

LAMPIRAN 1

Ruj Kami: (17) KK/UPK/IT/2024

REFERENCE OF TENDER	DESCRIPTION OF TENDER	TIME PERIOD OF TENDER	DEPARTMENT/DIVISION/UNIT REQUESTING TENDER	FEES	CLOSING DATE NOT LATER THAN 12.00AM	FOCAL PERSON
KK/60/2024/TUT	REPLACEMENT OF DX-ACCUS AND AHU C/W ASSOCIATED WORKS AT CSSD BUILDING, PMMPMHAMB HOSPITAL TUTONG <u>Eligibility for Tenderers:</u> Registered with Ministry of Health and Ministry of Development <u>Class:</u> II below <u>Category :</u> M01 & E01	-	PENGIRAN MUDA MAHKOTA PENGIRAN MUDA HAJI AL-MUHTADEE BILLAH (PMMPMHAMB) HOSPITAL, TUTONG	\$10.00	23 RD APRIL 2024	Ak Noorshah bin Pg Haji Zainal Porject Officer Estate Management Section Hospital PMMPMHAMB Tutong Ministry of Health Negara Brunei Darussalam Contact No.: 4260721/2/3/4/5 EXT 181/188 e-mail: noorshah.zainal@moh.gov.bn

NOMBOR TAWARAN: KK/60/2024/TUT

**KEMENTERIAN KESIHATAN
NEGARA BRUNEI DARUSSALAM**

**REPLACEMENT OF DX-ACCUS AND AHU C/W ASSOCIATED
WORKS AT CSSD BUILDING, PMMPMHAMB HOSPITAL TUTONG**

YURAN TAWARAN : \$10.00

NOMBOR RESIT :

TARIKH TUTUP : HARI SELASA, 23HB APRIL 2024

JAM : 2.00 PETANG

KEPADA :

**PENGERUSI LEMBAGA TAWARAN KECIL
PETI TAWARAN, TINGKAT BAWAH
BANGUNAN KEMENTERIAN KESIHATAN
COMMONWEALTH DRIVE
BANDAR SERI BEGAWAN BB 3910
NEGARA BRUNEI DARUSSALAM**

(CLUSTERING)

ESTATE MAINTENANCE SECTION TUTONG
MINISTRY OF HEALTH

<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto; position: relative;"><div style="position: absolute; top: 0; right: 0; width: 5px; height: 5px; background: white;"></div></div>	<div>1. _____</div> <div>2. _____</div> <div>3. _____</div>
FOR OFFICIAL USE ONLY	

Tender For : REPLACEMENT OF DX-ACCUS AND AHU C/W ASSOCIATED WORKS AT CSSD BUILDING, PMMPMHAMB HOSPITAL TUTONG

Tender No. : KK/60/2024/TUT **Closed On** : **Receipt No.** :

PART A - AGREEMENT

1.0 On behalf of _____
I, the undersigned, agree to carry out the above Works/Service/Supply* for a sum of B\$ _____
(Brunei Dollars _____)
within a period of 4 (FOUR) Days / Weeks / Months* in accordance with the terms and conditions below.

2.0 Name & Signature : _____ As Owner/Director* (_____)	<div style="border: 1px solid black; width: 100%; height: 100%; margin: 0 auto;"></div> <div style="border: 1px solid black; width: 100%; height: 30px; margin: 0 auto; text-align: center; font-weight: bold;">Company Stamp</div>
2.1 IC No. : _____	
2.2 Name & Signature : _____ of Witness (_____)	
2.3 IC No. : _____	
2.4 Address : _____	
2.5 Telephone No. : _____ Fax No. : _____ E-mail : _____	
2.6 Date : _____	

FOR OFFICIAL USE ONLY.

3.0 On behalf of the Brunei Government, I accept your offer to carry out all/ items* _____
of the above for a sum of B\$ _____ (Brunei Dollars _____)
within a period of _____ Days / Weeks* in accordance with the terms and conditions below.

4.0 _____ (_____)	<div style="border: 1px solid black; width: 100%; height: 100%; margin: 0 auto;"></div> <div style="border: 1px solid black; width: 100%; height: 30px; margin: 0 auto; text-align: center; font-weight: bold;">Department Stamp</div>
4.1 _____ For Senior Special Duties Officer	
4.2 Name & Signature : _____ of Witness (_____)	
4.3 Address : _____	
4.4 Telephone No. : _____ Fax No. : _____ E-mail : _____	
4.5 Date of Contract : _____	
5.0 The Contract Administrator is : _____	
6.0 The Starting Date is on : _____	

* Delete as necessary

PART B - TERMS OF QUOTATION

1.0 BASIS OF QUOTATION, OVERALL OBLIGATIONS AND ADMINISTRATION

1.1 Overall Obligations of the Government:

- 1.1.1 To provide access at proper times for the Contractor to do his work.
- 1.1.2 To provide all information and facilities stated in this contract to enable the Contractor to do his work.
- 1.1.3 To pay the Contractor as provided in this Contract.
- 1.1.4 To assign a Contract Administrator to administer this Contract.
- 1.1.5 May take out or renew insurances referred to in Clause 1.2.4 below if the Contractor fails to do so.

1.2 Overall Obligations of the Contractor:

- 1.2.1 To finish the Works to the quality standards provided in this Contract within the timeframes and completion period provided in this Contract.
- 1.2.2 To cooperate with all other Contractors working on the project and not to disrupt them or cause damage to them.
- 1.2.3 To provide a collateral warranty containing a similar obligation as under this Contract directly to a third party if requested by the Contract Administrator.
- 1.2.4 To provide and maintain valid Contractor's all risks insurance policy at all times.

1.3 Instructions & Certifications

- 1.3.1 The Contract Administrator can issue instructions and certifications including job orders to the Contractor on anything relating to the Works.
- 1.3.2 All instructions, certifications and job orders must be in writing, dated and clearly identified as Contract Administrator's instructions, certifications or job orders.
- 1.3.3 The Contractor must comply with all instructions, certifications and job orders issued by the Contract Administrator.
- 1.3.4 The Contract Administrator may arrange others to complete the Works if the Contractor fails to comply with Clause 1.3.3, and the Contractor shall pay for all extra costs incurred.

2.0 QUALITY, HEALTH AND SAFETY

2.1 Quality

- 2.1.1 The Contractor must do his work based on the documents referred to in this Contract and other instructions and information given to him by the Contract Administrator.
- 2.1.2 If any of the Works is not done according to this Contract or if there is any other breach of this Contract by the Contractor, the Contract Administrator must inform the Contractor of the shortfall(s). The Contractor must rectify the shortfall(s).
- 2.1.3 If the Contractor does not rectify the shortfall(s), The Contract Administrator may arrange others to rectify the shortfall(s). The Contract Administrator can also certify either:
 - (a) The cost of rectifying such shortfall(s); or
 - (b) The reduced value of the completed Works due to such shortfall(s)as provided in the payment certification clause.
- 2.1.4 The Contract Administrator can continue to do this throughout the project and during the Defects Liability Period (as stated in the Appendix) after the Contract Administrator confirms the Works is complete as provided in the completion clause.

2.2 Variations To Work

- 2.2.1 The Contract Administrator can issue instructions to vary the Works to be done.
- 2.2.2 If the Contract Administrator instructs the Contractor to vary any of the Works and there is a financial impact, the Contract Administrator must certify the value of the variation work as provided in the payment certificate clause.
- 2.2.3 The Contract Administrator must value the variation work using the Summary of Works rates. If there are no Summary of Works rates then using schedule of rates or if neither are available using fair market rates.
- 2.2.4 This shall be done in a written certificate clearly identified as Variation Order Certificate.

2.3 Health and Safety

- 2.3.1 The Contractor must keep the site clean and safe at all times.
- 2.3.2 The Contractor must comply with all laws and regulations relating to Health and Safety Act, if any.

3.0 TIME OBLIGATIONS

3.1 Starting, Progress and Finishing

- 3.1.1 If not stated in this Contract, the Contract Administrator will inform the Contractor when to start work in writing.
- 3.1.2 The Contractor must progress with the Works in a regular and diligent manner.
- 3.1.3 The Contract Administrator can instruct the Contractor to stop and restart at any time.
- 3.1.4 The Contractor must finish all the Works within the deadlines stated in this Contract or as instructed by the Contract Administrator.

3.2 Adjusting Time for Completion

- 3.2.1 If the Government or Contract Administrator or anyone within either of their responsibility or control (which includes other contractors on site), or anything beyond the Contractor's control, disrupts the Contractor from finishing within the completion period, the Contract Administrator must assess the impact of this disruption on the Contractor's work to be done.
- 3.2.2 If any Completion Date is affected the Contract Administrator must adjust the Completion Date.
- 3.2.3 This must be done in a written certificate clearly identified as Extension of Time Certificate.

3.3 Completion

- 3.3.1 When the Contractor practically completes all the Works, he may inform the Contract Administrator stating he has completed.
- 3.3.2 The Contract Administrator must decide when the Works was actually practically completed by the Contractor.
- 3.3.3 This decision must be in a written certificate clearly identified as Certificate of Practical Completion.
- 3.3.4 The Contract Administrator must decide when all obligations of the Contractor are fully discharged.
- 3.3.5 This decision must be in a written certificate clearly identified as a final completion certificate.
- 3.3.6 This must be done after the end of Defects Liability Period (as stated in the Appendix) or when the Contractor has rectified all the shortfall(s) including Works that is not according to this Contract and any other breach of Contract by the Contractor identified by the Contract Administrator, whichever is later.

3.4 Delayed Completion

- 3.4.1 If the Contractor does not finish within any deadline he shall pay Liquidated and Ascertained Damages due to the delay to the Government as provided in the payment certification clause.
- 3.4.2 Liquidated and Ascertained Damages is calculated for delay between when the Contractor should have completed the Works and when he actually completes the Works.

4.0 PAYMENT CERTIFICATION

4.1 Claims and Payment Certificate

- 4.1.1 The Contractor must submit a claim for the Works done before payment certificate can be issued.

4.2 Contents of Payment Certificate:

- 4.2.1 The payment certificate must include the following:
- 4.2.2 Add the following:
 - (a) Cumulative value of the Works done. This is valued based on Summary of Works rates or schedule of rates, if any. If none, then valued based on fair market rates.
 - (b) Value of variation work properly instructed by the Contract Administrator and properly done by the Contractor.
- 4.2.3 Deduct the following:
 - (a) Liquidated and Ascertained Damages for delayed completion. Liquidated and Ascertained Damages is calculated for delay between when the Contractor should have completed the Works and when he actually practically completes the Works.
 - (b) The value of any shortfall(s) due to work done according to this Contract or due to any other breach of this Contract by the Contractor which the Contract Administrator has informed the Contractor. If the Contractor does not rectify the shortfall(s) the Contract Administrator can certify either:
 - (i) The cost of rectifying such shortfall(s) by others; or
 - (ii) The reduced value of the completed Works due to such shortfall(s) as stated in the Appendix.
 - (c) A percentage of the sum of total additions above will be retained (as the Retention Sum) and released after the end of Defects Liability Period or when the Contractor rectified all the shortfall(s) including work that is not done according to this contract and any other breach of contract by the Contractor identified by the Contract Administrator.

- 4.2.4 The Net Amount Payable is the amount the Government must pay to the Contractor. This is calculated by:
- (i) Adding the total under additions above;
 - (ii) Deducting the total of all deductions above; and
 - (iii) Deducting the cumulative amount certified previously.

- 4.2.5 The Contract Administrator may deduct any monies owed by the Contractor to the Government under this or any contract from the Contractor's payments.

5.0 TERMINATION OF CONTRACT

- 5.1 If the Contractor:

- (a) Suspends the Works before completion without any reasonable cause;
- (b) Fails to proceed with the Works within the time stated in the Contract Administrator's instructions;
- (c) Fails to comply with the Contract Administrator's instructions;

for fourteen (14) days after a notice sent to the Contractor, the Contract Administrator can determine this contract by a written notice.

- 5.2 If the Contractor:

- (a) Becomes bankrupt; or
- (b) Goes into liquidation; or
- (c) Is guilty of any offence under the Prevention of Corruption Act (Chapter 131) or an offence under sections 161 to 165 or 213 to 215 of the Penal Code (Chapter 22).

this Contract is terminated by a written notice.

- 5.3 In either (5.1) or (5.2) above, the Contract Administrator may complete the Works by other ways and the Contractor shall pay for all extra costs incurred.

PART C - APPENDIX

1.0	Completion Date: (If not stated, to be instructed by the Contract Administrator. If more than one completion period, identify the scope of Works for each completion period)	_____
2.0	Liquidated and Ascertained Damages (LAD): (If none stated, then the Contract Administrator may certify a reasonable sum as compensation for delay)	B\$_____ Per Day
3.0	Shortfalls / Defects Liability Period: (If none stated, NINE (9) MONTHS from the date of completion)	_____ Months
4.0	Retention Sum	5 % of the Contract Sum

SITE VISIT FORM

**ESTATE MAINTENANCE SECTION
PENGIRAN MUDA MAHKOTA PENGIRAN MUDA HAJI AL-MUHTADEE BILLAH HOSPITAL, TUTONG
MINISTRY OF HEALTH**

Project Title : REPLACEMENT OF DX-ACCUS AND AHU C/W ASSOCIATED WORKS AT CSSD BUILDING, PMMPMHAMB HOSPITAL TUTONG.

Tender No. : KK/60/2024/TUT

Company : _____

Date of Visit : _____

I hereby on behalf of my Company has visited the site, i.e. location of work on the date stated above and understand the work requirement(s) and all cost incurred throughout the works as per Specification stated in this Tender / Quotation.

I (our Company) also agree not to claim additional charges to Ministry of Health should accident(s) or damage(s) occur during the Contract Period.

Name and Signature

Date : _____

Company Stamp

FOR OFFICAL USE ONLY

Name and Signature

Date : _____

Department Stamp

Note:

The Tenderer shall satisfy himself as to the nature of the site / ground condition and location.
This form is to be attached and submitted together with the Tender / Quotation documents.

SUMMARY OF TENDER

Title : **REPLACEMENT OF DX-ACCUS AND AHU C/W ASSOCIATED WORKS AT CSSD BUILDING , PMMPMHAMB HOSPITAL TUTONG**

Tender No. : KK/60/2024/TUT Request Ref. : MOH No. :

No.	Description	UNIT	Rate	Amount		
				Quantity	\$	¢
	<p><u>Note:</u> The contractor shall carry out site visit inspection and take into account all aspects and conditions of site before submitting his quotation. The contractor must fill this schedule at the time of tendering. Supply all materials, labour, tools and everything else deemed necessary to carry out work as specified as per Attachment 'A' to the following. Contractor having submitted their prices are considered as having visited the site. No claims for additional payment will be entertained on the ground of misunderstanding or misinterpretation of the conditions, measurement etc.</p>					
A	DISMANTLE AND REMOVAL OF EXISTING AIR CONDITIONNG EQUIPMENT					
	Dismantle and removal of the following equipment as below including necessary labours and tools. Cost shall include delivery of dismantled items to contractor dumping area / site.					
1.0	Existing DX – Condensing Units c/w associated refrigerant pipings, power cables and accessories.	LOTS		2		
2.0	Existing DX-AHU c/w associated refrigerant piping, condensate pipe, duct, power & control cables, control panel and field sensor & devices.	LOT		1		
B	AIR CONDITIONING EQUIPMENT					
	Supply and install air cooled DX-condensing unit using R410a refrigerant gas with cooling capacity as specified below. The offered unit shall be complete with 2 nos. refrigerant system condenser coil, condenser fan, safety devices and crankcase heater. Condenser fan shall be vertical top discharge type. The refrigerant gas shall be R410a. The condenser coil shall come with factory applied heavy duty anti corrosion coating in compliance with ASTM B117 salt spray test standard. The offered condensing unit model(s) shall fit into the space of the existing ACCU yard.					
1.0						

No.	Description	UNIT	Rate	Amount		
				Quantity	\$	¢
	DX- Condensing Unit (ACCU) Not less than nominal cooling capacity: 21 TR Compressor: Hermetic scroll type c/w 2 nos refrigerant system with one compressor for each system. R410a refrigerant gas. Offered :- Brand : _____ Type : _____ Warranty : _____	SET		1		
1.1	DX-AHU shall be of modular double skin type, belt driven fan, cooling coils, condensate drain pan, washable prefilter & HEPA filters, mixing box and spring vibration isolators. AHU cooling coil shall be constructed from copper tubes and aluminium fins. The cooling coil of the AHU shall have air flow velocity not exceeding 2.5 m/s. The double skin AHU panel shall be insulated using machine injected PU foam with minimum density 39 kg/m ³ and insulation thickness of 50 mm thick. Fan shall be belt driven DIDW forward curve centrifugal fan type. The condensate drain pan shall be constructed from stainless steel. The offered AHU shall c/w HEPA filter c/w filter box with access door & prefilter 50mm thick G4 class with GI/AL steel frame. The cooling performance of the AHUs shall be Eurovent / AHRI Certified. The offered AHU shall come with built-in UVC lamp c/w ballast and control box. The UVC lamp ballast shall be enclosed in the control box complete with ON/OFF switch for switching OFF the power supply of the UVC lamp for AHU maintenance purpose. The offered AHU model(s) shall be able to fit into the space of the existing AHU room.					

No.	Description	UNIT	Rate	Amount		
				Quantity	\$	¢
	DX-AHU Total cooling capacity not less than :21 TR Air On Coil temperature DW/WB:25.4 Deg C / 18.9 Deg C Air Off Coil temperature DW/WB: 12 Deg C / 11.9 Deg C Total supply air flow rate not less than: 7,500 CFM Fresh air flow rate 400 cfm Fan external static pressure not less than 300 Pa Motor 1450 RPM, IE 2 TEFC motor, 400V, 50 Hz c/w min. six (6) tube rows of cooling coil. c/w prefilter 50m G4 with GI/AL steel frame (washable) c/w HEPA filter with filter efficiency 99.95% and grade H13 c/w UVC lamps with ballast and On/Off switch	SET		1		
2.0	ABOVEGROUND AND UNDERGROUND REFRIGERANT PIPEWORK'S Supply and install above ground and underground refrigerant piping from new DX- condensing unit to new AHU c/w necessary filter drier. Indoor refrigerant pipings shall be closed cell insulation wrapped with denso tape. Outdoor refrigerant pipings shall be pre-insulated using high density 45 kg/m ³ polyurethane foam c/w UPVC jacket. Suction line size: 1 3/8" x 2 Liquide line size: 5/8" x 2	LOT		1		
2.2	Supply and install refrigerant accessories as below for the above ACCU Filter drier core - size: 5/8"	NOS		2		
2.3	Thermostatic expansion valve with suitable cooling capacity for the above DX- ACCU	NOS		2		
2.4	Solenoid valve – Size: 5/8"	NOS		2		
2.5	Sight glass – Size: 5/8"	NOS		2		
3.0	CONDENSATE DRAIN PIPEWORKS Supply and install UPVC condensate drain pipes BS3505 Class C 40 mm dia. For the new AHU at AHU room c/w necessary fittings, condensate trap and pipe supports to the nearest drain. The condensate pipe shall be insulated with 20 mm thick closed cell insulation.	LOT		1		
4.0	DUCTWORKS					

No.	Description	UNIT	Rate	Amount		
				Quantity	\$	¢
	Supply and install new supply air ducts inside AHU room with galvanised steel duct c/w external insulation, internal acoustic lining and steel support including any necessary duct modification to connect new AHUs to existing main supply air ductworks.					
4.1	GI steel duct 0.8mm thick	LOT		1		
4.2	External fiberglass insulation with 50mm thick and density 32 kg/m ³ wrapped with fire resistant heavy duty double sided aluminium foil.	LOT		1		
4.3	Internal semi closed elastomeric foam acoustic liner 25mm thick 100 kg/m ³ w /noise absorption coefficient 0.90 or higher at frequency of 100 Hz.	LOT		1		
5.0	AHU & ACCU CONTROL PANEL Supply and install new AHU / ACCU control panels IP43 installed in the AHU plant room complete with all the necessary MCCB, MCB, relay, fuse, earth fault relay, terminal blocks, timer switch, incoming & outgoing light, voltmeter & ammeter, auto/manual selector switch, manual start / stop push button c/w indicating Run, Stop, Trop lights for AHU & ACCU, incoming & outgoing light, emergency stop, smoke detector alarm and all other system controls and protection which deem necessary for satisfaction system operation and performance. The above panels shall include all the necessary volt free contact, relays for receiving BAS signal for start / stop and monitoring (on/off) the AHUs unit status signal to DDC. Incoming: 1 x 100 A TPN MCCB 1 x 32 A TPN MCCB AHU 1 x 60 A TPN MCCB ACCU 1 x 16 A SPN DDC controller panel 1 x 16 A SPN MCB spare 1 x 3A TPN MCB existing rooftop fan (0.75kW)	LOT		1		
6.0	POWER & CONTROL Supply and install suitable rating of power and control cables for the following equipment. Cables shall be conformed to the latest IEE standard. Price quoted shall include termination of all incoming & outgoing cables c/w cable glands, cable lugs, hot dipped galvanised epoxy powder coated cable tray, trunking PVC sleeves, PVC conduits and fittings with necessary steel supports.					

No.	Description	UNIT	Rate	Amount		
				Quantity	\$	¢
6.1	From new AC control panel to new ACCU (± 30 m cable length) 1 x 4C x 16 mm ² PVC/SWA/PVC + 16 mm ² Earth cable	LOT		1		
6.2	From new AC control panel to new AHU (± 10 m total cable length) 1 x 4C x 10 mm ² PVC/SWA/PVC + 10 mm ² Earth cable	LOT		1		
6.3	Multicore control cables enclosed from new AC control panels to new ACCU.	LOT		1		
7.0	STANDALONE DIRECT DIGITAL CONTROLLER					
7.1	Supply and install standalone pre-programmed Direct Digital Controller (DDC) c/w enclosure panel IP43, MCB, contactors, control relay, transformer and terminal block. The DDC shall be preprogrammed to provide automatic run/stop sequence of the new air conditioning equipment and multi-step cooling capacity ACCU (s) to achieve the required room temperature.	LOT		1		
7.2	Supply and install the following field sensor c/w wiring:					
7.2.1	Duct-mounted temperature sensor for return air, mixing air, off coil air, supply air.	NOS		4		
7.2.2	Duct-mounted smoke detector sensor (photoelectric type c/w measuring rods)	NO		1		
7.2.3	Filter pressure differential switch	NO		1		
7.2.4	Air flow sensor switch	NO		1		
7.2.5	Variable speed drive to suit offered AHU motor capacity for manual air balancing use.	NO		1		
8.0	MISCELLANEOUS WORKS					
8.1	To provide all necessary openings and permanent sealing up on the brick walls for the refrigerant piping, conduit / cable tray with putty.	LOT		1		
8.2	To dig affected turfing area / cut concrete floor for laying underground refrigerant pipings and power cables c/w make good to original conditions.	LOT		1		
8.3	To provide suitable capacity of mobile crane for lifting and positioning of the existing and new ACCU including transportation of dismantle equipment and parts to the designated room.	LOT		1		
8.4	To provide necessary extension of concrete plinth for all new outdoor ACCU and indoor AHU	LOT		1		
8.5	Supply and charge correct quantity of R410a gas into the new DX-air cooled condensing unit with new AHU	LOT		1		

No.	Description	UNIT	Rate	Amount		
				Quantity	\$	¢
8.6	Supply nitrogen gas for copper pipe brazing, vacuum and leak test for the new air conditioning equipment	LOT		1		
8.7	To clean and paint internal wall of AHU room with approved paint	LOT		1		
8.8	To repair and fix the existing ceiling with touch up paint after the installation of new return and supply air ducts at AHU room.	LOT		1		
9.0	SALVAGE Allow for all cost for salvaging all material values and other materials from the above demolition works (Item A 1.0 and 2.0). This amount is deductible to the above amount of this works. Item must be price and considered as discount.	LUMP		Sum		
10.0	TESTING AND COMMISSIONING To carry out testing and commissioning on the above mentioned new air conditioning equipment	LOT		1		
GRAND TOTAL (B\$)						