機電工程署 🕰 EMSD

香港特別行政區政府 機電工程署 香港九龍取成街3號

Electrical and Machanical Services Department Government of the Hong Kong Special Administrativa Region 3 Kai Shing Steet, Kowkoon, Hong Kong www.cemsd.gov.hk

Restricted (Tender)
Our reference 本署檔號:

By Fax (3942 0993) & Post

EMSD/EEO/RD/06/26 Pt.1

Your reference 來函檔號:

Tolephone 電話號碼:

Facsimile 國文傳真 3757 6147

2890 6081

5 February 2024

Office of Research and Knowledge Transfer Services, Room 301, Pi Ch-iu Building, The Chinese University of Hong Kong, Shatin (Attn: Dr Stephen Lam)

Dear Sir/ Madam,

Quotation No. EEOQ2769 STUDY ON PERFORMANCE OF EC FAN WITH SPIRAL GUIDE VANE (Tender Invitation)

You are hereby invited to submit a quotation for the captioned project.

You must submit your completed two (2) copies of your Fee Proposal (From of Quotation and Schedule of Price), technical proposal, organisation chart with brief curriculum vitae of each team member in a sealed envelope addressed to the Director of Electrical and Mechanical Services and placed in the "EEO Tender Box" located on the Energy Efficiency Office, 7/F, Electrical and Mechanical Services Department, 3 Kai Shing Street, Kowloon, Hong Kong on or before 20 February 2024 (Tuesday):14:00.

Late tender will not be considered.

The Subject Officer is Ms. Bella Wong of Tel. No. 3757 6147.

In the event a typhoon signal No. 8 or above or rainstorm black warning is issued between 0900 and 1400 on the closing date, the tender closing time will be postponed to 1400 on the first working day of the following week.

Yours faithfully,

(Bella WONG)

for Director of Electrical and Mechanical Services

THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINSTRATIVE REGION ELECTRICAL AND MECHANICAL SERVICES DEPARTMENT

QUOTATION FOR STUDY ON PERFORMANCE OF EC FAN WITH SPIRAL GUIDE VANE

(QUOTATION NO.: EEOQ2769)

Terms of Quotation

1. Quotation Document

This invitation to Quotation document ("Quotation Document") consists of a complete set of the following:

- (a) Terms of Quotation;
- (b) General Conditions of Contract
- (c) Form of Quotation;
- (d) Study Brief; and
- (e) Schedule of Price.

2. Preparation of Quotation

- Save in accordance with the terms of the Quotation Document, a Bidder must not alter any provision of the Quotation Document.
- 2.2. A Quotation for the captioned service ("Quotation") must be completed in either English or Chinese and in accordance with other requirements of the Quotation Document. The Government will not consider a Quotation that is completed in any other language.
- 2.3. An interested service provider ("Bidder") shall submit, in the following manner, its completed Quotation together with all information and documents required under the Quotation Document or relevant to its Quotation in accordance with the terms of the Quotation Document. A Quotation not so submitted (for example, a Quotation submitted by e-mail) will not be considered. The following documents shall be submitted by facsimile or enclosed in a sealed envelope clearly marked "EEOQ2769: STUDY ON PERFORMANCE OF EC FAN WITH SPIRAL GUIDE VANE":
 - (a) Two copy of duly completed The Schedule of Price
 - (b) Two copy of duly completed Form of Quotation
 - (c) Two copy of technical proposal
 - (d) Two copy of organisation chart with brief curriculum vitae of each team member
- 2.4. The Government may not consider a Quotation if:
 - (a) false, inaccurate or incorrect information is given in the Quotation;
 - (b) complete information (including descriptive literature, catalogues and any other document required under any provision of the Quotation Document) is not given with the Quotation; and

- (c) any particulars or data requested for in the Quotation Document is not furnished in full in the Quotation.
- 2.5. When completing the Quotation, a Bidder shall ensure that the name of the Bidder is the same as the name shown in:
 - (a) if the Bidder is a company incorporated in Hong Kong:
 - i. the Certificate of Incorporation of the Bidder; or
 - ii. if there is a change of name of the Bidder since the date of its Certificate of Incorporation, the latest Certificate of Change of Name of the Bidder;
 - if the Bidder is a sole proprietorship or a partnership, the latest business registration certificate of the Bidder; or
 - (c) If the Bidder is formed, established or incorporated outside Hong Kong, a document equivalent to Paragraph. 2.5 (a)(i), (a)(ii) or (b) above (as the case may be) issued by a governmental or competent authority of the place where the Bidder is formed, established or incorporated.

2.6. Quotation Closing Time

- (a) A Quotation must be deposited in the "EEO Tender Box", located at the Energy Efficiency Office, Electrical and Mechanical Services Department, 7/F, 3 Kai Shing Street, Kowloon Bay, Kowloon before 1400 hours on Tuesday, 20 February 2024 (Quotation Closing Time). A Quotation deposited in the tender box at or after the Quotation Closing Time will not be considered;
- (b) In case of a rainstorm black warning or typhoon signal No.8 or above is still hosted between 0700 hours and 1400 hours on the Quotation closing date, the Quotation Closing Time will be extended to 1400 hours on the next weekday (i.e. except Saturday and Sunday) other than public holiday.
- 2.7. The Quotations shall remain valid for acceptance for not less than <u>90</u> calendar days (inclusive of the end day) after the Quotation closing date ("Quotation Validity Period").
- 2.8. All documents to be submitted by a Bidder shall either be originals or certified true copies of the documents. If a Bidder fails to comply with this requirement, its Quotation may not be further considered.

3. Award of Quotation

- 3.1. EMSD is not bound to accept the Quotation with the offer with the lowest bid or the highest combined score and reserves the right to accept all or any part of any Quotation at any time within the Quotation Validity Period.
- 3.2. The successful Bidder will receive a letter as an indication of acceptance of the offer. This letter of acceptance shall constitute a binding Contract. Bidders who do not receive any notification within the validity period of their offers shall assume that their Quotations have not been accepted.

4. Contract Commencement

Upon acceptance of the Quotation by EMSD, a notification letter or a service order will be issued to the successful Bidder. The Contract shall commence on the date of the notification.

5. Right to Disclose Contract Information

EMSD shall have the right to disclose whenever it considers appropriate or upon request by any third party, information on the awarded service order, without any further reference to the name and address of the successful Bidder, description of services and the quoted price.

6. Personal Data Provided

- 6.1. Bidder's personal data provided in the Quotation will be used for Quotation evaluation and contract award purposes. If insufficient and inaccurate information is provided, the Quotation may not be considered.
- 6.2. Bidder's personal data provided in the Quotation may be disclosed to the parties responsible for Quotation evaluation in other government departments and non-government organisations.
- 6.3. Bidders have the right of access and correction with respect to personal data as provided for in sections 18 and 22 and Principle 6 of Schedule 1 to the Personal Data (Privacy) Ordinance (Chapter 486 of the Laws of Hong Kong). The right of access includes the right to obtain a copy of the Bidder's personal data provided in the Quotation.
- 6.4. Enquiries concerning the personal data collected by means of the Quotation, including the making of access and corrections, should be addressed to the Personal Data Privacy Officer of Electrical and Mechanical Services Department.

7. <u>Documents of Unsuccessful Quotations</u>

Documents of unsuccessful Quotations will be destroyed not less than three months after the date the Contract has been awarded or orders have been placed.

8. Cancellation of Quotation

Without prejudice to the Government's right to cancel the Quotation, where there are changes of requirement after Quotation Closing Date for operational needs or whatever reasons, the Government is not bound to accept any conforming Quotation and reserves the right to cancel the Quotation.

Negotiations

The Government reserves the right to negotiate with any Bidder the terms of the Bidder's offer and conditions of the Contract.

10. Enquiries

Any queries about the particulars on this Quotation Document may be sought in writing from Engineer/ Energy Efficiency A7/1 (Ms. Bella WONG) of the Electrical and Mechanical Services Department, 3 Kai Shing Street, Kowloon Bay, Kowloon, or by facsimile at 3757 6147.

THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINSTRATIVE REGION ELECTRICAL, AND MECHANICAL SERVICES DEPARTMENT

QUOTATION FOR STUDY ON PERFORMANCE OF EC FAN WITH SPIRAL GUIDE VANE (QUOTATION NO.: EEOQ2769)

GENERAL CONDITIONS OF CONTRACT

Total Services and Variation

- The Services to be performed under the Contract shall be as laid down in the Brief, Special Conditions of Contract and Schedule (if any) and shall be carried out, as and when required, to the satisfaction of the Director's Representative. All orders placed under the Contract shall be issued in writing and the Government will not be responsible for Services performed on oral instructions issued by any person whomsoever.
- 1.2 The Consultant shall not extend the Services beyond the requirements specified in the Brief, Special Conditions of Contract and Schedule (if any) except as directed in writing by the Director's Representative; but the Director's Representative may, subject to the proviso hereinafter contained, at any time during the Contract Period by notice in writing direct the Consultant to alter, amend, omit, add to, or otherwise vary any of the Services and/or the Contract Period, and the Consultant shall carry out such variations, and be bound by the same conditions, so far as are applicable, as though the said variations were stated in the Brief, Special Conditions of Contract and Schedule (if any).
- 1.3 Where a variation has been made to the Contract the amount to be added to or deducted from the Contract Price in accordance with that variation shall be determined in accordance with the rates specified in the Schedule of Price so far as the same may be applicable and where rates are not contained in the Schedule of Price, or are not applicable, such amount shall be such sum as is reasonable in the circumstances.

- Consultant's Acknowledgement, Obligations and Contract Performance
 - 2.1 The Consultant acknowledges and agrees that it has been supplied with sufficient information to enable it to provide to the Government the Services, which shall comply fully with the requirements set out in the Brief and other provisions of the Contract. The Consultant shall not be entitled to any additional payment nor be excused from any liability under the Contract as a consequence of any misinterpretation by the Consultant of any matter or fact relating to the Brief or any other provisions of the Contract.
 - 2.2 The Consultant further acknowledges that the Government relies on the skill and judgment of the Consultant in the provision of the Services and the performance of its obligations under the Contract.
 - 2.3 The Consultant shall perform its obligations under the Contract:
 - (a) with appropriately experienced, qualified and trained personnel and with all due care, skill and diligence; and
 - (b) in accordance with Good Industry Practice.
 - 2.4 The Consultant shall comply with all applicable laws and regulations. In particular, the Consultant shall:
 - (a) comply with the Employment Ordinance (Chapter 57 of the Laws of Hong Kong) and the immigration Ordinance (Chapter 115 of the Laws of Hong Kong). The Consultant shall not employ any persons who are forbidden by the laws of Hong Kong or are not entitled for whatever reasons to undertake any employment in Hong Kong;
 - (b) make its own arrangements to provide Mandatory Provident Fund Schemes to its employees in accordance with the provisions of the Mandatory Provident Fund Schemes Ordinance (Chapter 485 of the Laws of Hong Kong); and
 - (c) comply with the requirements of the Occupational Safety and Health Ordinance (Chapter 509 of the Laws of Hong Kong) and any other legal provisions pertaining to the health and safety of the personnel,

Government staff and others who may be affected by its performance of Services.

- 2.5 The Consultant shall secure, obtain and maintain throughout the Contract Period all and any governmental authorisations, approvals, permits or licences which may be required or necessary in connection with the performance of the Contract and to bear all costs, charges and expenses that may be incurred in obtaining and maintaining the permits and licences.
- 2.6 The Consultant shall pay all taxes, duties, fees, charges, assessments of any nature levied by relevant governmental authorities and to pay the fines and penalties imposed for any offence or infringement by the Consultant under any laws or regulations in connection with the performance of the Contract.
- 2.7 The Consultant shall be responsible for the accuracy of all drawings, documents and information supplied by the Consultant to the Government in connection with the Services. Without prejudice to any other provisions of the Contract, the Consultant shall indemnify the Government against all losses and damages arising from, and costs and expenses incurred in connection with, any discrepancies, errors or omissions therein.
- 2.8 Any drawings and specifications reasonably required for the Consultant's guidance in the execution of the Contract shall be provided by the Government free of charge but shall be returned to the Government on completion of the Contract.
- 2.9 If at the request of the Consultant assistance of any Government staff is provided after normal business hours, the Consultant will be responsible for the overtime remuneration, subsistence allowances and travelling expenses of such Government staff directly engaged in such assistance.

3. Warranties and Representations

- 3.1 The Consultant warrants, represents and undertakes that:
 - (a) the Consultant and its sub-Consultants, their employees and agents shall have the necessary training, skill, experience, qualifications and expertise to provide the Services on the terms and conditions set out in the Contract;
 - the Consultant shall carry out the Services with all due diligence and in a timely, safe, proper, skilful and workmanlike manner;

- the Services shall conform in all respects to the Brief and conditions under the Contract;
- (d) it shall not employ any illegal workers to carry out its obligations under the Contract;
- (e) the Consultant has full power, capacity and authority to enter into the Contract and to perform its obligations under the Contract;
- (f) the Contract constitutes valid, legally binding obligations of the Consultant enforceable in accordance with its terms;
- (g) all authorisations, approvals, consents, licences, exemptions and other requirements of any governmental, administrative or other authority or body in any relevant jurisdiction which are required to authorise the Consultant to execute, deliver and perform the Consultant's obligations under the Contract (including where its procedures so require, the consent of its parent company) have been duly and unconditionally obtained and are in full force and effect and the use of the Services by the Government will not contravene any applicable laws;
- (h) all information supplied, and statements and representations made by or on behalf of the Consultant in or in relation to its Quotation and the Contract are true, accurate and complete;
- (i) no claim is being made and no litigation, arbitration or administrative proceeding is presently in progress, or to the best of the Consultant's knowledge and belief, pending or threatened against it or any of its assets which will or might have a material adverse effect on its ability to perform its obligations under the Contract;
- it is not subject to any contractual obligation, compliance with which is likely to have a material adverse effect on its ability to perform its obligations under the Contract;
- (k) no proceedings or other steps have been taken and not discharged (nor to the best of its knowledge, are threatened) for the winding up or bankruptcy of the Consultant or for its dissolution or for the appointment of a receiver, administrative receiver, liquidator, manager, administrator or similar office in relation to any of the Consultant's assets or revenue;

- (I) it owns, has obtained and is able to obtain, valid licences for all Intellectual Property Rights that are necessary for the performance of its obligations under the Contract; and
- (m) it has not done or omitted to do anything which could have a material adverse effect on its assets, financial condition or position as an ongoing business concern or on its ability to fulfil its obligations under the Contract.
- 3.2 The warranties, representations and undertakings, expressed or implied, contained in Clause 3.1 and other provisions of the Contract (collectively, "Warranties" and each, a "Warranty") shall be true without limitation in time, save that in case of any Warranty expressed to be effective during the Contract Period, it shall be true on each day of the Contract Period as if it is repeated on each such day.
- Each of the Warranties shall be separate and independent and without prejudice to any other Warranty, and shall not be limited by reference to or inference from any other Warranty or any other provision of the Contract.
- 3.4 Unless otherwise expressly excluded from or provided to the contrary in the Contract, the rights, duties and liabilities imposed on a service provider and the rights conferred on the party contracting with the service provider under the Supply of Services (Implied Terms) Ordinance (Chapter 457 of the Laws of Hong Kong) apply to bind the Consultant and the Government respectively.

4. Costs and Expenses

Save as otherwise expressly provided for in the Contract, the Consultant shall comply with all provisions of the Contract and its obligations under the Contract at its own costs and expenses.

5. Order and Provision of Services

- 5.1 Whenever required by the Government by a written order signed by the Director's Representative ("Order") specifying:
 - (a) the Services to be provided to the Government;
 - (b) the date and time for provision of the Services referred to in (a); and

(c) the conditions, if any, applicable to the provision of the Services referred to in (a),

the Consultant shall provide to the Government the Services so specified in the Order in accordance with the Order and the provisions of the Contract.

- 5.2 If no date and time for provision of the Services is specified in an Order, the Consultant shall provide the Services specified in the Order within fourteen (14) working days from the date of the Order.
- 5.3 Time shall be of the essence as regards each provision of the Services specified in an Order.
- Notwithstanding any provision of the Contract, due provision of any Services to the Government shall not be regarded to have taken place unless and until such Services are accepted by the Government.

6. Inspection

- 6.1 The Services performed shall be subject to inspection and certification by the Inspecting Officer and/or the Director's Representative. Upon breach of any term or condition of the Contract by the Consultant, including but not limited to failure to comply with the performance requirements in accordance with the Brief, the Government shall be entitled to reject unsatisfactory performance of the Services and withhold payment of the Contract Price until the deficiencies or defects have been rectified by the Consultant.
- 6.2 In the event that the Consultant, its sub-Consultants or any of the Services performed shall fail to comply with any of the requirements of the Contract, or in the event that there is a breach of or non-compliance with any warranty, undertaking or obligation on the part of the Consultant to observe and perform which is capable of remedy, the Government may by notice in writing to the Consultant at any time require the Consultant to make good the defect, deficiency or remedy the breach at its sole costs and expenses within such time as may be stipulated by the Government in the notice.

Non-exclusive Contract

Nothing in the Contract shall preclude the Government from procuring any Services from any other person.

8. Government Property

When Government property is issued to the Consultant under the Contract, the Consultant shall be responsible for the due return of all such property. Should any such property be lost or damaged from any cause whatsoever while in the possession or control of the Consultant or his servants, workmen or agents, the Consultant shall pay for the same at total original cost plus twenty percent (20%). A count of the articles or material in the possession of the Consultant may be made at any time by the Director's Representative and the Consultant shall render such assistance as is necessary for this purpose.

9. Government Premises/Consultant's Premises

- 9.1 The Consultant, shall ensure that all persons engaged by him in carrying out the Contract keep to such parts of Government premises as are necessary for the due discharge of the Consultant's obligations under the Contract.
- 9.2 Where the Services are carried out on the Consultant's premises, such premises shall be open to inspection by the Director's Representative or Inspecting Officer at all reasonable times.
- 9.3 The safety of any craft, vessel and vehicle used by the Consultant and brought alongside or onto Government premises, piers or wharves, as the case may be, shall be the responsibility of the Consultant, who shall indemnify the Government in respect of any loss or damage to such Government premises, piers or wharves.

10. Payment of the Contract Price

10.1 In consideration of the Consultant's due and proper performance of all its obligations in accordance with the Contract, the Government shall pay the Consultant the Contract Price in accordance with the payment timetable set out in the Schedule of Price.

eeoq2079 — general conditions of contract

- 10.2 Notwithstanding any provision in the Contract, unless otherwise agreed in writing by the Government, in respect of any Services provided to the Government, the Government shall not have any obligation to pay the Consultant any Contract Price for such Services unless and until the Services have been accepted by the Government. The Government shall pay the Consultant the Contract Price within thirty (30) days after the date of acceptance of the Services.
- 10.3 The Contract Price is inclusive of all charges for provision of Services. Subject to Clause 1 and save as otherwise expressly provided for in the Contract, the Consultant shall not be entitled to any adjustment in the Contract Price for any reason (including foreign exchange fluctuations).
- 10.4 In the event that the Consultant has made a standing offer to provide the Services to the Government if and when demanded during the Contract Period, the Consultant and the Government hereby acknowledge and agree that the consideration for the standing offer shall be One Hong Kong Dollar, payable by the Government to the Consultant, if demanded, and that the Consultant irrevocably undertakes to keep the standing offer open throughout the Contract Period.
- 10.5 The Consultant shall invoice the Government for any payment of the Contract Price. In respect of each provision of the Services, the Consultant shall deliver to the Government an invoice setting out the particulars of the Services provided (including the unit rate), the Order number (if any), the amount of Contract Price payable for the Services and such other information as the Director's Representative may require from time to time.
- 10.6 Notwithstanding any provision of the Contract, the Government is entitled to withhold payment of all or any part of the Contract Price and any other sum payable by the Government to the Consultant under the Contract if:
 - (a) the Consultant fails to observe or perform any provision of the Contract;
 - (b) the Government disputes on any reasonable ground its obligation to pay the amount in question;
 - (c) the Government has reasonable grounds to believe that the Consultant is or will be liable to the Government under any provision of the Contract for the loss or damage suffered by the Government; or

- (d) withholding of payment is required by any applicable law.
- 10.7 No payment made by the Government under the Contract shall prejudice or carry any implication whatsoever on any rights or cause of action which has accrued or may accrue, or any remedy available, to the Government in respect of any breach of the Contract by the Consultant.

11, Variations

Subject to the provisions of the Contract, no waiver, cancellation, alteration or amendment of or to the provisions of the Contract shall be valid unless made by an instrument in writing and duly signed by the Consultant and the Government.

12. Liability and Indemnities

- 12.1 Neither the Government nor any of its employees or agents shall be under any liability whatsoever for or in respect of:
 - any loss of or damage to any of the Consultant's property or that of its employees or agents however caused (whether by any Negligence of the Government or any of its employees or agents or otherwise); or
 - (b) any injury to or death of the Consultant (in the case where the Consultant is a natural person) or any of its employees or agents, save and except any such injury or death caused by the Negligence of the Government or any of its employees or agents.
- 12.2 Without prejudice to any other provision of the Contract, the Consultant shall indemnify each of the Government and its employees and agents (each an "Indemnified Person") against:
 - (a) any and all claims (whether or not successful, compromised, settled, withdrawn or discontinued, in whole or in part), actions, investigations, demands, proceedings or judgments, joint or several, threatened, brought or established against an Indemnified Person ("Claims"); and
 - (b) any and all liabilities, losses, damages, costs, charges or expenses
 (including (i) all legal fees and other awards, costs, payments, charges and

expenses and (ii) any loss or damage sustained by or any injury to or death of any person in consequence of any Negligence of the Consultant or any of its employees, sub-Consultants or agents) which an Indemnified Person may pay or incur as a result of or in relation to any Claims,

which in any case arise directly or indirectly in connection with, out of or in relation to:

- the performance or breach of any provisions of the Contract by the Consultant, its employees, agents or sub-Consultants;
- (ii) the negligence, recklessness, tortious acts or wilful omission of the Consultant, its employees, agents or sub-Consultants;
- (iii) any default, unauthorised act or wilful misconduct of the Consultant, its employees, agents or sub-Consultant(s);
- (iv) any claim that the use or possession of the Materials infringes the Intellectual Property Rights of any person; or
- (v) the non-compliance by the Consultant, its employees, agents or sub-Consultant(s) with any applicable law, or regulation, order or requirement of any government agency or authority.
- 12.3 The indemnity under Clause 12.2 shall not apply to any injury or death caused by the Negligence of an Indemnified Person.
- 12.4 In the event of any person suffering any injury or death in the course of or arising out of the Contract and whether there be a claim for compensation or not, the Consultant shall verbally inform the Director's Representative as early as practicable and deliver to the Government a written report within seven (7) working days after the occurrence of the injury or death, or on an earlier date specified by the Director's Representative.
- 12.5 For the purposes of this Clause, "Negligence" shall have the same meaning as that assigned to it in section 2(1) of the Control of Exemption Clauses Ordinance (Chapter 71 of the Laws of Hong Kong).

12.6 The indemnities, payment and compensation given in pursuance of the Contract by the Consultant shall not be affected or reduced by reason of any failure or omission of the Government in enforcing any of the terms and conditions of the Contract.

13, Termination

13.1 lf:

- the Consultant fails to provide to the Government any Services specified in an Order within the time as specified in the Order or in accordance with Clause 5.2;
- (b) any Services are rejected pursuant to the Contract;
- (c) the Consultant fails to provide to the Government rectified Services by the date specified by the Director's Representative pursuant to Clause 6.2;
- (d) the Consultant commits a fundamental breach of any term of the Contract;
- (e) the Consultant is in breach of any other provision of the Contract which in the opinion of the Government is not capable of remedy;
- (f) the Consultant commits a breach of any other provision of the Contract which is capable of remedy and falls to remedy the same within seven (7) days of service of notice by the Government (or such longer period as specified in the notice) requiring such remedy;
- (g) the Consultant is in breach of any of its warranties and undertakings under the Contract;
- (h) the Consultant has made a material misrepresentation (including submission of false statement or inaccurate information) during the quoting process of the Contract;
- (i) the Consultant, any officer (including director), employee, agent or sub-Consultant of the Consultant commits an offence under the Prevention of Bribery Ordinance (Chapter 201 of the Laws of Hong Kong) or any law of

a similar nature in relation to the Contract or any other contract made by the Consultant with the Government; or

(j) the Government is given the right to terminate the Contract under any other provision of the Contract,

the Government may by written notice to the Consultant terminate the Contract immediately.

- 13.2 The Government may also by written notice to the Consultant terminate the Contract immediately upon the occurrence of any of the following events:
 - a proposal is made for a voluntary arrangement or any other composition, scheme or arrangement with, or assignment for the benefit of, the Consultant's creditors;
 - (b) if the Consultant is an incorporated body, a shareholders or members meeting is convened for the purpose of considering a resolution that it be wound up or a resolution for its winding-up is passed (other than voluntarily for the purpose of bona fide reconstruction or solvent amalgamation);
 - a petition is presented for the winding-up or bankruptcy of the Consultant, which is not dismissed within fourteen (14) days after the petition is presented;
 - (d) the Consultant is or becomes insolvent, or any order is made for the Consultant's bankruptcy;
 - an administrator, administrative receiver, receiver or similar officer is appointed over the whole or any part of the Consultant's business or assets;
 - (f) the Consultant suspends or ceases, or threatens to suspend or cease, to carry on all or a substantial part of its business;
 - (g) the Government reasonably apprehends that any of the events mentioned above is about to occur; or

- (h) a Force Majeure Event occurs in such manner entitling the Government to terminate the Contract under Clause 25.7.
- 13.3 The Government may at any time suspend or terminate the Contract by giving the Consultant thirty (30) working days prior written notice.
- On termination of the Contract for any reason, the Government is under no further obligation to the Consultant under the Contract without thereby releasing the Consultant from any of its liabilities under the Contract, or affecting any rights and powers conferred upon the Government by the Contract.
- 13.5 The expiry or termination of the Contract shall not affect any accrued rights or liabilities of either party nor shall it affect the coming into force or the continuance in force of any provision of the Contract which is expressly or by implication intended to come into or continue in force on or after such expiry or termination.
- 13.6 If the Contract is terminated under Clause 13.1 and the Government makes other arrangements for the provision of any Services from any other source, the Government may recover from the Consultant: (a) any amount in excess of the Contract Price incurred by the Government in engaging another Consultant to complete the uncompleted Services and all costs and expenses incurred in making the arrangements for the same including conducting quotation exercise for the uncompleted Services; and (b) any additional expenditure incurred by the Government in connection with a default by the Consultant referred to in Clause 14.1. If the Contract is so terminated, until the Government has established the final cost of making other arrangements contemplated under this Clause, no further payments shall be payable by the Government to the Consultant for the Services provided by the Consultant prior to termination and in accordance with the Contract for which payment has yet to be made by the Government.
- 13.7 On the expiry or termination of the Contract for any reason, the Consultant shall:
 - (a) immediately return to the Government all documents containing confidential information, personal data and such other information, property and materials in the possession or under the control of the Consultant or any of its sub-Consultants and agents, which was obtained or produced in the course of providing the Services;

- assist and co-operate with the Government to ensure an orderly transition
 of the provision of the Services to such person specified by the Director's
 Representative and/or the completion of anywork-in-progress;
- (c) within twenty-eight (28) days of the date of termination compile and submit to the Government a report of all relevant information, facts, data, findings and conclusions in respect of the Services which have been provided up to the effective date of termination; and
- (d) promptly provide all information concerning the provision of the Services which may reasonably be requested by the Government for the purposes of adequately understanding the manner in which the Services have been provided or the purpose of allowing the Government or a replacement Consultant to conduct due diligence.
- 13.8 Save as otherwise expressly provided for in the Contract, no compensation whatsoever (including compensation for any loss or expense arising from any consequential loss or damage, or loss of opportunity, suffered or incurred by the Consultant) shall be payable by the Government to the Consultant as a result of any suspension or early termination of the Contract by the Government.

14. Intellectual Property Rights

- 14.1 The Government shall be the exclusive owner of the Materials. All the Intellectual Property Rights in the Materials shall vest in the Government at the time they are created. Subject to Clause 14.3, the Consultant warrants that such Materials are original works developed by or on behalf of the Consultant.
- 14.2 The Consultant shall not use or allow to be used directly or indirectly the Materials except for the performance of its obligations under the Contract or except with the prior written approval of the Government. "Use" includes any acts restricted by copyright (including reproduction) set out in sections 22 to 29 of the Copyright Ordinance (Chapter 528 of the Laws of Hong Kong).
- 14.3 If materials from other copyright works or Intellectual Property Rights from other sources (except those originating from the Government) are included in the Materials or any software and materials are supplied or used by the Consultant in the performance of the Contract and the Intellectual Property Rights are vested in a third

party, the Consultant shall identify such materials to the Government and keep the Government informed in writing of such third party materials.

14.4 The Consultant warrants that:

- (a) It has or shall have a valid and continuing licence under which it is entitled to use or sub-license such third party materials and the third party Intellectual Property Rights for itself and for the Government and its authorised users to use such third party materials;
- (b) prior to the use and incorporation of such third party materials, the Consultant shall have obtained the grant of all necessary clearances for itself and for the Government and its authorised users authorising the use of such third party materials for the purposes contemplated under the Contract;
- (c) the provision of the Services by the Consultant and the use or possession by the Government and its authorised users of the Materials including the third party materials for any of the purposes contemplated by the Contract does not and will not infringe any Intellectual Property Rights of any person; and
- (d) the exercise of any of the rights granted under the Contract by the Government and its authorised users will not infringe any Intellectual Property Rights of any person.
- The Consultant hereby waives and will procure its officers, employees, agents, sub-Consultants and all authors concerned to waive all moral rights (whether past, present or future) in respect of the Materials to which they may now or at any time in the future be entitled under the Copyright Ordinance and under any similar law in force from time to time anywhere in the world. Such waiver shall operate in favour of the Government, its authorised users and licensees and shall take effect upon delivery of the relevant Materials.
- 14.6 The Consultant shall at its own costs execute or procure the execution of any further assignments, deeds, licence, documents and instruments and do or procure the doing of any further things as may be necessary to give full effect to this Clause.

14.7 The provisions of this Clause shall survive the expiry or termination of the Contract and shall continue in full force and effect notwithstanding such expiry or termination.

15. Conflict of Interest

- 15.1 The Consultant shall during the Contract Period and for three (3) months thereafter:
 - ensure that it (including each and every employee of the Consultant) and each of its sub-Consultants and each of their respective employees, officers and agents engaged in the discharge of the obligations hereunder, and each of their respective associates and associated persons, shall not undertake any service, task, or job or do anything whatsoever for or on behalf of any third party (other than in the proper performance of the Contract) which conflicts or which may be seen to conflict with the Consultant's duties or obligations under the Contract without the prior written approval of the Government (which approval shall not be unreasonably refused or delayed); and
 - (b) forthwith notify the Government in writing of all or any facts which may reasonably be considered to give rise to a situation where the financial, professional, commercial, personal or other interests of the Consultant or any of the Consultant's sub-Consultants or any of their respective employees, officers and agents deployed for the performance of the Consultant's obligations hereunder or their respective associates or associated persons, conflict or compete, or may be seen to conflict or compete, with the Consultant's duties or obligations under the Contract.
 - 15.2 The Consultant shall ensure that each of its associate and associated person, each of its sub-Consultants and each of their respective employees, officers and agents deployed in the performance of the Consultant's obligations hereunder and their respective associates and associated persons shall keep themselves informed and inform the Consultant and keep it informed regularly of all facts which may reasonably be considered to give rise to, a situation in which the financial, professional, commercial, personal or other interests of such persons, conflict or compete, or may be seen to conflict or compete, with the Consultant's obligations under this Contract.

15.3 In the Contract:

- (a) "associate" in relation to any person means:
 - (i) a relative or partner of that person; or
 - a company one or more of whose directors is in common with one or more of the directors of that person;
- (b) "associated person" in relation to another person means:
 - (i) any person who has control, directly or indirectly, over the other;
 - (ii) any person who is controlled, directly or indirectly, by the other; or
 - (iii) any person who is controlled by, or has control over, a person at (i) or (ii) above;
- (c) "control" in relation to another person means the power of a person to secure:
 - by means of the holding of shares or interests or the possession of voting power in or in relation to that or any other person;
 - (ii) by virtue of powers conferred by any constitution, memorandum or articles of association, partnership, agreement or arrangement (whether legally enforceable or not) affecting that or any other person; or
 - (iii) by virtue of holding office as a director in that or any other person;
 - that the affairs of the first-mentioned person are conducted in accordance with the wishes of that other person;
- (d) "director" means any person occupying the position of a director by whatever name called and includes a de facto or shadow director;
- (e) "relative" means the spouse, parent, child, brother or sister of the relevant person, and, in deducing such a relationship, an adopted child shall be

deemed to be a child both of the natural parents and the adopting parent and a step child to be a child of both the natural parents and the step parent.

(f) "Director's Representative" means Chief Engineer / Energy Efficiency A or such other person as may be authorised by him in writing and notified to the Consultant.

16. Confidentiality

- 16.1 The Consultant shall treat as proprietary and confidential all information, documents, materials and data (including any personal particulars records and personal data (as defined in the Personal Data (Privacy) Ordinance (Chapter 486 of the Laws of Hong Kong)), in whatever form or media, which the Government has for the purposes of or in the course of performing the Contract, supplied, made available or communicated to the Consultant or which may come to the Consultant's knowledge or be accessible by the Consultant in the course of carrying out the Services and all advices, recommendations, documents, materials and data given by the Consultant to the Government under the Contract ("Confidential Information"). The Consultant's obligations under this Clause 16 shall not extend to any information which was rightfully in the possession of the Consultant prior to the commencement of the negotiations leading to the Contract or which is already in the public knowledge or becomes so at a future date (otherwise than as a result of a breach of this Clause).
 - 16.2 Without prejudice to any other provision of the Contract, the Consultant shall indemnify and keep the Government and its authorised users fully and effectively indemnified against any and all actions, damages, costs, claims, demands, expenses (including the fees and disbursements of lawyers, agents and expert witnesses) and any awards and costs which may be agreed to be paid in settlement of any proceedings and liabilities of any nature arising from or incurred by reason of:
 - a breach of confidence (whether under the Contract or general law) by the
 Consultant or any of its employees, agents or sub-Consultants;
 - (b) any actions or claims made in respect of information subject to the Personal Data (Privacy) Ordinance, which action and/or claim would not have arisen but for the act, negligence or omission of the Consultant or

any of its employees, agents or sub-Consultants in connection with the performance of the Contract; and

- (c) any act done or omission in the performance of the Contract that contravenes the Unsolicited Electronic Messages Ordinance (Chapter 593 of the Laws of Hong Kong).
- 16.3 The Consultant shall use the Confidential Information solely for the purposes of the Contract, The Consultant shall not, at any time whether during the Contract Period or after the expiry or termination (howsoever occasioned) of the Contract, use (or allow to be used) the Confidential Information for any other purposes without the Government's prior written consent.
- 16.4 The Consultant shall not disclose the Confidential Information to any third parties except in confidence to such of the Consultant's employees, agents or sub-Consultants who need to know the same for the purposes of the Contract.
- 16.5 The Consultant undertakes to take all necessary measures for the protection of the Confidential Information and to prevent any unauthorised disclosure or leakage of the Confidential Information.
- 16.6 The Consultant shall comply with any disclosure restrictions and conditions of use of the Confidential Information as may be stipulated by the Government from time to time.
- 16.7 The Consultant shall ensure that each of its employees, agents, sub-Consultants, and any other persons involved in the performance of the Contract are aware of and comply with the provisions of this Clause 16 and the Official Secrets Ordinance (Chapter 521 of the Laws of Hong Kong).
- The Consultant undertakes, if so requested by the Government, to deliver to the Government on such date as specified by the Government, separate confidentiality agreements duly executed by the Consultant and/or each person to whom any Confidential Information is to be disclosed by the Consultant in accordance with the Contract. The Consultant shall not be regarded to have complied with this Clause unless each confidentiality agreement is executed on terms prescribed by the Government.
- 16.9 The Consultant further agrees that it will not at any time whether by itself or through any subsidiary or agent use, sell, license, sub-license, create, develop or Page 19 of 30

deal with any Confidential Information otherwise than in accordance with the Contract.

- 16.10 If the Consultant becomes aware of any breach of confidence by any of its employees, agents or sub-Consultants, it shall promptly notify the Government and give the Government all reasonable assistance in connection with any action or proceedings which the Government may take or institute against any such persons.
- 16.11 The Government may request the Consultant in writing at any time that any Confidential Information disclosed pursuant to the terms of this Clause and any copies, analyses, compilations and extracts thereof whether in hard copies, electronic format or other media be returned, destroyed and/or deleted with a written statement to the effect that upon such return, destruction and/or deletion it has not retained in its possession or under its control, either directly or indirectly, any Confidential Information in whatever form. The Consultant shall comply with any such request from the Government within seven (7) days of receipt of such request.
- 16.12 The provisions of this Clause 16 shall survive the expiry or termination of the Contract and shall continue in full force and effect notwithstanding such expiry or termination.

17. Probity

- 17.1 The Consultant acknowledges it has been reminded that:
 - dishonesty, theft and corruption on its part or that of its employees, agents or sub-Consultants are criminal offences and may lead to prosecution under section 9 of the Prevention of Bribery Ordinance (Chapter 201 of the Laws of Hong Kong), sections 17, 18D and 19 of the Theft Ordinance (Chapter 210 of the Laws of Hong Kong) and section 161 of the Crimes Ordinance (Chapter 200 of the Laws of Hong Kong);
 - (b) the soliciting or accepting of advantages, as defined in the Prevention of Bribery Ordinance is not permitted.
- 17.2 The Consultant shall inform its officers, employees (whether permanent or temporary), agents and sub-Consultants that the soliciting or accepting of

advantages (as defined in the Prevention of Bribery Ordinance) is not permitted. The Consultant shall also caution its officers, employees and agents and sub-Consultants against soliciting or accepting any excessive hospitality, entertainment or inducement which may impair their impartiality in relation to the selection of its sub-Consultants, if any, or the supervision of the work of the sub-Consultants.

- 17.3 The Government may terminate the Contract immediately if the Consultant or any of its employees, agents and sub-Consultants is convicted of an offence under the Prevention of Bribery Ordinance, the Theft Ordinance or the Crimes Ordinance.
- 17.4 The Consultant shall within two (2) weeks after the commencement of the Contract draw up and submit a staff code of conduct to the Director's Representative including, among other probity issues, a statement explicitly prohibiting its sub-Consultant (if any), or any person employed by it to provide the Services from soliciting or accepting any form of advantages in discharging his duties under the Contract. It shall ensure that its sub-Consultant (if any), or any person employed by it to provide the Services is well aware of the prohibited acts explicitly stated in Clause 17.2 and of the staff code of conduct. The code of conduct should form part of the employment contract to ensure acknowledgement and compliance by the employees.

18. Insurance

- 18.1 The Consultant shall effect and maintain throughout the Contract Period a policy or policies of insurance providing an adequate level of cover in respect of all risks which may be incurred by the Consultant in connection with the performance or attempted performance of its obligations under the Contract, including death, personal injury, loss of or damage to property or any other loss. Such insurances shall include cover in respect of any financial loss arising from any advice given or omitted to be given by the Consultant. The insurance company or companies shall be authorised under the insurance Companies Ordinance (Chapter 41 of the Laws of Hong Kong).
- 18.2 Without prejudice to Clause 18.1, the Consultant shall effect and maintain employer's liability insurance in respect of all its employees and other staff in accordance with all applicable legal requirements.

- 18.3 If required by the Government, the Consultant shall deliver to the Government copies of all insurance policies referred to in the Contract together with receipts or other evidence of payment of the latest premium due under the policies.
- 18.4 The Consultant shall be responsible for lodging claims with the insurance company and shall notify the insurance company within the time period specified in the policy of the occurrence of any event liable to give rise to a claim.
- 18.5 If the Consultant fails to give effect to or maintain any insurance required under the Contract, the Government may make such alternative arrangements as it considers appropriate to protect its interests and may recover from the Consultant the costs of putting such in place and maintaining such arrangements.
- 18.6 No provision in any insurance and no amount of insurance covered shall relieve the Consultant of any liability under the Contract. It is the responsibility of the Consultant to determine the amount of insurance cover that will be adequate to enable the Consultant to satisfy any liability under the Contract.

19. Process Agent

If the Consultant is not a Hong Kong resident, the Consultant irrevocably appoints the person whose name and address are set out in the Appendix as its process agent to receive on its behalf service of process of any legal action or proceedings arising out of or in connection with the Contract in Hong Kong, Service upon the process agent shall be good service upon the Consultant whether or not it is forwarded to and received by the Consultant. If, for any reason, the process agent ceases to be or ceases to be able to act as process agent, or no longer has an address in Hong Kong, the Consultant hereby agrees to appoint a substitute process agent with an address in Hong Kong acceptable to the Government and to deliver to the Government a copy of the substitute process agent's acceptance of that appointment within thirty (30) days. In the event that the Consultant fails to appoint a substitute process agent, or fails to notify the Government of the name and address for service of that substitute process agent, it shall be effective service for the Government to serve the process upon the last known address in Hong Kong of the last known process agent for the Consultant notified to the Government notwithstanding that such process agent is no longer found at such address or has ceased to act or has ceased to be able to act.

20. Relationship of the Parties

The Consultant enters into the Contract with the Government as an independent Consultant only and nothing in the Contract shall create a contract of employment, a relationship of agency or partnership, or a joint venture between the Government and the Consultant. Unless otherwise expressly provided for in the Contract, neither party is authorised to act in the name of, or on behalf of, or otherwise bind the other party.

21. Assignment and Sub-contracting

- Unless otherwise provided for in the Contract, the Consultant shall not, without the prior written consent of the Government, assign, transfer, sub-contract or otherwise dispose of any of its interests, rights, benefits or obligations under the Contract. The performance of the Contract by the Consultant shall be personal to it.
- 21.2 The Consultant shall submit the proposed sub-contract to the Government for approval. The Government reserves the right to grant permission for sub-contracting and determine the terms and conditions of the sub-contract. A certified copy of the sub-contract shall be deposited with the Government within seven (7) days after the effective date of the sub-contract.
- 21.3 The Consultant shall remain fully liable and shall not be relieved from any of its obligations hereunder by entering into any sub-contract for the performance of any part of the Contract and the Consultant shall be responsible for the acts, defaults or neglect of any sub-Consultant, its employees and agents.

22. Disclosure of Information

The Consultant hereby irrevocably authorises, consents and agrees that the Government may, whenever it considers appropriate or upon request by any person (written or otherwise) and without any further reference to the Consultant, disclose to any person in such form and manner as the Government considers fit:

- (a) the Services provided or to be provided by the Consultant;
- (b) the Estimated Contract Price and any other fees, cost and expense payable to the Consultant pursuant to the Contract;
- (c) the price proposal submitted prior to the date of the Contract by the Consultant to the Government in relation to the Services; and

(d) the engagement by the Government of the Consultant under the Contract and the name and address of the Consultant and persons appointed or engaged by the Consultant to assist in the performance of the Contract.

23. Publicity

- 23.1 Whether before, during or after the expiry or termination of the Contract Period, the Consultant shall not use the Government's name in any document, publication, advertisement or publicity material without the prior written consent of the Government.
- 23.2 Subject to Clause 23.1, the Consultant shall submit to the Director's Representative for approval all the proposed advertising or other publicity material relating to the Contract, the Services or other services provided or other work done in connection with the Contract wherein the Government's name is mentioned or language used from which a connection with the Government can reasonably be inferred or implied.
- 23.3 Notwithstanding any consent or approval given under Clause 23.1 or 23.2, whenever required by the Government, the Consultant shall remove all advertisement and publicity material relating to the Contract wherein the Government is mentioned or language used from which a connection with the Government can reasonably be inferred or implied and the Consultant must comply with such request.

24. Vicarious Liability

Any act, default, neglect or omission of any officers, employees, agents or sub-Consultants of the Consultant shall be deemed to be the act, default, neglect or omission of the Consultant.

25. Force Majeure

25.1 If the Consultant becomes aware of any matter likely to constitute a Force Majeure Event, the Consultant shall forthwith notify the Government in writing of that matter and all relevant particulars.

- 25.2 Within three (3) days after the occurrence of a Force Majeure Event, the Consultant shall notify the Government in writing of the full particulars of the Force Majeure Event including its nature, extent and likely duration of its effect on the Consultant's ability to perform its obligation under the Contract. In the event of an occurrence of a Force Majeure Event, the Government may on its own issue a notice to the Consultant noting the occurrence of the Force Majeure Event and requiring the Consultant to suspend all or any of the obligations under the Contract. A notice issued by the Consultant or the Government pursuant to this Clause is hereinafter referred to as the "Suspension Notice".
- 25.3 Following the issue of a Suspension Notice by the Consultant or the Government, the Consultant shall keep the Government informed at reasonable intervals, and upon the request of the Government, of:
 - the likely duration of the relevant Force Majeure Event and of its effect on the Consultant's ability to perform its obligations under the Contract;
 - (b) the actions taken or proposed to be taken by the Consultant to mitigate or minimise the effects of that Force Majeure Event; and
 - (c) any other matters relevant to that Force Majeure Event or the Consultant's performance affected by that Force Majeure Event.
- 25.4 To the extent that the performance of obligations by the Consultant under the Contract is prevented by a Force Majeure Event, the Consultant's performance of such obligations will, subject to Clause 25.5, be suspended to that extent from the date the Consultant or the Government gives a Suspension Notice in respect of that Force Majeure Event until the Consultant ceases to be so prevented ("Cessation Date"). Notwithstanding anything in the Contract to the contrary, as soon as the Government issues a Suspension Notice to the Consultant, the Consultant shall forthwith suspend the performance of the obligations to the extent specified in the Suspension Notice.
- 25.5 During the suspension of any obligations under Clause 25.4:
 - (a) the Consultant shall use its best endeavours (including incurring any reasonable expenses and re-deploying its manpower and resources) to remove or mitigate the effect of each Force Majeure Event on the Consultant's performance of the obligations under the Contract;

- (b) the Government may make alternative arrangements for the performance of any suspended obligations, whether by another person or otherwise; and
- (c) the Consultant shall not be entitled to any cost, fee or charge or such pro rata portion thereof in respect of the suspended obligations for the suspended period.
- As soon as the relevant Force Majeure Event has ended, the Consultant shall forthwith notify the Government of the Cessation Date, or the Government may on its own, after consultation with the Consultant, by notice in writing to the Consultant, determine the appropriate Cessation Date. The Consultant shall immediately after the Cessation Date resume performance of the suspended obligations in accordance with the terms and conditions of the Contract. In the event of any disagreement between the Government and the Consultant on the appropriate Cessation Date, the Government's decision shall be final in the absence of manifest error.
- 25.7 Should suspension of the performance by the Consultant of its obligations under the Contract persist or be likely to persist as a result of a Force Majeure Event, the Government shall be entitled to terminate the Contract pursuant to Clause 14.2.
- 25.8 The Consultant shall ensure that provisions similar to this Clause 25 are incorporated in all its contracts with sub-Consultants made pursuant to this Contract.

26. Retention of Records

The Consultant shall keep and maintain until six (6) years after the expiry of the Contract, or such longer period as may be agreed by the parties, full and accurate records of the Contract including the Services provided under it, all expenditure reimbursed by the Government, and all payments made by the Government. If requested by the Government, the Consultant shall afford the Government or its representative access to the records as may be requested by the Government.

27. Notices

- 27.1 Each notice, demand, invoice, correspondence or other communication given or made under the Contract by a party shall be in writing and delivered or sent to the other party at its postal address, facsimile number or email address set out in the Appendix (or such other postal address, facsimile number or email address as the addressee has by not less than seven (7) working days' prior written notice specified to the other party).
- 27.2 Such notices, demands, invoices, correspondence or other communications shall be addressed as provided in Clause 27.1 and, if so addressed, shall be deemed to have been duly given or made as follows:
 - (a) if sent by personal delivery during normal business hours on a working day, upon delivery at the address of the relevant party;
 - (b) if sent by post, four (4) days (for any place in Hong Kong) and seven (7) days (for any place outside Hong Kong) after the date of posting;
 - (c) if sent by facsimile during normal business hours on a working day, when despatched with confirmed receipt as evidenced by the transmission report generated at the end of the transmission of such facsimile by the facsimile machine used for such transmission;
 - (d) if sent by email, when actually received in a form readable by an individual.

28. Entire Agreement

- 28.1 The Contract constitutes the whole agreement between the parties thereto and supersedes any previous agreements or arrangements between them relating to the subject matter hereof. The Consultant acknowledges that in entering into the Contract, it has not relied on any statements, warranties or representations given or made by the Government.
- 28.2 All of the provisions of the Contract shall remain in full force and effect notwithstanding the completion of the Services (except insofar as those obligations which have been fully performed).

29. Governing Law

The Contract shall be governed by and construed in accordance with the laws of Hong Kong and the parties hereby agree to submit to the exclusive jurisdiction of the courts of Hong Kong in relation to any matters arising out of the Contract.

30. Severability

If any provision of the Contract is found by any authority or court of competent jurisdiction to be illegal, invalid or unenforceable, such illegality, invalidity or unenforceability shall not affect the other provisions of the Contract, all of which shall remain in full force and effect.

31. Waiver

- 31.1 No failure, delay, forbearance or indulgence by any party to the Contract to exercise any right, power or remedy available to it under the Contract or at law or in equity shall operate as a waiver thereof; nor shall any single or partial exercise of the same preclude any other or further exercise thereof or the exercise of any other right, power or remedy. A right or a remedy of each party under the Contract shall be cumulative and not exclusive of any other rights, power or remedies provided by the Contract, at law or in equity. Without limiting the foregoing, no waiver by any party of any breach by the other party of any provision hereof shall be deemed to be a waiver of any subsequent breach of that or any other provision hereof.
- 31.2 Without prejudice to the generality of Clause 31.1, any right of termination of the Contract or any other right, power or remedy of whatsoever nature conferred upon the Government under the Contract shall be exercisable by it in addition to and without prejudice to any other rights and remedies available to it under the Contract or at law (and, without prejudice to the generality of the foregoing, shall not extinguish any right to damages to which the Government may be entitled in respect of the breach of the Contract) and no exercise or failure to exercise a right of termination shall constitute a waiver by the Government of any other right, power or remedy.

32. Recovery of Sums Due

Where the Consultant has incurred any liability to the Government, whether at law or in equity and whether such liability is liquidated or unliquidated, the Government may set

Page 28 of 30

off, whether by way of equitable set off or at common law the amount of such liquidated liability and a reasonable estimate of the amount of any unliquidated liability, against any sum then due or which at any time thereafter may become due from the Government to the Consultant under the Contract or any other contract made between the Government and the Consultant.

33. Assistance in Legal Proceedings

- 33.1 If and whenever requested to do so by the Director's Representative, the Consultant shall provide to the Government all relevant information, documents (including documentation and statements from staff) and other assistance in connection with any inquiry, investigation, arbitration, tribunal hearings or court proceedings in which the Government may become involved or any internal disciplinary hearing of the Government that arises out of or in connection with the Contract or the Consultant's presence at the Government's premises. If requested by the Government, the Consultant shall arrange for relevant staff to give evidence at such inquiries, investigations, arbitrations, hearings or proceedings.
 - Where the Consultant or any employees, agents or Consultants of the Consultant become aware of an incident, accident or other matter which may give rise to a claim or legal proceedings by a third party against the Government or the Consultant or in respect of the Contract, it shall notify the Director's Representative immediately in writing giving full details of such incident, accident or matter as the Director's Representative may require.

34. Contracts (Right of Third Parties) Ordinance

The parties hereby declare that nothing in this Contract confers or purports to confer on any third party any benefit or any right to enforce any term of this Contract pursuant to the Contracts (Rights of Third Parties) Ordinance (Chapter 623 of the Laws of Hong Kong).

35. Order of Precedence

In the event of, and only to the extent of, any conflict or inconsistency between the Clauses of the Contract, any document referred to in those Clauses and the Schedules, the following order of precedence shall be applied, but only in so far as is necessary to resolve that conflict or inconsistency:

- (a) Brief;
- (b) Schedule of Price;
- (c) General Conditions of Contract;
- (d) any other materials which were submitted by the Contractor as part of its. Quotation and attached to the Contract.

To be submitted with your quotation

GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION ELECTRICAL AND MECHANICAL SERVICES DEPARTMENT

(QUOTATION NO.: EEOQ2769)

Form of Quotation

Project	Study on Indirect Evaporative Cooling (IEC) Technology for Primary Air Handling (PAU)	y Unit
То:	Study on Performance of EC Fan with Spiral Guide Vane Director of Electrical & Mechanical Services, Electrical & Mechanical Services Department, 3 Kai Shing Street, Kowloon,	
	Hong Kong	
1. compl Brief a	Having inspected the Consultancy Brief for the above named Project, I/we of the and guarantee the whole of the said project in conformity with the said Consustance in the Quotation Schedule for the sum of Hong Kong Dollars	ultancy
2. the pr	I/We undertake to complete, deliver and guarantee without further charge the wiject within the time as stated below:	hale of
	(a) Time for Completion (#) : Eighteen (18) months	
	(b) Validity Period : Ninety (90) days	
form of 4. may re	f Letter of Acceptance, is received for this quotation within the validity period. I/We understand that Government is not bound to accept the lowest or any quot ceive.	ation it
Signa	ure and Company Chop :	
-	in Block Letters :	
	Status : Date :	
	nalf of (*)	
	g in Hong Kong under the style of ;	
	ered address of firm :	
Signa	ure of Witness and Company Chop :	
Name	in Block Letters :	
Occup	ation of Witness:	
	ss of Witness:	

- (#) If the time of completion is not stated, the tenderer is to fill it in.
- (*) Insert the name of the company.

STUDY ON PERFORMANCE OF EC FAN WITH SPIRAL GUIDE VANE

(QUOTATION NO.: EEOQ2769)

Study Brief

1.	Background of the Assignment	Z
2.	Objective of the Assignment	2
3.	Description of the Assignment	2
-	3.1 Scope of Study	2
	3.2 Services to be provided	3
4	Deliverables , , , , , , , , , , , , , , , , , , ,	4
5	Response to Queries	4
7.	Variations and Other Commitments	5
8.	Director's Representative	5
9.	Specialist and Sub-consultant Service	5
10	Surveys	5

1. Background of the Assignment

Air-conditioning ("A/C") systems account for a large amount of electricity consumption, especially in the public and commercial buildings. The electronically commuted fan (EC fan) has been widely adopted in the air-handling units (AHU) or primary air handling unit (PAU) due to its satisfactory efficiency. There are studies indicating the design of the guide vane may affect fan efficiency. Thus, this study is conducted to see if using spiral guide vane can further push the efficiency of the EC fan.

2. Objective of the Assignment

This Assignment aims to study the performance of the EC fan with spiral guide vane in AHU. A laboratory test and a simulation will be conducted to evaluate and compare the power consumption, pressure head and energy efficiency, etc. between the EC fan with spiral guide vane and the EC fan with standard guide vane.

3. Description of the Assignment

The Assignment is a performance study of the electronically commuted fan (EC fan) with spiral guide vane in AHU.

3.1 Scope of Study

The scope of the study of this Assignment shall include, but not limited to, the following:

Part I - Procurement of EC fan

- (a) To select and purchase one (1) no. of EC fan with spiral guide vane and two (2) no. of EC fan with standard guide vane which operate under 220V and 50Hz a.c. power supply.
- (b) The EC fan should fit into the testing rig with rated power not larger than 2.1 W and with IE5 motor efficiency.
- (c) The EC fans shall meet the safety requirements in Hong Kong and also comply with the requirements according to the General Specification of the Architectural Services Department.

Part II – Laboratory tests

- (a) To design and conduct lab tests for an EC fan with spiral guide vane and two EC fan with normal guide vane at various speeds in accordance with ASHRAE Standard: Laboratory Methods of Testing Fans for Rating ANSI/ASHRAE;
- (b) To evaluate the power consumption, pressure head and energy efficiency of the EC fan with spiral guide vane compared with the conventional EC fan for different air flowrates and different partial loads;
- (c) The data to be collected shall include, but not limited to, the following:
 - Air flowrate flowing through the tested EC fans

- ii. Air pressure drop between the inlet and outlet of the tested EC fans
- iii. Electric power consumption of the tested EC fans
- iv. Noise level of the tested EC fans
- (d) To analyze the data of the two tested EC fans and compare their power consumption, pressure head and energy efficiency for different flowrates, up to 6000 m3/h.
- (e) To compare the lab test result with the product catalogues.
- (f) To provide all the testing equipment, accessories and analysis tools for the laboratory tests.

Part III - Simulations

- (a) To conduct CFD simulations on EC fan with spiral guide vane used in single and fan grid arrangement in AHU for finding its advantages and disadvantages compared with normal EC fans in the same fan grid;
- (b) To investigate the energy losses based on air turbulence of air flow through the spiral guide vane;
- (c) To conduct a feasibility study for using the new EC fan compared with the normal fan for application in AHU through analysis of various costs and economic paybacks after the lab tests and simulations are completed;
- (d) To study the acoustic aspects of the fan grid arrangement with hybrid multiple outlets.

3.2 Services to be provided

The services to be provided by the Consultant shall include, but not limited to, the following:

- (e) To conduct the performance study as specified in Sub-clause 3.1;
- (f) To provide a M&V Protocol for the Assignment study, program and a staff organization for the approval of the Director's Representative within 7 days after award of the contract;
- (g) To provide the deliverables required in Clause 4;
- (h) To revise draft reports according to the comments received;
- To attend all necessary meetings relevant to this study and as directed by the Director's Representative;
- (j) To take notes for meeting and to consolidate comments for meetings in this Assignment;
- (k) To response to enquiries as directed by the Director's Representative during the Assignment and in according to Clause 5;
- (l) To prepare presentation materials such as information summary, powerpoint files, etc. as directed by the Director's Representative; and
- (m) To deliver all necessary presentations and respond to queries as directed by Director's Representative.

4. Deliverables

The Consultant shall submit the following to the Director's Representative:

- (a) The M&V Protocol as required in Sub-clause 3.2 (b) within 7 days after contract award;
- (b) A Draft Interim Report with a Draft Executive Summary with scope referred to Sub-clause 3.1, within 4 months after contract award; and
- (c) A Final Interim Report with an Executive Summary with scope referred to Sub-clause 3.1, within 5 months days after contract award.
- (d) A Draft Final Report with a Draft Executive Summary with scope referred to Sub-clause 3.1, within 5 months after contract award; and
- (e) A Final Report with an Executive Summary with scope referred to Sub-clause 3.1, within 6 months after contract award.

5. Response to Queries

The Consultant shall respond to queries raised to a date 3 months after the final submission of the Deliverables required under the Assignment. Such date shall be confirmed in writing to the Consultant by the Director's Representative. The Consultant shall response directly to queries raised by the Director's Representative or his designate during the whole course of the Assignment. Further requirement of such services from the Consultant shall be paid for as additional work.

6. Programme of Implementation

The date for commencement of the Assignment shall be the day of the letter of acceptance issued by the Director's Representative. The Assignment shall be completed within 18 months from the commencement date including:

Stage	Duration
Procurement, supply and delivery of EC fans	1 month
M&V Protocol	
Laboratory Test	3 months
Data monitoring and analysis and	1 months
Simulation	
Submission of interim report	

EEQQ2769

Submission of Final Report	1 months
Total	6 months

7. Variations and Other Commitments

As and when required, some items of work directly or indirectly related to this Project may be added, deleted or modified by the Director's Representative with the agreement of the Consultant and shall form part of the overall scope of the project.

8. Director's Representative

The Director's Representative shall be Chief Engineer / Energy Efficiency A or such other person as may be authorised by him in writing and notified to the Consultant. The Director's Representative may delegate any of the powers and functions vested in him to other officers. If the Consultant is dissatisfied with a decision or instruction of any such officer the matter shall be referred to the Director's Representative for a ruling.

9. Specialist and Sub-consultant Service

The Consultant shall provide all specialist and sub-consultant services, as well as purchase and hiring of equipment, computer software and system, laboratory service and translation services required for the satisfactory completion of the Assignment. No additional fees or expenses for the provision of such services rendered locally or overseas will be payable by the Employer except as otherwise provided for in the Schedule of Fees.

10. Surveys

The Consultant shall update and verify the accuracy of the information supplied by the Director's Representative. All field survey work, if required, for the proper execution of the Assignment shall unless otherwise provided for in this quotation, be the duty of the Consultant. Digital copies of field notes, field data and plans arising from these surveys shall be handed over to the Director's Representative upon completion of the Assignment. The accuracy as well as presentation of these surveys shall be of a standard agreed by the Director's Representative.