FLAT-PANEL DETECTOR (FD)			
1.4.2.1	C-arm is fully flat-panel detector technology			
1.4.2.2	Detector size: Standard 8 x 8 inch or 21cm x 21cm or 30cm x 30cm or equivalent			
1.4.2.3	FD is fixed type			

	SECTION 1 – USER REQUIREMENTS			
REF. NO.	DESCRIPTION	Tick (✓)		STATE OR SPECIFY
		YES	NO	REMARKS/ BROCHURE PAGE
1.4.2.4	Pixel pitch must be between: 200 to 300 µm			
	COLLIMATOR SYSTEM			
1.4.3.1	Inclusive of removable anti scattering x-ray grid for paediatric patient			
1.4.3.2	Specify the type of collimator available			
	X-RAY GENERATOR			
1.4.4.1	Power: Between 15kW to 25kW or better			
	X-RAY TUBE			
1.4.5.1	Stationary anode tube with high heat capacity to support long fluoroscopic procedures			
1.4.5.2	Specify the focal spot size			
	VIEW STATION			
1.4.6.1	Inclusive of monitor cart with two units of (2) medical-grade LCD display monitor			
1.4.6.2	Two (2) display monitor size: at least 19”			

	SECTION 1 – USER REQUIREMENTS			
REF. NO.	**DESCRIPTION**	**Tick (✓)**		**STATE OR SPECIFY**
		YES	**NO**	**REMARKS/ BROCHURE PAGE**
1.4.6.3	Height adjustable car			
1.4.6.4	Monitors can be folded for easy storage			
	X-RAY RELEASE SWITCHES			
1.4.7.1	Comes with both wired and wireless hand switch to expose			
1.4.7.2	Inclusive of foot switch			
1.5	**ADDITIONAL ACCESSORIES**			
1.5.1	Two (2) units of lightweight lead apron; WHO certified specification; 0.35mm equivalent lead; wrap around protection			
1.5.2	Eight (8) pairs of OT clogs shoes; antistatic and washable; toe enclosed; Size: 4 x Medium, 2 x Large, 2 x Extra Large			
2	**END-USER & TECHNICAL TRAINNING**			
2.1	Inclusive of **clinical application training** for all radiographers and x-ray technician for at least three (3) working days on-site for all the operation and applications offered with the system **by Manufacturer's Application Specialist** which includes but not limited to:			
2.1.1	Basic user operation, user troubleshooting and user maintenance			
2.1.2	CPACS guide through (if necessary)			

	SECTION 1 – USER REQUIREMENTS			
REF. NO.	**DESCRIPTION**	**Tick (✓)**		**STATE OR SPECIFY**
		YES	**NO**	**REMARKS/ BROCHURE PAGE**
2.1.3	RPACS guide through (if necessary)			
2.2	Include training for QC radiographers on Quality Control procedures.			
2.3	**Training certificate must be provided by manufacturer** or tenderer after completion of training sessions.			
2.4	On-site follow up application training by application specialist after three (3) months of clinical use to ensure the system is fully optimised			
2.5	**Introductory Technical Training** to Biomedical Engineers and Technicians at BME RIPASH Office by competent Tenderer's Engineer/Technicians that includes but not limited to: ▪ Troubleshooting and basic corrective maintenance ▪ Handling and basic inspection maintenance *(Two sessions/groups if required)			
3	**BRU-HIMS AND PACS INTEGRATION**			
3.1	Comply to HIL 7 and DICOM 3.0 and activated for integration with Bru-HIMS and PACS			
3.2	Capable to perform DICOM Modality Performed Procedure Step (MPPS), storage, worklist, query/retrieve and print, Radiation Dose Structure Report (RDSR)			
3.3	Tenderer to include the cost of Bru-HIMS integration quoted from Bru-HIMS vendor. Tenderer may contact the quotation of Bru-HIMS integration for this project directly to the MOH's Bru-HIMS vendor or through the Healthcare Technology Department, Ministry of Health			
4	**WARRANTY**			

	SECTION 1 – USER REQUIREMENTS			
REF. NO.	**DESCRIPTION**	**Tick (✓)**		**STATE OR SPECIFY**
		YES	**NO**	**REMARKS/ BROCHURE PAGE**
4.1	Tenderer to include warranty period of **at least two (2) years**			
4.2	Tenderers to **INCLUDE** a Warranty Undertaking Letter stating the terms of warranty provided for the equipment in the tender. This includes but not limited to (Refer to form at the next section)			
4.2.1	Duration and warranty coverage			
4.2.2	Excluded from Warranty			
4.2.3	Two times (2x) Warranty Planned Preventive Maintenance (one of which includes, if applicable, PM kit) on the sixth month after date of commissioning and end of warranty period.			
4.2.4	Scope of Planned Preventive Maintenance			
5	**SHENA REGISTRATION**			
5.1	Tenderer must be registered with Safety, Health and Environment National Authority (SHENA), Brunei Darussalam for relevant radiation licenses to be able to import radiation equipment. **[Proof of Active Registration must be included]**			

SECTION 2 – PROCUMENT AND TECHNICAL SPECIFICATION								
BRAND:					**MODEL:**			
COUNTRY OF ORIGIN:					**UNIT PRICE (B$):**			
WARRANTY PERIOD:					**TOTAL PRICE (B$):**			
YEAR INTRODUCED TO MARKET:					**PRICE VALIDITY:** [AT LEAST ONE (1) YEAR PRICE VALIDTY]			
LAST COUNTRY SOLD TO:					**DELIVERY TIME:**			
WARRANTY UNDERTAKING LETTER?		**YES**		**NO**	**☑ Where appropriate**			
DETAILED BROCHURE INCLUDED?		**YES**		**NO**	**☑ Where appropriate**			
USER AND SERVICE MANUALS:		**YES**		**NO**	Tenderers to acknowledge that they must provide at least **TWO** sets of **USER AND SERVICE** manuals when applying commissioning form. One Set for End User, One Set for BME. (Please provide hardcopy or softcopy)			
MAINS POWER SUPPLY:		**220V-240V**			OTHERS:			
		50-60HZ			OTHERS:			
BATTERY		**RECHARGEABLE**				**SINGLE-USE**		**REPLACEABLE**

SECTION 2 – PROCUMENT AND TECHNICAL SPECIFICATION			
		OTHERS:	
	TYPE OF BATTERY:		
POWER RATINGS:	**POWER ADAPTER/CHARGER:**		
	BATTERY:		
EQUIPMENT AMBIENT OPERATING TEMPERATURE RANGE:			
INTERNATIONAL SAFETY STANDARD List of Safety Standards and certification (Please attached the copy of stated standards and certifications)			
NO OF TECHNICAL SUPPORT (ENGINEER/TECHNICIAN)	**LOCAL**		
	OVERSEA **(SPECIFY LOCATION)**	LOCATION:	
DIMENSIONS AND WEIGHT OF MAIN UNIT:			**MM / CM / INCH**
			KG / G / LBS
EQUIPMENT WHOLE LIFE TIME SUPPORT:	Number of years, spare parts are available after the installation of the equipment: _____ years		

SECTION 3 – WARRANTY UNDERTAKING FORM

WARRANTY UNDERTAKING FORM (PAGE 1)

Tenderer, on behalf of the manufacturer, acknowledged and agrees that when equipment is under Warranty period, must cover the scope of normal warranty below at no additional cost:

NORMAL WARRANTY

- Warrants the supplied medical equipment and its accessories to be in good condition, in working order and free from defects to the extend such equipment do not comply with specifications, under normal use for the warranty period. The scope of warranty covers to its maximum extent permitted by applicable law.
- During warranty, tenderer must rectify issues arise from any mechanical, technical or software faulty as soon as it is reported.
- **Exchange warranty**; Providing replacement units:
    A. Warranty against defects – Manufacturing defects or Equipment malfunction resulted from mechanical, electrical or software failure during Commissioning or within the first _____ months of use
    B. Faulty workmanship or unsatisfactory condition during delivery or commissioning
    C. If a unit or accessory is deemed used item or refurbished item (not a new unit) by the user and BME Unit.
- **Two time Planned Preventive Maintenance (PPM) PER YEAR** according to Manufacturer's Preventive Maintenance Guideline, including one-time replacements of PM Kits, batteries and any relevant parts to prolong equipment lifespan.

EXCLUSION FROM WARRANTY

MOH understand that the following circumstances are not covered in the warranty and Tenderer may quote for repair and subject to MOH approval:

- Unauthorized modifications - an alteration or repair by anyone other than the Manufacturer or Authorized agent during warranty period.
- Accidental damage or problems caused by negligence or mishandling, subject to appropriate justification by both parties.
- Vandalism and Natural disasters
- Normal wear and tear

POST WARRANTY COMPREHENSIVE MAINTENANCE SERVICE

Tenderer must provide a comprehensive maintenance service after the warranty period.
The scope for **Comprehensive Maintenance Service** consists of:

A. Inspection Maintenance (IM)
B. Corrective Maintenance (CM) and
C. Planned Preventive maintenance (PPM)
D. Breakdown calls

TENDERER ACKNOWLEDGMENT

COMPANY CHOP AND SIGNATURE

WARRANTY UNDERTAKING FORM (PAGE 2)

A. Inspection Maintenance (IM)

- Must be conducted every six (6) months starting from warranty expiry date
- Issuance of IM Report to End User and Biomedical Engineering Unit of respective Facilities (BME)
- Physical hardware checks on main unit/system and all supplied accessories
- System, Software and Application checkup – Update to latest version when available
- Performance and Functional testing
- Servicing/Cleaning of dust

B. Corrective Maintenance (CM):

- Repair and replacement of parts with new, quality, and compatible parts within thirty (30) days after receipt of reported problem by BME
- Post repair tests with reports to ensure Electrical Safety Test, Performance Test and Functional Test is conducted.

C. Planned Preventive Maintenance (PPM):

- **Two times a year** Comprehensive PPM for every warranty year to ensure equipment is working in maximum condition. (Inclusive of one time PM kits and replaceable items)
- Provide Maintenance Due Date stickers after each PPM

D. Breakdown Call

- Attend to any breakdown call within 24 hours after receipt of reported problem by BME Unit of Respective Facilities preferably during office hours, else after office hours or public holidays (only if it is necessary and urgent)
- Response to Breakdown call: within 30 mins (Office hours) / within 60 mins (Non-Office hours)
- Downtime: Not more than 24 hours after receipt of reported problem by BME unit of Respective Facilities
- If Downtime is expected to be more than 24 hours, Tenderer must provide notice to BME unit indicating the reason of delay with estimation of:
  - ✓ Estimated time of parts to arrive and
  - ✓ Expected no of days for repair completion
  - ✓ Estimated time for loan unit to arrive if not in stock (Leasing).

ADDITIONAL WARRANTY SCOPE FOR LEASING:

Tenderer need to plan and provide a **LOAN UNIT** to End User as soon as possible if equipment downtime is expected to be more than 24 hours after receipt of reported problem from BME (not repairable or need to be remove from service due to requiring parts replacement until the equipment is return back to service.)

TENDERER ACKNOWLEDGMENT

COMPANY CHOP AND SIGNATURE

WARRANTY UNDERTAKING FORM (PAGE 3)
ANY OTHER EXCLUSION Tenderer may propose below to include items or terms which is not listed in the exclusion list above for MOH consideration
TENDERER ACKNOWLEDGMENT
COMPANY CHOP AND SIGNATURE

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

2. Our Tender is fully consistent with and does no 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. OUR OFFER IS VALID FOR **TWELVE (12)** CALENDAR MONTHS FROM THE TENDER CLOSING DATE.

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

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

Dated this_____day of_____, _____

Tenderer's official stamp

_____

Signature of authorised officer of Tenderer
Name:
Designation: