

TERMS AND CONDITIONS OF TENDERING (FOR QUOTATION WORKS)

1. Before tendering, the tenderer shall visit the site where the Works are to be carried out and shall also carefully examine the relevant Terms and Conditions of Contract, Drawings, Specification and all other accompanying schedules, etc.

If there is any ambiguity in or discrepancy between any of the documents, he / she should refer the matter to the Contract Administrator (C.A.), **HEAD OF ESTATE & HEALTH CENTRES MAINTENANCE - BRUNEI MUARA.**

On tendering, the tenderer shall be deemed to have examined the documents referred to above and shall be bound by the terms and conditions therein.

2. Every tenderer must submit together all documents listed below and this requirement shall be strictly adhered to prior to any consideration :-
 - (a) Valid Tenderer's Registration Certificate from the Ministry Of Development or Ministry of Health, **Eligibility to CLASS II,III & IV ; Category M01, E01 & E02.**
 - (b) Business Enactment Act Section 16 & 17.
 - (c) The Tender Form **MUST be signed by the Owner, or the Director of Shareholder(s) of the Company** stating their post and stamped with the Company's Official seal as detailed in the Business Enactment Act Section 16 & 17 / or the tenderer's Registration Certificate from the Ministry of Development.
 - (d) The address indicated must be detailed as in the Business Enactment Act Section 16 & 17 / and/or Tenderer's Registration Certificate from the Ministry Of Development. Any changes to the above must be officially referred to the Registrar of Companies and Business Names and a copy must be submitted to this department.

Tender documents must be duly completed, signed and dated. Any tender which is incomplete or unsigned will render the tender to be rejected.

3.
 - (a) Tenders and documents in connection therewith as specified above , must be delivered to the place at or before the time specified.
 - (b) In the case of the tender not being delivered by hand, the tenderer must arrange for his / her tender and other documents to be posted in time to reach the stipulated place by not later than the time stated.
 - (c) In no case will the Government be responsible for any expense or loss incurred by a tenderer in the preparation of this tender.

Tenders shall remain valid for **6 MONTHS** from the final date for submission of the tenders and no tenderer may withdraw his/her tender within that period. The Government reserves the right to extend this period if deemed necessary provided that such extension of the tender validity period shall have the written consent of the tenderers.

4. The Government does not bind itself to accept the lowest and/or any tender and no reason will be given for rejecting any tender thereof.
5. Every correspondence to be given to a tenderer may be posted to the tenderer's address in the tender and such posting shall be deemed good and legally binding in service of such correspondence.
6. The tender shall be made on the basis of the rates in the tender documents being firm and not subject to any adjustment with variations in quantities.
7. The tender fee shall be **B\$5.00 [Five Dollar Only]**
8. No unauthorised alteration or use of 'blanco' in the tender documents is allowed, or the tender may be rejected. Any errors are to be struck off and initialled.
9. Non-compliance with the above terms and conditions in any respect may render the tender liable to be rejected.
10. The tender must be done in the official printed tender forms which is available from the **PURCHASING AND PROCUREMENT SECTION, MINISTRY OF HEALTH.**

The completed tender documents are to be lodged on or before _____ PM on _____ in a sealed enveloped addressed to :-

TENDER / QUOTATION (QTN) BOX

**PENGERUSI SEBUTHARGA
TINGKAT BAWAH
KEMENTERIAN KESIHATAN
JALAN COMMONWEALTH DRIVE
NEGARA BRUNEI DARUSSALAM**

The top part of the sealed envelope must be written stating the following :-

Quotation No. : _____ **Quotation Closing Date** : _____

Title : **PROVISION OF MAINTENANCE SERVICES FOR REFRIGERANT AIR-CONDITIONING AND VENTILATION EXHAUST UNDER HEALTH CENTRES AND CLINICS IN BRUNEI MUARA FOR A PERIOD OF SIX (6) MONTHS.**



A	<input type="checkbox"/>	1. _____
	<input type="checkbox"/>	2. _____
	<input type="checkbox"/>	3. _____
FOR OFFICIAL USE ONLY		

Quotation For : **PROVISION OF MAINTENANCE SERVICES FOR REFRIGERANT AIR-CONDITIONING AND VENTILATION EXHAUST UNDER HEALTH CENTRES AND CLINICS IN BRUNEI MUARA FOR A PERIOD OF SIX (6) MONTHS.**

Quotation No. : _____ 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 _____)

(or),

At Schedule of Rates attached subject to the adjustment percentage of an additional (+) / a deduction (-) * _____ % with an approximate Maximum Contract Sum as stated in PART C - APPENDIX Item 6.0.

And,

within the Contract Period of 6 Days / Weeks / Months * in accordance with the terms and conditions below.

2.0 Owner / Director * 's : _____
Signature & Name (_____)
IC No. : _____

2.1 Signature & Name of Witness : _____
(_____)
IC No. : _____

2.2 Company : _____
Address : _____

2.3 Tel. No. : _____ Fax No. : _____ E-mail : _____

2.4 Date : _____

B
Company Stamp

ACCEPTANCE OF CONTRACT (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 _____)

(or),

At Schedule of Rates attached subject to the adjustment percentage of an additional (+) / a deduction (-) * _____ % with an approximate Maximum Contract Sum as stated in PART C - APPENDIX Item 6.0.

And,

within the Contract Period of 6 Days / Weeks / Months * in accordance with the terms and conditions below.

4.0 **(MOHAMMAD KHAIRUDDIN BIN HAJI ROSLIN)**
ACT. HEAD OF ESTATE & HEALTH CENTRES MAINTENANCE - BRUNEI MUARA
4.1 **For, CHIEF EXECUTIVE OFFICER, DEPARTMENT OF HEALTH SERVICES - COMMUNITY**

4.2 Signature & Name of Witness : _____
(**MOHAMMAD KHAIRUDDIN BIN HAJI ROSLIN**)

4.3 Address : **HEALTH HEADQUARTERS, COMMUNITY HEALTH SERVICES, MINISTRY OF HEALTH, COMMONWEALTH DRIVE, JALAN MENTERI BESAR, BANDAR SERI BEGAWAN, BB3910, NEGARA BRUNEI DARUSSLAM**

4.4 Tel. No. : **673-2381640** Fax No. : **673-2382755** E-mail : **community.health@moh.gov.bn**

4.5 Date of Contract : _____ Approval No. : _____

4.6 The Contract Administrator is : **HEAD OF ESTATE & HEALTH CENTRES MAINTENANCE - BRUNEI MUARA**

4.7 The Starting Date is on : _____

C
Department Stamp

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 Works.
- 1.1.2 To provide all information and facilities stated in this Contract to enable the Contractor to do his Works.
- 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 collateral warranty and insurance as referred to in Clause 1.2.3 and 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 Completion Date(s) and Contract 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 their Works.
- 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 & Job Orders

- 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 and Job Orders.
- 1.3.3 For each Job Order, the Contract Administrator must state a commencement date and a reasonable date for its completion and the Contractor must complete each Job Order by that completion date.
- 1.3.4 The minimum and maximum of any one Job Order to be issued as stated in the Appendix Item 5.0 and the maximum to be issued must be capable of being carried out and completed within the Contract Period.
- 1.3.5 The Contractor must comply with all instructions, certifications and Job Orders issued by the Contract Administrator.
- 1.3.6 The Contract Administrator may arrange others to complete the Works if the Contractor fails to comply with Clause 1.3.5, and the Contractor shall pay for all extra costs incurred.

2.0. QUALITY, HEALTH, SAFETY AND ENVIRONMENT

2.1 Quality

- 2.1.1 The Contractor must do his Works 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 shall inform the Contractor of the shortfall(s) in writing. 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 Item No. 3.0) after the Contract Administrator confirms the Works is complete as provided in the Completion Clause.

2.2 Health, Safety And Environment

- 2.2.1 The Contractor must keep the site clean and safe at all times.
- 2.2.2 The Contractor must comply with all laws and regulations relating to Health, Safety and Environment 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. The Contractor shall not be entitled to claim for any loss or damage caused by any delay of possession of site.
- 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 Completion Date(s) 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 Works.
- 3.2.2 If any Completion Date(s) is affected the Contract Administrator must adjust the Completion Date(s).
- 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 completed all the Works, he shall inform the Contract Administrator stating he has completed.
- 3.3.2 The Contract Administrator must decide when the Works has 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 Item No. 3.0) 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 by the date stated in the Contract or Job Order, 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 Damages is calculated for delay between when the Contractor should have completed the Works and when he actually completed the Works.

4.0. VARIATIONS TO WORK

- 4.1 The Contract Administrator can issue instructions to vary the Works to be done.
- 4.2 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 Certification Clause.
- 4.3 The Contract Administrator must value the variation work using the Summary of Works rates and/or adjusted Schedule of Rates. If neither are available then using fair market rates.
- 4.4 This shall be done in a written certificate clearly identified as Variation Order certificate.

5.0. PAYMENT CERTIFICATION

5.1 Claims and Payment Certificate

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

5.2 Contents of Payment Certificate:

- 5.2.1 The payment certificate must include the following:
- 5.2.2 Add the following:
 - (a) Cumulative value of the Works done. This is valued based on Summary of Works rates and/or adjusted 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.
- 5.2.3 Deduct the following:
 - (a) Liquidated and Ascertained Damages which is calculated for delay between when the Contractor should have completed the Works and when he actually practically completed the Works.
 - (b) The value of any shortfall(s) due to Works 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 Works that are not done according to this Contract and any other breach of contract by the Contractor identified by the Contract Administrator.
- (d) 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.
- (e) The Contract Administrator may deduct any monies owed by the Contractor to the Government under this Contract or any contract(s) from the Contractor's payments.

6.0. TERMINATION OF CONTRACT

6.1 If the Contractor :

- (a) Suspends the Works before completion without any reasonable cause; and/or
- (b) Fails to proceed with the Works within the time stated in the Contract Administrator's Instructions; and/or
- (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.

6.2 If the Contractor :

- (a) Becomes bankrupt; or
- (b) Goes into liquidation; or
- (c) Has offered or given or agreed to give to any person any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any action in relation to the obtaining or execution of this Contract with the Government, or for showing or forbearing to show favour or disfavour to any person in relation to this Contract or any other contract with the Government or the like acts shall have been done by any person employed by the Contractor or acting on his behalf (with or without the knowledge of the Contractor), or if, in relation to this Contract or any other contract with the Government, the Contractor, or any person employed by the Contractor or acting on his behalf shall have committed or abetted to commit an offence under the Prevention of Corruption Act (Chapter 131) or section 161, 162, 163, 164, 165, 213, 214 or 215 of the Penal Code (Chapter 22);

this Contract is terminated by a written notice.

6.3 In either (6.1) or (6.2) above, the Contract Administrator may complete the Works by other ways and the Contractor shall pay for all extra costs incurred.

6.4 Termination For Convenience :

- (a) The Government may at any time, give the Contractor a written notice to terminate the employment of the Contractor under the Contract and the Contractor shall immediately or upon such other date as specified in the written notice;
 - (i) cease all works under the Contract, which shall include, but be not limited to such work for the purpose of protecting, making safe or tidying up such part of the works as may already have been executed, or may be in the course of execution.
 - (ii) Vacate the site, remove all his plant, tools, equipment, goods and unfixed materials which have not been paid by the Government and hand back possession of the site to the Government.
- (b) In the event of termination under this Clause, Contract Administrator shall certify the amounts payable to the Contractor and the Contractor shall provide all reasonable assistance to the Contract Administrator. In the event that the Contractor does not submit the necessary information required, the Contract Administrator shall make his certification on the information available. The amount certified shall be paid by the Government less any sums previously paid or due to or recoverable by the Government from the Contractor.

PART C - APPENDIX

<p>1.0</p>	<p>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). For Term Contract, the Contract shall ends when the following conditions are met : (a) The actual expiration of the Contract Period; or (b) The limit of the Approximate Maximum Total Value of All Job Orders have been reached; whichever of the above comes first but subject to Clause 3.2 and Clause 4.0.</p>	<p style="text-align: center;">_____ / _____ / 2026</p>
<p>2.0</p>	<p>Liquidated and Ascertained Damages (LAD) : (If none stated, then the Contract Administrator may certify a reasonable sum as compensation for delay).</p>	<p style="text-align: center;">B\$ _____ per day [(Contract sum x 0.15)/Days]</p>
<p>3.0</p>	<p>Shortfalls / Defects Liability Period : (If none stated, SIX (6) MONTHS from the date of completion).</p>	<p style="text-align: center;">_____ 12 Months</p>
<p>4.0</p>	<p>Retention Sum : (If none stated, FIVE (5%) PERCENT of the Contract Sum).</p>	<p style="text-align: center;">_____ 5 % of the Contract Sum</p>
<p>5.0</p>	<p>Minimum and Maximum Values of Job Orders : Minimum value of any one Job Order to be issued Maximum value of any one Job Order to be issued (If none stated, the maximum value to be issued must be capable of being carried out and completed within the Contract Period).</p>	<p style="text-align: center;">≤ B\$ N/A _____ ≥ B\$ N/A _____</p>
<p>6.0</p>	<p>Approximate Maximum Total Value of All Job Orders for the Contract Period : (If not stated, NOT MORE THAN \$50,000.00 - BRUNEI DOLLARS FIFTY THOUSANDS) The Contract Administrator gives no warranty or undertaking as to the actual amount of Works that will be issued through Job Orders and no variance in the actual value of Works ordered shall give rise to a change in any rate, price or percentage adjustment.</p>	<p style="text-align: center;">≤ B\$ N/A _____</p>

SCHEDULE A
SUMMARY OF QUOTATION

Tajuk / Title : **PROVISION OF MAINTENANCE SERVICES FOR REFRIGERANT AIR-CONDITIONING AND VENTILATION EXHAUST UNDER HEALTH CENTRES AND CLINICS IN BRUNEI MUARA FOR A PERIOD OF SIX (6) MONTHS.**

Bil. Sebutharga : _____ Ruj. Permohonan : _____ No. MOH : _____
Quotation No. _____ Request Ref. _____ MOH No. _____

Muka Page 1 Dari Of 3

ITEM NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT	
					\$	¢
	<p>NOTE:</p> <p>1. Contractor is advice to visit the site and fill the site visit form to tender price. Supply all labour, materials, tools, equipment, PPE and transport for the proper execution of the following works to its proper working conditions as directed and to S.O. satisfaction. Rate shall include to make good all works disturb to match or as directed by S.O and to remove debris to Contractor's own dumping Yard. No claims for additional payment will be entertained as the grounds of misunderstanding or misinterpretation of site condition, measurements etc.</p> <p>2. Contractor / vendor to follow and refer the Specification / Scope of works, Planned Preventive maintenance schedule & List of Consumables items, attachment.</p> <p>3. Contractor / vendor to provide detailed technical/service report.</p>					
1.0	BERAKAS HEALTH CENTRE					
1.1	4 no Water-cooled Chiller c/w Control Panel					
1.1.1	- Bi-monthly (x2)	8	No			
1.1.2	- Annually (x1)	4	No			
1.2	4 no Chilled Water Pump and Motor c/w Control Panel					
1.2.1	- Bi-monthly (x2)	8	No			
1.2.2	- Annually (x1)	4	No			
1.3	8 no Air Handling Unit Including Ducting c/w Control Panel					
1.3.1	- Bi-monthly (x2)	16	No			
1.3.2	- Annually (x1)	8	No			
1.4	19 no Split Units Complete Set					
1.4.1	- Bi-monthly (x2)	38	No			
1.4.2	- Annually (x1)	19	No			
2.0	PAPHMWHB, GADONG HEALTH CENTRE					
2.1	165 no Split Units Complete Set					
2.1.1	- Bi-monthly (x2)	330	No			
2.1.2	- Annually (x1)	165	No			
Total Amount carried forward						

ITEM NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT	
					\$	£
Brought Forward						
3.0	MUARA HEALTH CENTRE					
3.1	3 no Water-cooled Chiller c/w Control Panel					
3.1.1	- Bi-monthly (x2)	6	No			
3.1.2	- Annually (x1)	3	No			
3.2	3 no Chilled Water Pump and Motor c/w Control Panel					
3.2.1	- Bi-monthly (x2)	6	No			
3.2.2	- Annually (x1)	3	No			
3.3	7 no Air Handling Unit Including Ducting c/w Control Panel					
3.3.1	- Bi-monthly (x2)	14	No			
3.3.2	- Annually (x1)	7	No			
3.4	32 no Split Units Complete Set					
3.4.1	- Bi-monthly (x2)	64	No			
3.4.2	- Annually (x1)	32	No			
4.0	PENGKALAN BATU HEALTH CENTRE					
4.1	3 no Air-Cooled DX, Condensing Unit (Complete Set)					
4.1.1	- Bi-monthly (x2)	6	No			
4.1.2	- Annually (x1)	3	No			
4.2	2 no Air Handling Unit Including Ducting c/w Control Panel					
4.2.1	- Bi-monthly (x2)	4	No			
4.2.2	- Annually (x1)	2	No			
4.3	95 no Split Units Complete Set					
4.3.1	- Bi-monthly (x2)	190	No			
4.3.2	- Annually (x1)	95	No			
5.0	JUBLI PERAK SENKURONG HEALTH CENTRE					
5.1	3 no Air-Cooled DX, Condensing Unit (Complete Set)					
5.1.1	- Bi-monthly (x2)	6	No			
5.1.2	- Annually (x1)	3	No			
5.2	3 no Air Handling Unit Including Ducting c/w Control Panel					
5.2.1	- Bi-monthly (x2)	6	No			
5.2.2	- Annually (x1)	3	No			
5.3	58 no Split Units Complete Set					
5.3.1	- Bi-monthly (x2)	116	No			
5.3.2	- Annually (x1)	58	No			
6.0	PAPHR HEALTH CENTRE, SG. ASAM					
6.1	78 no Split Units Complete Set					
6.1.1	- Bi-monthly (x2)	156	No			
6.1.2	- Annually (x1)	78	No			
Total Amount carried forward						

ITEM NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT	
					\$	¢
Brought Forward						
7.0	JUBLI EMAS BUNUT HEALTH CENTRE					
7.1	35 no Split Units Complete Set					
7.1.1	- Bi-monthly (x2)	70	No			
7.1.2	- Annually (x1)	35	No			
8.0	SUNGAI BESAR CLINIC					
8.1	15 no Split Units Complete Set					
8.1.1	- Bi-monthly (x2)	30	No			
8.1.2	- Annually (x1)	15	No			
Total Amount						

SPECIFICATIONS / SCOPE OF WORKS

PROVISION OF MAINTENANCE SERVICES FOR REFRIGERANT AIR-CONDITIONING AND VENTILATION EXHAUST UNDER HEALTH CENTRES AND CLINICS IN BRUNEI MUARA FOR A PERIOD OF SIX (6) MONTHS.

SCOPE OF WORKS

1. GENERAL

- Tenderers are sought from suitably qualified contractors who wish to be considered for the provision of maintenance services (hereinafter referred to as "Maintenance Services") for Refrigeration, Air Conditioning and Ventilation (hereinafter referred to as "the System") at the locations set out in **SUMMARY OF LOCATIONS** for a duration of Six (6) Months.
- The Tenderer shall provide Maintenance Services for the System inclusive of all necessary spare parts and replacement parts to ensure that the System is kept in good working order and condition and functioning efficiently within the manufacturer's specification. The Maintenance Services consist of:
 - Preventive Maintenance
- All prices to be quoted shall include labor, parts and transport charges.
- The Tenderer shall also ensure that technical services shall be available twenty-four (24) hours a day for the convenience of the Government to provide assistance for any emergency service. In the event that any attended calls are made during the preventive maintenance period, there shall not be any charges for the replacement of parts.

2. MAINTENANCE SERVICES

2.1 PREVENTIVE MAINTENANCE

- Scheduled or routine preventive maintenance, which includes testing, troubleshooting and inspection, on the system shall be performed during Government working hours (07.45 am – 12.15 pm and 01.00 pm – 04.30 pm).
- The Tenderer shall dispatch his technician to a site specified by the Superintending officer or his representative within 2 hours (hereinafter "Response Time") after being notified in writing or telephone that a fault is reported via a "Service Call Slip" which the Tenderer shall collect prior to commencing the repair or replacement works. This Service Call Slip must be certified by the Superintending officer or his representative with an official stamp, time in, time out and date.
- Preventive maintenance shall be performed in accordance with the maintenance schedules set out in **Planned Preventive Maintenance Schedules (PPM)** recommended by the manufacturers' service manuals.
- Although the maintenance schedules may not include instructions for every component of each item of the equipment, the Tenderer is expected to carry out the usual maintenance process in accordance with the normal trade practices and to meet specific requirements of the respective equipment's manufacturer's recommendations.

- The frequencies of the preventive maintenance may be adjusted by mutual agreement, to suit the duty and conditions of operation of the system's equipment.
- Where follow – up work is considered necessary and involves further repairs the Tenderer shall notify the Superintending Officer of the extent of the repairs before proceeding with the work.
- The Tenderer shall ensure that downtime of any of the equipment within the system is kept to a minimum. The maximum period for which any equipment to be continuously out-of service shall be **three (3) days**.
- The Tenderer is also required to submit monthly reports covering details (by mentioning Brand, Modal, serial Number and Tagging Number stated etc) of periodic inspection servicing and repairs. The monthly report shall include, but not limited to, a log showing time when fault notice was received, nature of fault, time when rectification works was initiated, actual time taken for repair, materials and parts used.

3. SUPERVISION & PERSONNEL

- To ensure the proper and efficient execution of the maintenance services, the Tenderer shall provide and employ **qualified and competent workers** to perform the Maintenance Services as follows:
 - One (1) registered Engineer
 - Four (4) registered technician/supervisor consisting of:
 - ❖ One (2) Electrical
 - ❖ Two (2) Aircon
 - Two (3) tradesmen
- The Tenderer shall ensure that such personnel are properly trained and employed (if they are employed outside of Brunei Darussalam) by the Tenderer throughout the contract duration.
- The Tenderer is required to submit a list of names, addresses, qualification, experiences and other relevant information that the Superintending Officer may require.
- The Superintending Officer **reserves the right to remove, reject or replace any persons employed by the Tenderer**, who in the opinion of the Superintending Officer is not competent to execute the maintenance Services and shall direct the Tenderer to replace such person/s.
- All personnel employed by the Tenderer shall be neatly and properly attired in uniforms and equipped with proper tools and safety equipment to enable them to carry out their work safely, accurately and without any risk of causing damage to the system or any part of the building within the contract.

4. LOG BOOKS AND REPORTS

- A record of the work done on each maintenance visit for each location and shall be noted in a log book by the Tenderer.
- The log book must show the date, time and duration of work performed; a description of work performed and the name of the Tenderer's personnel responsible for performing the work.
- Completion of the maintenance visit shall be affixed via the technician's signature and shall be confirmed in writing by the Superintending Officer or his representative or End-User.
- The log book must be available for inspection by the Government at any time.
- The Tenderer shall also submit Maintenance Service Reports in a format acceptable the Government and shall include the following information.
 - Reference number of any equipment of the system;
 - Job number;
 - Date of completion of job;
 - Date, time and total time any equipment of the system is made unavailable to the Government;
 - Name of Tenderer's technician/personnel responsible for carrying out the job; and
 - Comments of the person requesting the Maintenance Services.
- Any verbal reports made by the EMS on any breakdown shall be made available to the Superintending Officer or his representative within twenty-four (24) hours of receiving the complaint. Such report must state the nature of the fault, work done and whether any further work is required.

5. CONTRACT PRICE AND PAYMENT

- The Tenderer shall quote the cost of an annual service contract which shall consist of the maintenance services charges and the cost of parts replaced (if any), upon receipt of:
 - One (1) original invoice;
 - One (1) duplicate invoice;
 - Service Call Slip;
 - A detailed Maintenance service Report
- The Contractor shall submit the invoice of the previous month **on the first week of the following month.** All claims shall be addressed to:

**Head of Section,
Brunei Muara Estate Management , Ong Sum Ping
Ministry of Health
Brunei Darussalam**

- Payment will be made within forty-five (45) days after submission of the invoice and other related documents, subject to any deduction under the Contract and satisfactory certification by the Government during the preceding month.

6. CONSUMABLES

- Consumable items as listed out in **Consumables items** shall be deemed to be included in the rates and prices for the maintenance services. No additional claims shall be entertained for these items.

7. USE OF SITE

- The Tenderer shall not use the site for any purpose other than that of carrying works in connection with the performance of the contract
- The Tenderer shall at all times keep the site clear and free from all surplus materials, rubbish, debris arising from the execution of the works and shall keep the site in a clean condition.

8. HEALTH AND SAFETY, PRECAUTION AGAINST CONTROL

- The Tenderer shall provide all necessary measure, comply with all health and safety regulations and rules that are force, and comply with all orders and instructions given to him from time to time by the Superintending Officer in regard to health and safety persons in the vicinity of the site and including safety and other regulation in force in the Hospital, Health Centers and Clinics and any requirements of local authority and/or public service authority. **No claim** by the Tenderer for additional payment shall be allowed on the grounds of any misunderstanding or misinterpretation due lack of knowledge of these conditions, regulations and requirements.

SUMMARY OF LOCATION:

A) HEALTH CENTRE & CLINICS

- BERAKAS HEALTH CENTRE
- PAPHMWHB GADONG HEALTH CENTRE
- PENGKALAN BATU HEALTH CENTRE
- SENGKURONG HEALTH CENTRE
- MUARA HEALTH CENTRE
- P.A.P.H.R SUNGAI ASAM HEALTH CENTRE
- BUNUT HEALTH CENTRE
- SG. BESAR CLINIC

PLANNED PREVENTIVE MAINTENANCE SCHEDULE

**PREVENTIVE MAINTENANCE
SCHEDULES / CHECKLISTS**

Equipment AHU & FCU	Maintenance 2-Monthly Service	2M/AHU
-------------------------------	---	---------------

1. Switch off plant. Remove and clean filters by washing. If disposable – replace as necessary.
2. Check cooling coil for dust and algae. Clean by using approved cleaner, soft brush (and pressure spray pump for AHU's). Straighten damaged fins with fin comb.
3. Check condensate line, pan and trays for damage, blockage. Clean as necessary with chemical and test for easy water flow. Replace approved condensate pan treatment tablets for FCU's (consumable).
4. Check and service controls and devices for correct operation ie. Motorized valves and dampers, step controllers, thermostat, humidistats, smoke detectors, duct heaters, air flow switch, high temperature cutout etc. report/repair if faulty.
5. Check and record temperature/humidity and settings ie. SA and RA temperature, chilled water in and out temperature, humidity etc.
6. Check V-belts for correct tension and wear. Replace worn belts from stock (consumable). Re-adjust tension where necessary. As a guide V-belt tension should be ¾" to 1¼" deflection or see manufacturers information.
7. Pulley drives to be checked for secure fixing, if loose to be tightened. Alignment of pulleys to be checked and adjusted as necessary using straight-edge or string line.

Note: Recheck tension of v-belts after adjustment.

8. Check motor and Fan Bearings for wear, noise and lubrication Lubricate. Failed bearing are over lubricated will be replaced at the contractors expense. Noise and wear to be investigated and reported. If found to be too severe, unit should be left switched off and reported immediately. Shaft couplings, if fitted, to be checked for wear and secure fitting.
9. Fans and fan housing to be checked for secure fitting & cleaned by brush and vacuum. Fan blades to be inspected for any signs of damage, looseness and reported if found.
10. Check electrical connections for damage or looseness; repair or tighten as required. Clean any dust build up on motors and electrical panels and clean. Check for noisy contractors, timers, change-over relays-service. Check carbon brushes and replace if necessary (consumable). Check and record running amps. Replace any defective indicator lights, fuses etc.
11. Check, fix back or report internal and external duct insulation if loose or damaged.
12. Check AHU panels for secure fixing. Replace any missing screws (consumable). Check panel seals and repair/replace if leaking.
13. Check AHU panels for rust/corrosion, wire brush and repaint affected area with anti-rust paint. Report any damage.
14. Clean AHU panels and the plant room and leave it tidy. (AHU room is not to be used as a "store").

15. Replace plant room lighting as necessary.

Equipment AHU & FCU	Maintenance 6- Monthly Services	6M/AHU
------------------------	------------------------------------	--------

Carry out monthly service.

Conduct vibration analysis: Check all alignments to specifications.

Check Motor amperage should not exceed manufacturer's specification.

4. Perform analysis on oil and filter. Change if necessary. Check oil pump and seals. Check oil heater and thermostat.

Check for condenser and evaporator tube corrosion and clean as needed.

Indications include: poor water quality, excessive fouling, and age of chiller.

Clean coil with cleaner using a pressure jet pump

Any other manufacturer's recommendation for six-monthly maintenance

Equipment AHU & FCU	Maintenance Annual Services	Y/AHU
------------------------	--------------------------------	-------

1. Carry out monthly service.
2. Change all V-belts.
3. Dry base of unit and paint internally with anti-rust paint.
4. Paint external surface, including fresh air intake grille, with quick drying glossy paint of similar colour to original.
5. Test smoke damper manually; report if defective.
6. Meg the AHU/FCU motor and record.
7. Re-surfacing of slip ring and changing of shaft bearing, (both front and back). Carry out insulation testing (> 1 meg).
8. Replace carbon brush for all slip ring motor. (to be replaced in complete sets)

Clean coil with cleaner using a pressure jet pump

NOTE: Where cooling coils are very dirty and clogged up special cleaning procedure shall be carried out: discharge air duct shall be disconnected (if possible) or a temporary bypass shall be provided between the supply and return air side; the coil shall be sprayed (with the blower running) with approved concentrated cooling coil cleaning chemical and washed down repeated until the coil is clean;

Equipment	Maintenance	2M/D
Ductwork	2-Monthly Services	
AHU, FCU & Ventilation Fan		

1. This service is to be done together with the AHU, FCU & Ventilation fan service at no additional cost.
2. Visually inspect for air leaks, condensation; repair or report. Visually inspect internal and external duct installation and vapour barrier for damage repair or report. Check flexible connections for secure fixing and damage.
3. Clean diffusers and grilles by soft brush and vacuum.
4. Washable filters should be removed from the unit for cleaning. Filters should be cleaned with air / water hose passing through the filters in the opposite direction.
5. After washing, the filters must be installed following the direction of the airflow arrow.

Equipment	Maintenance	6M/D
Ductwork	6-Monthly Services	

1. This service is to be done together with the AHU, FCU & Ventilation fan service at no additional cost.
2. Carry out monthly service.
3. Lightly brush and vacuum clean internally where possible (including volume dampers, control sensors air heaters etc in duct).
4. Wash all return and supply grilles and diffusers with mild non-abrasive cleaner, do not dirty walls or ceiling whilst cleaning grilles and diffusers.

Equipment	Maintenance	2M/EP
Electrical Control	2-Monthly Services	
Panels/Switch Board		

1. This service is to be done together with the Plant (AHU, Pumps, Cooling Towers etc.) service at no additional cost.
2. Check electrical connections for looseness and damage, retighten as necessary or report. Inspect indicator lights and fuses; replace any defective.
3. Check proper operation of controls and safety devices, noisy contractors, timers, change-over relays, etc. and record settings.
4. Check contractors for burnt or dirty contacts, service or report. Spray clean contacts with contact cleaners if still usable; otherwise replace.
5. Clean out dust, cobwebs etc.

Equipment Electrical Control Panels/Switch Board	Maintenance 6-Monthly / Annual Services	6M/A/EP
--	--	---------

1. This service is to be done together with the Plant (AHU, Pumps, Cooling Towers etc.) service at no additional cost.
2. Carry out 2 monthly services.
3. Prepare external surface (including conduits and trunking) and repaint with quick drying glossy paint of similar colour to original.

Equipment DX Air Cooled Condensing Unit (more than 25TR)	Maintenance Daily Service	D/DXACCU
--	------------------------------	----------

1. Daily check and record operating conditions ie. Temperature, pressures, amps, oil level, suction and discharge temperature/pressure, air on/off temperatures etc., Oil level in sight-glass should be ½ to 2/3 full. If low -top up as necessary and record amount used.
2. Check operation of crankcase heaters. Inspect sight glass for moisture and bubbles and report. Check and record suction superheat.

Equipment DX Air Cooled Condensing Unit (more than 4TR)	Maintenance 2-Monthly Service	2M/DXACCU
---	----------------------------------	-----------

1. Carry out 1D Maintenance (unit more than 25TR only).
2. Check condensing coil for dust/dirt build up. Clean by using approved cleaner, soft brush and pressure spray pump. Straighten damaged fins with fin comb.
3. Check Condensing unit for vibration and damage; test pipework for leaks with leaks with leak detector.
4. Check operating and safety controls and record settings. Check electrical connections for damage or looseness, repair or tighten as required. Clean any dust build up on motors and electrical panels. Check for noisy contractors, timers, change-over relays. Check and record running amps. Replace any defective indicator lights, fuses etc.
5. Check V-belts for correct tension and wear. Replace worn belts from stock (consumable). Readjust tension where necessary as a guide V-belts tension should be ¾" to 1¼" deflection or see manufacturers information.
6. Pulley drives to be checked for secure fixing, if loose to be tightened. Alignment of pulleys to be checked and adjusted as necessary using straight-edge or string line.
Note: Recheck tension of V-belts after adjustment.
7. Check motor and Fan Bearings for wear, noise and lubrication Lubricate. Failed bearing are over lubricated will be replaced at the contractors expense.
Noise and wear to be investigated and reported. If found to be too severe, unit should be left switched off and reported immediately. Shaft couplings, if fitted, to be checked for wear and secure fitting.

8. Fans and fan housing to be checked for secure fitting & cleaned by brush and vacuum. Fan blades to be inspected for any signs of damage, looseness and reported if found.
9. Check condensing unit for secure fixing, replace missing screws/fasteners.
10. Clean condensing unit panels and area.

Equipment	Maintenance	6M/Y/DXACC
DX Air Cooled Condensing Unit (more than 4TR)	6 monthly / Annual Service	

1. Carry out Monthly Maintenance.
2. Meg compressor windings and fan motors.
3. Check and clean electrical contractor all electrical connections, check and replace any defective fuse-holder and service electrical components.
4. Check compressor oil by chemical analysis.
Change compressor oil and refrigerant filter; Test run and trim refrigerant charge.
5. Prepare external surface (including conduits and trunking) and repaint with quick drying glossy paint of similar colour to original.

Equipment	Maintenance	2M/AGSU
DX Air Cooled Split Unit	2-Monthly Services	

1. Switch off plant. Remove and clean filters by washing. If disposable-replace as necessary.
2. Check cooling coil and condensing coil for dust and algae. Clean by using approved cleaner, soft brush and pressure jet pump. Straighten damaged fins with fin comb.
3. Check condensate line, pan and trays for damage, blockage. Clean as necessary with chemical and test for easy water flow. Replace approved condensate pan treatment tablets (consumable).
4. Check and service controls and devices for correct operation ie. Motorized valves and dampers, step controllers, thermostat, humidistats, smoke detectors, duct heaters, air flow switch, high temperature cutout etc. report/repair if faulty.
5. Check and record supply/return air temperature and room humidity and settings.
6. Check V-belts for correct tension and wear. Replace worn belts (consumable). Readjust tension where necessary as a guide V-belts tension should be 3/4" to 1 1/4" deflection or see manufacturers information.
7. Pulley drives to be checked for secure fixing, if loose to be tightened. Alignment of pulleys to be checked and adjusted as necessary using straight-edge or string line.
Note: Recheck tension of V-belts after adjustment.
8. Check motor and Fan Bearings for wear, noise and lubrication Lubricate. Failed bearing are over lubricated will be replaced at the contractors expense.

Noise and wear to be investigated and reported. If found to be too severe, unit should be left switched off and reported immediately. Shaft couplings, if fitted, to be checked for wear and secure fitting.

9. Fans and fan housing to be checked for secure fitting & cleaned by brush and vacuum. Fan blades to be inspected for any signs of damage, looseness and reported if found.
10. Check electrical connections for damage or looseness; repair or tighten as required. Clean any dust build up on motors and electrical panels. Check for noisy contractors, timers, change-over relays. Check and record running amps. Replace any defective indicator lights, fuses etc.
11. Check panels for secure fixing. Replace any missing screws. Check panel seals and repair/replace if leaking.
12. Check panels for rust/corrosion, wire brush and repaint affected area with anti-rust paint. Report any damage.

Equipment	Maintenance	6M/Y/ACSU
DX Air Cooled Split Units	6 –Monthly / Annual Service	

1. Carry out monthly service.
Note: For wall, floor, ceiling, cassette type split unit the refrigerant should be pump-down and the FCU must be brought down for general servicing. Prior to the completion the FCU must be reinstalled with adequate Freon charge any additional Freon will be included in annual servicing price.
2. Change all V-belts.
3. Dry base of unit and paint internally with anti-rust paint where applicable.
4. Paint external surface with quick drying glossy paint of similar colour to original (including conduits and trunking).
5. Test smoke damper manually; report if defective.
6. Meg compressor windings and fan motor.

Equipment	Maintenance	2M/WP
Water pumps	2-Monthly Service	

1. Check shaft seal glands for excessive water leaks. For packing type gland adjust/replace so as to allow a steady drip of water. For mechanical seal report for replacement.
2. Check coupling, pulleys, anti-vibration connection, insulation and mountings, insulation etc. for secure fixing and wear, rectify and/or report for repair. Check pump and motor bearings and signs of wear.
3. Check and record suction and discharge pressure running amps, direction of rotation.
4. Check electrical connections for damage or looseness; repair or tighten as required. Clean any dust build up on motors and electrical panels. Check for noisy contractors, timers, change-over relays. Check and record running amps. Replace any defective indicator lights, fuses etc.
5. Clean motor vents, slip ring, inspect and replace carbon brush holder, carbon brushes as necessary (consumable). Check and tighten electrical connections.

6. Valve glands to be checked for leaks, packing to be tightened or replaced as necessary.
7. Change over to standby pump as schedule.

Equipment	Maintenance	6M/WP
Water pumps	6-Monthly Service	

1. Carry out monthly service.
2. Clean water pump strainers.
3. Lubricate pump and motor bearings sparingly.
4. Wire brush rust/corrosion and repaint with red oxide/anti rust paint.
5. Check operation of non-return water valves.

Equipment	Maintenance	A/WP
Water pumps	Annual Services	

1. Carry out 6-Monthly service.
2. Meg pump motor and record.
3. Prepare and repaint outer surface with similar colour paint to original.
4. Re-surfacing of slip ring and changing of shaft bearing, (both front and back). Carry out insulation testing (> 1 meg).
5. Replace carbon brush for all slip ring motor (to be replaced in complete sets).

Equipment	Maintenance	2M/MP
Condenser/Chilled Water Pipe work/Expansion Tank	2-Monthly Service	

1. This service is to be done together with the pumps, cooling towers, water chiller plants etc. service at no additional cost.
2. Check correct level of extension tank and make up water (1/3 height of tank).
3. Check pipe work, flexible joints, brackets, supports etc. for secure fixing and vibration; make good/report as necessary.
4. Inspect and rectify or report water leaks, damaged pipe insulation.
5. Inspect all valves for gland packing leaks; replace or tighten gland packing as necessary.
6. Check correct operation of flow-switch, air vent, flow meters, water pressure gauges etc.

Equipment	Maintenance	6M/Y/P
Condenser/Chilled	6-Monthly / Annual Service	
Water Pipe work/Expansion Tank		

1. This service is to be done together with the pumps, cooling towers, water chiller plants etc. service at no additional cost.
2. Carry out 2-monthly service.
3. Drain and clean out make up tank and expansion tank; treat with anti-rust paint. Test valve operation, examine and report any leakage.
4. Operate all valves and record number of turns on valve spindle and return to original setting.
5. Open all air-vents and bleed system; report/service any defective automatic air-vents.
6. Prepare and repaint outer surface with similar color paint to original.

Equipment	Maintenance	2M
Ventilation	2-Monthly Service	
Fans (wall/ glass/ceiling mounted)		

1. Clean inlet/outlet grilles and fan blades, fan housing etc. clean air filter or replace as necessary.
2. Check V-belts for correct tension and wear. Replace worn belts as necessary (consumable). Readjust tension where necessary as a guide V-belts tension should be ¾" to 1¼" deflection or see manufacturers information.
3. Pulley drives to be checked for secure fixing, if loose to be tightened. Alignment of pulleys to be checked and adjusted as necessary using straight-edge or string line.
Note: Recheck tension of V-belts after adjustment.
4. Check motor and Fan Bearings for wear, noise and lubrication Lubricate. Failed bearing are over lubricated will be replaced at the contractors expense. Noise and wear to be investigated and reported. If found to be too severe, unit should be left switched off and reported immediately. Shaft couplings, if fitted, to be checked for wear and secure fitting.
5. Check electrical connections for damage tighten as required. Carry-out as per service/4.
6. Clean the plant room and leave it tidy (Plant room not to be used as a 'Store').
7. Replace plant room lighting as necessary.

Equipment	Maintenance	6M/A/VF
Ventilation	6-Monthly / Annual Service	
Fans		

NOTE: Not required for window mounted exhaust fans (small)

1. Carry out Monthly service.
2. Lubricate bearings sparingly.

3. Change all V-belts.
4. Prepare and repaint outer surface with similar colour paint to original.
5. Check and record running amps. Meg fan motors and record.

Equipment	Maintenance	2M/GR
Cold Room	2-Monthly Services	

1. Inspect indicating lights and cold room lights; replace as necessary.
2. Check defrost heaters, door heaters, drain pipe heaters etc. check and record running amps of the compressor condenser fans, evaporator fans and heaters.
3. Inspect fan and motor bearings.
4. Check and record store temperature gauge reading.
5. Inspect store insulation, doors, floor etc for damage and report.
6. Clean the condensing unit, comb straight dented fins. Check system for leaks, noise and vibration. Check oil level and top up as necessary.
7. Carry-out as Service/4.

Equipment	Maintenance	A/GR
Cold Room	Annual Services	

1. Carry out 2-monthly service.
2. Clean condensing coil and evaporate with approved chemical if necessary.
3. Meg compressor windings and fan motor.
4. Prepare and repaint outer surface with similar colour paint to original.

Equipment	Maintenance	2M/RAC
Room Air Conditioners / Split Unit / Cassette Type / Suspended Ceiling	2-Monthly	

1. Wash the air filter or replace if necessary.
2. Brush and vacuum clean the cooling coil and comb straight fins if found dented.
3. Check for noise and vibration. Correct any loose fasteners, mounting etc.
4. Check any coil freezing during operation.
5. Clean condensate drain pan, drain pipe of sludge and slime etc.

6. Check and record running current of the compressor and fan motor.
7. Inspect and service controls and safety components.

Equipment	Maintenance	6M/A/RAC
Room Air Conditioners / Split Unit / Cassette Type / Suspended Ceiling	6-Monthly / Annual Service	

1. Remove from installed site to workshop, replace with service unit if required and carry out 2-monthly service.
2. Meg compressor windings and fan motors.
3. Clean coil with proper chemical cleaner using a pressure jet pump. Do not dirty the wall while cleaning.
4. Prepare and repaint outer surface with similar color paint to original.

Equipment	Maintenance	2M/SMP
Monitoring Panel	2-Monthly Service	

1. Inspect indicator bulbs, replace defective.
2. Check for noisy contractors.
3. Clean out dust within panels.
4. Inspect and tighten electrical and control wire connection etc.
5. Check condition and operation of fuses, overloads, timers, earth fault relays, circuit breakers, smoke detector, transformers, metering devices etc. and replace or report any defective.
6. Check for correct sequence of operation of the controls.

Equipment	Maintenance	6M/A/SMP
Monitoring Panel	6 Monthly / Annual Service	

1. Carry out monthly service.
2. Prepare and repaint outer surface with similar colour paint to original.

Equipment	Maintenance	D/ACLC
Air cooled Liquid Chillers	Daily Service	

1. Daily Record system operating conditions. Report any trend or adverse conditions for example: Oil, suction and discharge pressure. Entering and leaving water temperature and pressure, check compressor oil level oil pressure should be 20 to 30 PSI above suction pressure. Record chiller running amps and compressor running amps.
2. Inspect indicator lights, gauges etc. and replace any found defective. Check system for leaks, noise, vibration etc. Carry out area cleaning.

Equipment	Maintenance	2M/ACLC
Air cooled	2-Monthly Service	
Liquid Chillers		

1. Carry out daily maintenance.
2. Check panels for secure fixing. Replace any missing screws. Check panel seals and repair/replace if leaking.
3. Clean condensing coil; comb fin straight if found dented. Clean the Plant room area.

Equipment	Maintenance	6M/Y/ACLC
Air cooled	6-Monthly / Annual Service	
Liquid Chillers		

1. Carry out monthly service.
2. Meg compressor windings and fan motors.
3. Tighten all electrical connections, check and clean contactors. Check all fuse clips and replace defective fuse holder, inspect and service all electrical safety components.
4. Perform chemical analysis of oil.
5. Inspect cooler tubes and clean if necessary.
6. Change compressor oil and refrigerant filter.
7. Test run and trim the refrigerant charge.
8. Prepare and repaint outer surface with similar colour paint to original.

Note:

Manufacturer's instructions for maintenance shall be followed in conjunction with these guides

CONSUMABLES ITEMS

LIST OF CONSUMABLES ITEMS

Consumables items to be paid within the contract conditions including labour, supervision, testing and commissioning. To be used at any time when required throughout the contract period.

1. Replace Belting of all types and various sizes
 - a) Air Handling Units
 - b) Fan coil Units
 - c) Central Exhaust Fan
 - d) Cooling Towers
 - e) All Refrigeration, Air conditioning and Ventilation Plant
2. Bearing/ Bush of All Refrigeration, Air conditioning and Ventilation Plant (Any types and sizes)
3. Painting and Cleaning material to all Refrigeration, Air conditioning and Ventilation Plant, piping, electrical grade contact spray for all switch board, Control Panel and etc.
4. Motor terminal & compressor thermal overload ie klixon , etc
5. Any type of air filters.
6. Rubber mounting for compressor, motor etc
7. Flare nut, Flare Union, crews, fastener, nuts and bolts (any types and sizes)
8. Approved chemicals for cleaning coil (in any amount) when ever required.
9. Service valves or charging port for compressor.
10. Fuses, Cables lugs, Connector and etc (any types and amps)
11. 13A and 15A Plug Top
12. Repair leaks c/w recharge refrigerant to full running capacity for all refrigerant, air-conditioning system and Ventilation Plant (The item shall be used when ever the unit not cooling / undercharge due to leak in the system) for R22, R11, R12, R134A, R407, R410A and etc.
13. Nitrogen at any amount when required
14. Denso / Duct and Refrigerant Pipes insulation Tape (to repair damage of All Refrigeration, Air conditioning and Ventilation Plant)
15. Roll Filter for AHU, FCU, etc
16. Indicator bulbs for all type of switch board, indicator panel etc.
17. All type of Battery for remote Control.

SITE VISIT FORM

PROJECT REFERENCE	:	
PROJECT TITLE	:	PROVISION OF MAINTENANCE SERVICES FOR REFRIGERANT AIR-CONDITIONING AND VENTILATION EXHAUST UNDER HEALTH CENTRES AND CLINICS IN BRUNEI MUARA FOR A PERIOD OF SIX (6) MONTHS.

This is to confirm and verify that the company stated below has visited and understood the specifications stated in the tender above.

This site visit is a **Mandatory** for Every Tenderer to participate a tender. Without this site visit with our representative from Estate Maintenance Section MOH and/or client, the tender shall be considered **NON COMPLY**.

TO BE FILLED IN BY THE VENDORS:		
Name of Company :		STAMP
Name of staff :		
Position :		
Date of Visit :		
VERIFIED BY REPRESENTATIVE FROM END USER, DEPARTMENT: (For official use only)		
Name :		STAMP
Signature :		
Date :		
VERIFIED BY REPRESENTATIVE FROM ESTATE: (For official use only)		
Name :		STAMP
Signature :		
Date :		