(SOA-QPS5)

Brief of Work Assignment

under

Category A, Minor Group –

Feasibility Study on Adoption of Building Information Modelling in Fire Services Department

Version: 1.0

August 2022

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1. SCOPE OF THE SERVICES

1.1 As a SOA Contractor in Category A Minor Group, you are invited to provide the Feasibility Study ("FS") on adoption of Building Information Modelling ("the BIM FS") in the Fire Services Department ("FSD") of the Government of the Hong Kong Special Administrative Region ("the Government").

1.2 Unless otherwise defined in this Brief, all terms and expressions defined in the Tender for the Supply of Information Technology Professional Services to Government Departments (Tender Ref: GCIO90525965) (SOA-QPS5 Tender Documents) shall have the same meanings when used herein.

1.3 The required work assignment is a fixed cost project and is subject to the prevailing terms and conditions in the Conditions of Individual Contract (Part IV of the SOA-QPS5 Tender Documents). The tentative start date of the BIM FS is 1 November 2022 and is planned to be completed in 12 months.

1.4 The total price quoted in Price Proposal should not exceed HK$3 million

2. BACKGROUND

2.1. In the 2018/19 Budget Speech, adoption of Building Information Modelling ("BIM") technologies was again mentioned by the Financial Secretary. It stated that "Starting this year, the Government will adopt BIM technology in the design and construction of major government capital works projects.". With reference to the Budget 2019/20, HK$300 million have been earmarked for the development of digital infrastructure, with a view to facilitating the dissemination, utilisation and innovative application of geospatial data for the whole territory.

2.2. BIM is an intelligent 3-Dimensional ("3D") model-based process that gives architecture, engineering, and construction professionals the insight and tools to plan, design, construct, and manage buildings and infrastructure more efficiently. Since 2017, the Government has formulated the policy and set out requirements on the adoption of BIM, which is in fact one of the initiatives in the Smart City Blueprint for Hong Kong published in December 2017. On the first day of December of the same year, the Development Bureau of the Government issued a Technical Circular (Works) No. 7/2017 on the adoption of BIM for Capital Works Projects in Hong Kong, that capital works project with project estimates more than $30 million shall use BIM technology. The policy is applicable to projects in the investigation, feasibility, planning, design or construction stages in the capital works programme irrespective of the modes of delivery. It is anticipated that almost all of the new building works will have their 3D building models from design to as-built stages.

2.3. The Buildings Department of the Government ("BD") is developing a centralized Electronic Submission Hub ("ESH") for processing all electronic building plans and e-

submissions under the Buildings Ordinance (Cap. 123), there will be tremendous benefits that the ESH could offer by enabling the acceptance of building plans in BIM format. The ESH will be put into use by 3 stages from 2022 and the functions for transmission of building plan submissions in BIM format from BD to FSD will be rolled out in the last stage of the ESH project, i.e. the 2nd quarter of 2025 tentatively. Meanwhile, the Lands Department of the Government is conducting a large-scale exercise to digitalize the existing building plans and establishing a BIM Repository to support the development of the 3D digital map aforementioned. The adoption of BIM will furnish this Department an opportunity to re-engineer its business on different aspects, such as building plan submission, Fire Service Installation ("FSI") acceptance test, FSI inspection, fire protection inspection, firefighting and rescue operation etc.

3. PROJECT OBJECTIVES

3.1 The objectives of the BIM FS are:

a. to provide a statement of implementation of BIM directions;

b. to pave the way for future integration with planned ESH of BD;

c. to formulate the medium to long-term BIM strategy for the FSD;

d. to define the BIM standard and specifications for the fire services related items in building plan submission;

e. to develop three (3) prototypes of automatic building plan checking tools;

f. to identify potentials to carry out the business process re-engineering in different business areas including processing of building plan submission; handling of FSI data; and retrieval of building plan and FSI during fire service operation;

g. to use BIM to accelerate the establishment of the 3D digital map on provision of FSI for firefighting operations and fire protection inspections;

h. to review, identify and recommend corresponding actions accordingly in order to fulfil the Department's business demands and operational needs where appropriate including detailed proposals for developing individual BIM and relevant IT projects/services for separate approval, resource allocation and implementation in due course;

i. to be in line with the Department's policy, overall business strategy and operations, with consideration on the technological options and resource availability;

j. to identify the problems of the existing system currently encountered or anticipated and proposed a new system;

k. to identify improvement areas including change of business process;

l. to assess the feasibility of the computerised solution; and

m. to quantify the requirements, costs, benefits and other implications of the proposed computer system.

3.2 As a result of the study, the Contractor shall recommend to FSD the following:

a. The decision and the inherent benefits as to GO or NO-GO ahead with the subsequent project phases.

b. The business and technical system options, and implementation strategy.

c. How the project is to be broken down into multiple manageable sub-projects /phases, if appropriate, and the implementation plan.

d. A reasonable estimate of the following, for the subsequent sub-projects/phases:

(i) resource (staff) requirement;

(ii) resource (finance) requirements;

(iii) other requirements as necessary; and

(iv) timetable.

4. PROJECT REQUIREMENTS

Requirements for this work assignment are set out in Clauses 4.1 - 4.7 of this Brief (save and except Clause 4.1.1, Current Environment Description).

4.1 USER REQUIREMENTS

4.1.1 Current Environment Description

4.1.1.1 Processing of Building Plan Submission

a. At present, any person who intends to carry out building works under the Buildings Ordinance (Cap. 123) is required to appoint registered building professionals to prepare and submit plans for the approval of the Building Authority (i.e., BD). BD is the central clearing house to process all building plan submissions from the private sector through the Centralised Processing System. Currently, registered building professionals have to produce multiple hard copies of buildings plans and supporting documents to BD. Upon receipt of these hard copies, BD would disseminate them to relevant departments including FSD for processing.

b. Generally, new or amended building plans for new projects and existing buildings and/or FSI schematic drawings should be submitted for New Projects Division

("NPD") of FSD to scrutinise fire safety provisions and offer fire protection advice. For projects under the Centralized Processing System administered by BD, Authorized Person ("AP") will submit 6 sets of building plans to BD and 2 sets of which containing FSI proposals will be forwarded to NPD for comments. NPD will examine the FSI proposals according to the requirements set out in the Codes of Practice for Minimum Fire Service Installations and Equipment (FSI Code) and Fire Services Certificate (FS 161) will be issued if the proposals are found satisfactory. Application for inspection and testing of FSI in new building should be submitted by authorized person and the registered fire service installation contractor with Form FSI/501 and FSI/501a. They should certify that the FSI listed therein have been installed and tested, and are in efficient working order pursuant to the Codes of Practice for Minimum Fire Service Installations and Equipment and Inspection, Testing and Maintenance of Installations and Equipment.

4.1.1.2 Handling of FSI Data

a. The Certificate (F.S. 172) will be issued in accordance with Section 21 of the Buildings Ordinance Subsection 6(d), certifying that the Director of Fire Services is satisfied that the FSI shown on the building plans approved by him have been installed in accordance with Sub-paragraph (ii) of Paragraph (b) of Subsection (1) of Section 16 of the Buildings Ordinance and are in efficient working order and satisfactory condition at the time of inspection. After that, a new case will be generated in Integrated Licensing, Fire Safety and Prosecution System ("LIFIPS") to kick-start a new workflow for data input on FSI of the building.

4.1.1.3 Retrieval of Building Plan and FSI during Fire Service Operation

a. For retrieval of building plans in response to request from fire grounds, the subject file number of a particular building plan can be obtained from LIFIPS. There are store rooms for building plans and FSI schematic drawings. All plans/drawings are stored in numerical order of the building reference numbers which are marked on each shelf of the rack. Upon receipt of the request from fire grounds, officer of Duty Watch should ascertain the location of the subject plan/drawing by searching the LIFIPS. Then the officer should proceed to the appropriate Plan Room to retrieve the subject plan/drawing for delivery to the Officer-In-Charge incident of fire or to the location as instructed.

4.1.1.4 Problems and Limitations

a. The ESH will be put into use by 3 stages from 2022 and the transmission of electronic submissions from BD to FSD will be rolled out in the last stage of the ESH project, i.e. the 2nd quarter of 2025 tentatively. Since FSD would receive electronic submission (including BIM) referred by BD via ESH, the whole building plan processing workflow will be dramatically changed. There is a genuine need for FSD to review the existing workflows, IT infrastructure,

processing hardware and software due to the development of BIM specifications & objects definition, and staff establishment & training in order to support the new building plan submission workflows.

b. Given that the rich information in BIM such as FSI, indoor design, building materials, fireman's lift, emergency exit and stairway, escape route and building usage etc. could be valuable to FSD in mobilising, fire services inspection, rescue operation and training, recommend FSD to establish some standards and/or procedures in terms of the applications, infrastructure and service delivery processes, how to reuse the spatial data with a view to supporting different FSD IT systems and applications.

c. Recommend FSD to formulate the Department's BIM policy, recommend the BIM strategy and implementation plan for the Department as a whole in an ongoing basis that may not be currently available.

d. It is foreseeable that the number of IT systems and the number of BIM users in different sections/units of FSD will be increased significantly in upcoming years, please recommend the organization of the FSD and resources requirements how to support the medium to long-term BIM application and development in FSD.

e. Whether an external BIM contractor should be engaged to conduct a comprehensive feasibility study to further define the technology architecture and map out a number of BIM projects for FSD, please propose the requirement and responsibilities.

4.1.2 Project Management Requirements

The Contractor shall manage the project during all stages of the work assignment. The duties shall include the following:

a. be responsible for the total project management and act as a single contact point to FSD regarding all related activities of the work assignment;

b. take the lead in coordinating with various parties within and outside the Government including various Government bulk contractors for the smooth implementation of the work assignment ;

c. resolve conflicts and crisis during the entire work assignment life cycle;

d. oversee and monitor the progress of various activities during the work assignment life cycle to ensure that these activities are completed according to the implementation schedule and meeting the work assignment requirements;

e. plan and schedule meetings at appropriate time during the work assignment life cycle, prepare meeting agenda, chair and to take notes for all the meetings with various parties;

f. report progress, follow up all outstanding issues with all related parties, suggest solutions and resolve difficulties throughout the work assignment;

g. carry out any other activities which are necessary for the satisfactory completion of the work assignment.

4.1.3 Service Requirements

a. For the provision of the BIM FS, the Contractor is required to:

(i) assist FSD Internal Project Manager in the implementation of the BIM FS in order to meet all the project objectives and required deliverables;

(ii) follow the advice of FSD Project Team and the FSD engaged third-party BIM Consultant to implement the project;

(iii) define the system scope according to the defined business scopes and user requirements of FSD during the FS stage;

(iv) identify the problems of existing systems currently encountered or anticipated and the improvement areas;

(v) examine the feasibility and technical capabilities of the types of applications that are suitable for the proposed system taking into account the current state of technology;

(vi) define and confirm the detailed requirements for the proposed system that address the needs of all departmental users; [

(vii) evaluate hardware and software requirements of the FS, including data interfacing and harmonization with other Bureaus or Departments of the Government ("B/Ds");

(viii) assess the costs and benefits for implementation of the proposed system;

(ix) recommend BIM requirements and devise an implementation plan with existing procedure by departmental users need;

(x) recommend technical system options and to devise an implementation plan of the proposed system;

(xi) participate in regular project meetings and prepare meeting notes during the work assignment life cycle;

(xii) arrange field visits and interviews with FSD BIM users for reviewing the existing system and workflows;

(xiii) carry out presentations for FSD management, BIM stakeholders and users or any other activities which are necessary for the satisfactory completion of the work assignment;

(xiv) collaborate with different B/Ds and Construction Industry Council ("CIC") in enabling the use of BIM technology in compliance checking of electronic building plans;

(xv) define the system scope according to the defined business scopes and user requirements of adopting BIM in FSD during the FS stage;

(xvi) identify types of applications that are suitable for the proposed system taking into account the current state of technology;

(xvii) evaluate hardware and software requirements of the proposed system;

(xviii) assess the costs and benefits for implementation of the proposed system; and

(xix) recommend technical system options and to devise an implementation plan of the proposed system.

b. Please refer to Clause 3.2 of Annex 1 of Part V – Project Specifications of the SOA-QPS5 Tender Documents for details.

c. Outline content of a FS report (as required in Clause 3.2.m of Annex 1 of Part V – Project Specifications of the SOA-QPS5 Tender Documents) is in Annex 1 for reference.

4.2 SECURITY REQUIREMENTS

In addition to the terms and conditions as set out in Part IV – Conditions of Individual Contract, the following security requirements are also applicable:

4.2.1 The Contractor shall treat as confidential all information relating to the affairs or business of the Government or designated as confidential by the Government which is by its nature confidential which may come into the possession of the Contractor, the Contractor's employee, or any employee, agent or subcontractor of the Contractor as a result of or in connection with the provision and performance of Services under the Government's Agreement;

4.2.2 The Contractor shall not at any time during or after the provision of the services divulge or allow to be divulged to any person any such confidential information other than to the Relevant Employees and any other employees, officers, agents or contractors who need to know the same for the purpose of carrying out the Work Assignment and have signed an undertaking on non-disclosure as approved by the Government;

4.2.3 Should the Work Assignment terminate, either normally at the end of the Work Assignment period or prematurely due to any reasons, the Contractor shall return all related materials belonging to FSD or information collected from FSD within fourteen (14) working days of the termination including both hard copies and soft copies;

4.2.4 All FSD provided materials, data and information shall return to FSD or be destroyed by secure method within fourteen (14) working days after project closure; and

4.2.5 All staff who worked on the project must observe FSD's Departmental IT Security Policy and Guidelines and no details of the project requirements and deliverables would be exposed by any means without the written consent of FSD.

4.3 ESSENTIAL REQUIREMENTS

4.3.1 **All Proposals will be checked against the essential requirements set out in this Clause 4.3. Proposals that failed to meet any of the essential requirements set out in this Clause 4.3 will <u>not</u> be considered further.**

4.3.2 Professional Staff Requirements

As stipulated in Clause 3.10 of Part V - Project Specifications of SOA-QPS5, the Contractor may include Sub-contractor(s), which has/have been approved by the Government, in its Proposal in response to this Brief. The Sub-contractor(s) nominated in the Proposal must have been proposed and approved by the Government under the Category/Group invited for this Brief according to Clause 3.8 of Part V - Project Specifications of SOA-QPS5 before the Proposal Closing Date. Otherwise, the Proposal will <u>not</u> be considered further.

In addition, all proposed project team members must be employees of the Contractor or the proposed Sub-Contractor(s). Otherwise, the Proposal will <u>not</u> be considered further.

4.3.2.1 The composition of the Contractor's assignment team ("project team") must include at least the following roles who meet the requirements specified in the table below:

Roles	Requirements (#)
ONE (1) Project Manager	• Standard Staff Category (Note 1) 10 or above; • Degree in BIM / IT / GIS / Engineering or equivalent; • CIC Certified BIM Manager (CCBM); • Corporate Member of the Hong Kong Institution of Architects (MHKIA), Hong Kong Institution of Engineers (MHKIE) or Hong Kong Institution of Surveyors (MHKIS); • Minimum 11 years of IT experience (Notes 2 - 4), including at least 6 years of experience in BIM specifications / standards during the past 20 years; and • Have supervised and provided technical advisory for at least three (3) projects (Notes 2 - 4) regarding system implementation of BIM project, Common Data Environment (CDE) adopting Publicly Available Specifications (PAS) 1192 or International Organization for Standardization (ISO) 19650 or relevant local BIM standards during the past 10 years.

Roles	Requirements (#)
ONE (1) BIM Specialist	• Standard Staff Category (Note 1) 8 or above; • Degree in BIM / IT / GIS / Engineering or equivalent; • CIC Certified BIM Manager (CCBM); • Corporate Member of Hong Kong Institution of Architects (MHKIA), Hong Kong Institution of Engineers (MHKIE) or Hong Kong Institution of Surveyors (MHKIS); • Minimum 8 years of IT experience (Notes 2 - 4), including at least 4 years of experience (Notes 2 - 4) in BIM specifications / standards during the past 20 years; and • Have supervised and provided technical advisory for at least two (2) projects (Notes 2 - 4) regarding system implementation of BIM project, Common Data Environment (CDE) adopting PAS 1192 or ISO 19650 or relevant local BIM standards during the past 10 years.
ONE (1) System Analyst	• Standard Staff Category (Note 1) 6 or above; • Degree in BIM / IT / GIS / Engineering or equivalent; • Minimum 5 years of IT experience (Notes 2 - 4), including at least 3 years of experience in BIM specifications / standards during the past 10 years; • Have at least one (1) project (Notes 2 - 4) regarding system implementation of BIM project, Common Data Environment (CDE) adopting PAS 1192 or ISO 19650 or relevant local BIM standards during the past 10 years; • Proficient in using BIM software; • Proficient in systems programming or technical support of systems software; • Knowledge and experience in systems programming; and • Knowledge and experience in systems analysis and design.

Roles	Requirements (#)
ONE (1) Analyst Programmer	• Standard Staff Category (Note 1) 4 or above; • Degree in BIM / IT / GIS / Engineering or equivalent; • Minimum 2 years of experience (Notes 2 - 4) in BIM specifications / standards during the past 10 years; • Proficient in using BIM software; • Proficient in systems programming or technical support of systems software; • Knowledge and experience in systems programming; and • Knowledge and experience in systems analysis and design.

Notes:

1. Please refer to Annex 6 of Part V – Project Specifications of the SOA-QPS5 Tender Documents for details on Standard Staff Category.

2. IT experience refers to the full-time involvement in IT job positions. The following are not taken as IT experience:
   (a) Time spent on full-time undergraduate or full-time postgraduate studies on IT;
   (b) Time spent on sandwich training in full-time undergraduate or full-time postgraduate studies on IT;
   (c) Sales or marketing of IT related products and services; and
   (d) Teaching of IT related subjects.

3. "Years of IT experience" is counted up to the Proposal Closing Date regardless of whether the date has been extended subsequently and in aggregate number of days and divided by 365 to derive the number of years. Overlapping periods of experience will only be counted once.

4. **The Contractor shall provide documentation proof i.e. Contract no., if any, with project title, project document showing the role of the proposed staff i.e. project meeting minutes and detailed descriptions to support the proposed staff can meet the staff requirement and experience. Otherwise, the Proposal will <u>not</u> be considered further.**

4.3.2.2 The composition of the Contractor's assignment team should include at least the following roles:

a. Project Manager – responsible for the overall management of the project;

b. BIM Specialist – responsible for the design of BIM applications in FSD and interfacing with other systems of FSD, and provide recommendation and future directions on the adoption of BIM in FSD;

c. System Analyst – responsible for analysing user requirements, evaluating implementation options, performing system sizing, calculating costs and benefits, etc;

d. Analyst Programmer – responsible for developing prototypes, conducting unit testing and producing documentations.

4.3.2.3 Apart from the roles and requirements of project team stipulated in Clause 4.3.2.1, at least one of the members in the project team shall process the following experience and qualifications:

a. Authorized Person (AP)[1] / Building Services Engineer (BSE)[2];

b. Knowledge and experience in building plan / submission workflow and requirements; and

c. Knowledge and experience in fire safety and fire engineering requirements.

4.3.2.4 The Contractor's assignment team as a whole, and each individual within the team, should have the experience of conducting studies of similar nature and scope of those required in this work assignment.

4.3.2.5 The submitted proposal should describe how the assignment team would be structured in providing the services, and provide a full description of the experience of all designated team members and their proposed roles in the work assignment.

4.4 GOVERNMENT STANDARDS, METHODOLOGIES AND QUALITY REQUIREMENTS

4.4.1 The Contractor shall comply with the following Government regulations, policies, standards, guidelines, methodologies and quality requirements:

a. Baseline IT Security Policy
b. IT Security Guidelines
c. Practice Guide for Security Risk Assessment & Audit
d. Practice Guide for Information Security Incident Handling
e. Practice Guide for IT Outsourcing
f. Practice Guide for Cloud Computing Security
g. Practice Guide for Data Loss Prevention
h. The HKSARG Interoperability Framework
i. ISO 19650-2:2018 or relevant local BIM Standards, Policy, Strategy and Format

4.4.2 Where necessary, the Contractor has to adopt adaptations to the methodologies and quality management system specified in Clause 4.4.1 and those proposed in Section 8.2.2.1(b). The Contractor shall seek agreement from FSD on any adaptations of the methodologies and quality management system that will be adopted for delivering the required services/products of this work assignment. For all agreed adaptations, the Contractor has to document the reason why such adaptations are adopted in relevant quality records.

[1] The one who registered as Authorized Person under Building (Administration) Regulation 3.
[2] The one who registered as Corporate Members under Building Services Discipline of the Hong Kong Institute of Engineer.

4.5 PROJECT DELIVERABLES, MILESTONES & IMPLEMENTATION SCHEDULE

The Contractor shall provide the project Deliverables in Clause 4.5.1 which are based on the prevailing Government standards and methodologies that can be found at OGCIO's website (https://www.ogcio.gov.hk/en/infrastructure/methodology/).

4.5.1 Project Deliverables

a. The Contractor is required to provide a complete set of FS Deliverables for this work assignment. The major Deliverables are listed below:

(i) **Management Products**

i-1) Project initiation document

i-2) Project plan

i-3) Stage plans

i-4) Exception plans, if any

i-5) Minutes of checkpoint meetings, Project Steering Committee (PSC) and Project Assurance Team Meetings

i-6) Monthly highlight reports

i-7) Presentations for management, stakeholders and users with the presentation materials in each Project Milestone as stipulated in Clause 4.5.2 (c).

i-8) Project evaluation report

(ii) **Quality Products**

ii-1) Quality plan

ii-2) Product descriptions

ii-3) Technical exceptions (project issue report, off specification report and requests for change), if any

(iii) **Technical Products**

iii-1) FS report, which consists of two parts:

iii-1-1) Part 1 – FS management summary

iii-1-2) Part 2 – FS technical specification

- Current environment description
- Project definition

b. Please refer to Annex 1 for the major contents of the FS Report. Apart from the basic requirement described in Annex 1, the Contractor shall document the FS findings and provide sufficient and necessary information for conducting subsequent project phases for this project.

c. Formal and informal reviews of the above products will be required on a need basis throughout the course of the work assignment. Management presentations to FSD will be required at the commencement of the project and for the user acceptance of the following Deliverables:

(i) Deliverables for the "Definition of Problem" stage;

(ii) Deliverables for the "Selection of Feasible Options" stage; and

(iii) FS Report.

d. The Contractor is required to provide at least two (2) hardcopies for each product delivered. In addition, the Contractor is required to provide one softcopy for each product.

e. No Deliverable, in whatever nature that are first created by the Contractor, any of its Sub-contractors or agents for the performance of this Individual Contract in which the Intellectual Property Rights (IPR) shall be vested in the Contractor according to the Clause 15.2 of Part IV – Conditions of Individual Contractor of the SOA-QPS5 Tender Documents.

4.5.2 Milestones and Implementation Schedule

a. The FS will be tentatively conducted from November 2022 to October 2023 for a period of twelve (12) months. The project team shall provide <u>non-resident</u> services throughout the BIM FS. For the avoidance of doubt, off-shore service is **NOT** acceptable for this work assignment.

b. The Contractor shall propose a detailed timetable for the work assignment and ensure that they are able to deliver the FS report and work closely with FSD and the third-party Consultant according to this timetable.

c. A high-level timetable is as follows.

Milestone	End of Date	Deliverables
1. Project initiation	1st month	(1) Project initiation document
2. Definition of problems	3rd month	(2) Current Environment Description (3) Requirement Specifications

Milestone	End of Date	Deliverables
3. Selection of feasible options	8th month	(4) Business System Options (5) Technical System Options (6) Cost Estimation (7) Three (3) automatic plan checking prototypes
4. Feasibility study	11th month	(8) FS Report (9) Procurement Specifications of proposed option (10) FSD's BIM standard and specifications (11) FS Management Summary Presentations
5. Project closure	12th month	(12) Project Evaluation Report

4.6 OTHER REQUIREMENTS

4.6.1 During the course of the work assignment, interviews with external bodies outside FSD may be necessary.

4.6.2 The following implementation options are required to be considered in the FS:

a. Package IT Solutions

1. This includes commercial off-the-shelf software packages (overseas and local) and Government off-the-shelf applications.

2. The identification of packages should be formal and proper, and must be made in writing. Formal evaluation processes are required.

3. The proposed project schedule should allow time in assessing packages so that the progress of the assignment is not negatively impacted.

4. The Government must be involved at the early stage for a decision to go for a package solution or otherwise.

4.6.3 The option of packaged IT solution, which is not restricted to locally supported packages, should be formally considered and documented. The need for re-engineering user's business processes to suit the package should also be addressed. The use of off-the-shelf packages is encouraged.

4.6.4 If packaged IT solution is considered for implementation option, the Contractor shall name all potential packages and recommend the suitable ones. It should also describe any customisations needed on the packages to fulfil the requirements of the proposed system, the necessary computer environments, the financial implications, and how reference users have implemented such packages.

4.6.5 The FS Report will specifically address the results of the evaluation of these options in both the management summary and the technical report.

4.6.6 During the study, opportunities for data sharing should be explored and made use of whenever appropriate. The Contractor should recommend to users on how the requirements for data sharing are achieved.

4.6.7 The FS shall explore the opportunity of sharing data/information between the existing government and non-government systems and the proposed system.

4.6.8 The Contractor should allow seven (7) working days in the schedule for FSD responding to comments on interim deliverables, evaluation of implementation options, quality assurance and acceptance of deliverables, etc., so that the progress of the work assignment will not be adversely affected.

4.6.9 Delays

In accordance with Clause 10.3 of Part IV – Conditions of Individual Contract of the SOA-QPS5 Tender Documents, the Government Representative shall be entitled to reject the delayed Services or System if the Contractor fails to provide the Services for the work assignment within sixty (60) days after the scheduled delivery date.

4.6.10 Pursuant to Clause 22.1(i) of Part III – Conditions of Standing Offer Agreement, the Contractor is required to demonstrate its financial capability in accordance with Clause 33 of Part II again for determining the amount of contract deposit to be collected.

4.7 PAYMENT SCHEDULE

4.7.1 Payment of the Services shall be made upon successful completion of major milestones as stated below:

Payment Milestone (abbr.)	Percentage of Total Payment
Completion of milestones[#] 2 and accepted by FSD (PM1)	30%
Completion of milestones[#] 4 and accepted by FSD (PM2)	60%
Completion of milestones[#] 5 and accepted by FSD (PM3)	10%

[#] Milestones are set out in Clause 5.1(b) of this Brief.

5. ACCEPTANCE CRITERIA

5.1 The Government will accept the Services only if:

a. the Contractor produces all agreed Deliverables for the services required, which have adhered to Government standards, methodologies and quality requirements stipulated in Clauses 4.4 and 8.2.2.1(b) hereof and to the satisfaction of FSD;

b. the Contractor fulfils the acceptance criteria for the major assignment Deliverables as follows:

Milestone	Deliverables	Acceptance Criteria
1. Project initiation	Initial project management document: • Project Initiation Document	Initial project management document accepted by FSD.
2. Definition of problems	Problem definition documents: • Current Environment Description • Requirements Specifications	Problem definition documents accepted by FSD
3. Establishment of feasible options	Feasible options: • Business System Options • Technical System Options • Cost Estimation • Three (3) automatic plan checking prototypes	Feasible options accepted by FSD.
4. Feasibility study	FS documents: • FS Report • Procurement Specifications of proposed option • FSD's BIM standard and specifications • FS Management Summary	FS documents accepted by FSD.
5. Project closure	Project evaluation document such as project evaluation report	Project evaluation document accepted by FSD

5.2 FSD will require in general up to fourteen (14) days to consider each required Deliverable and, if it deems appropriate, to confirm the acceptance of the Deliverable. Allowance should be made in the proposed project plan for such activities.

5.3 For the approval of acceptance of the last assignment Deliverable, the Contractor should assure FSD that all assignment Deliverables, including the FS report, should have been delivered satisfactorily and is acceptable to FSD.

6. REFERENCE DOCUMENTATION

The Contractor should refer to the following documents in conducting the work assignment:

a. International Organization for Standardization (ISO) 19650
b. Publicly Available Specifications (PAS) 1192

c. Fire Services Department – Circular Notice: Improvement Measures for Processing of General Building Plans by the Fire Services Department;
d. Fire Services Department - General Format, Manner and Procedure for the Submission of Electronic Information under Law by virtue of the Electronic Transactions Ordinance Explanatory Note for Layman;
e. Fire Services Department - Codes of Practice for Minimum Fire Service Installations and Equipment and Inspection, Testing and Maintenance of Installations and Equipment [September 2022 revision] (Current Edition);
f. CIC BIM Standards – General (August 2019); (Version 2 - December 2020) and (Version 2.1 - 2021);
g. CIC BIM Standards for Architecture and Structural Engineering (Version 2 - December 2020); and (Version 2.1 - 2021);
h. CIC BIM Standards for Underground Utilities (August 2019); and (Version 2 - 2021);
i. CIC BIM Standards for Mechanical, Electrical and Plumbing (August 2019); and (Version 2 - 2021);
j. CIC BIM Standards for Preparation of Statutory Plan Submissions (December 2020);
k. CIC Production of BIM Objects Guide – General Requirements (August 2019); and (Version 2 - 2021);
l. CIC BIM Dictionary (December 2020); and (2021);
m. CIC BIM Exchange Information Requirements (EIR) Template (December 2020); and (Version 1.1 - 2021);
n. CIC BIM Special Conditions of Contract (September 2021);
o. CIC BIM Services Agreements (September 2021);
p. CIC BIM Guide for using BIM in generation of MEP digital drawings for statutory submissions (2021);
q. Lands Department – Plug-in Tools for Floor Areas Calculation Checking in General Building Plan (GBP) Submission using BIM;
r. Development Bureau Technical Circular (Works) No. 8/2021 Adoption of Building Information Modelling for Capital Works Projects in Hong Kong;
s. Buildings Department - Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers ADM-17; and ADM-19;
t. Buildings Department - Guidelines for using Building Information Modelling in General Building Plans Submission 2019

7. SELECTION CRITERIA AND MARKING SCHEME

7.1 SELECTION CRITERIA

The Contractor who has submitted a Proposal in response to this Brief shall be selected in accordance with Annex 4 of Part V – Project Specifications of the SOA-QPS5 Tender Documents.

7.2 MARKING SCHEME

7.2.1 The Standard Marking Scheme under the SOA-QPS5 as stipulated in Annex 4 of Part V – Project Specifications of the SOA-QPS5 Tender Documents shall be adopted. For this Brief, a 70% technical weighting and a 30% price weighting in the computation of the Combined Score will be adopted.

7.2.2 The scoring arrangement of items under "A. Execution Plan" and "B. Experience, Qualification & Certification" of the Standard Marking Scheme will be assigned based on the merit of the Proposal in response to the specific requirements of the work assignment. Innovative features of the proposed solution will be taken into consideration.

<table>
<tr><th>Assessment criteria</th><th>Rules for awarding marks</th></tr>
<tr><td colspan="2">Section A: Execution Plan</td></tr>
<tr><td>A1. Proposed Solution</td><td></td></tr>
<tr><td>A1.1 Methodology and Approach

Methodology and Approach measures the effectiveness of the proposed methodology and approach to conduct the study including the application of international standards/best practices, adoption of various techniques and procedures

Maximum mark for Methodology and Approach: 21</td><td>Marks will be given according to the effectiveness, practicality, clearness, logicality, pertinence, and comprehensiveness of the proposed solution provided by a Contractor, using the following four-grade approach:

<table><tr><th>Grade (#)</th><th>Percentage of maximum marks</th></tr><tr><td>Very Good</td><td>100%</td></tr><tr><td>Satisfactory</td><td>75%</td></tr><tr><td>Moderate</td><td>50%</td></tr><tr><td>Poor</td><td>0%</td></tr></table></td></tr>
<tr><td>A1.2 Stakeholders Engagement

Stakeholders Engagement measures the effectiveness of the proposal on interacting with and engaging the stakeholders to achieve the overall benefit of the project.</td><td>Marks will be given according to the effectiveness, practicality, clearness, logicality, pertinence, and comprehensiveness of the proposed solution provided by a Contractor, using the following four-grade approach:

<table><tr><th>Grade (#)</th><th>Percentage of maximum marks</th></tr><tr><td>Very Good</td><td>100%</td></tr></table></td></tr>
</table>

<table>
<tr><th>Assessment criteria</th><th>Rules for awarding marks</th></tr>
<tr><td>Maximum mark for Stakeholders Engagement: 7</td><td><table><tr><td>Satisfactory</td><td>75%</td></tr><tr><td>Moderate</td><td>50%</td></tr><tr><td>Poor</td><td>0%</td></tr></table></td></tr>
<tr><td>A1.3 Prototyping

Prototyping measures the effectiveness of the proposed prototyping for substantiating the recommendation of the study.

Maximum mark for Prototyping: 7</td><td>Marks will be given according to the effectiveness, practicality, clearness, logicality, pertinence, and comprehensiveness of the proposed solution provided by a Contractor, using the following four-grade approach:

<table><tr><th>Grade (#)</th><th>Percentage of maximum marks</th></tr><tr><td>Very Good</td><td>100%</td></tr><tr><td>Satisfactory</td><td>75%</td></tr><tr><td>Moderate</td><td>50%</td></tr><tr><td>Poor</td><td>0%</td></tr></table></td></tr>
<tr><td>A2. Team Structure and Resources Allocation

Team Structure and Resources Allocation will be assessed based on the following:
(i) detailed estimation of man-effort;
(ii) detailed estimation of man-effort required from B/Ds;
(iii) the professional qualifications, skills, experiences, job histories, responsible areas and duties of the proposed staff;
(iv) project team composition; and
(v) the proposed roles and responsibilities of the Contractor, any proposed sub-contractor(s).

Maximum mark is 14.</td><td>Marks will be given according to the effectiveness, practicality, clearness, logicality, pertinence, and comprehensiveness of the execution plan provided by a Contractor, using the following four-grade approach:

<table><tr><th>Grade (#)</th><th>Percentage of maximum marks</th></tr><tr><td>Very Good</td><td>100%</td></tr><tr><td>Satisfactory</td><td>75%</td></tr><tr><td>Moderate</td><td>50%</td></tr><tr><td>Poor</td><td>0%</td></tr></table></td></tr>
<tr><td>A3. Project Management Plan

The project management plan sets out the way in meeting the performance requirements for the services. Marks will be given for providing description on the following:

(i) proposed work approach: detailed description on how to provide the</td><td>Marks will be given according to the effectiveness, practicality, clearness, logicality, pertinence, and comprehensiveness of the execution plan provided by a Contractor, using the following four-grade approach:</td></tr>
</table>

<table>
<tr><th>Assessment criteria</th><th>Rules for awarding marks</th></tr>
<tr><td>service and standards and methodologies adopted;
(ii) the measures and procedures that the Contractor will take to comply with the project management requirements mentioned in this Brief;
(iii) approach to devise the project plan (with detailed timetable);
(iv) approach to devise the quality assurance plan;
(v) approach to devise the change management plan; and
(vi) approach to devise the contingency plan.

Maximum mark is 7.</td><td><table><tr><th>Grade (#)</th><th>Percentage of maximum marks</th></tr><tr><td>Very Good</td><td>100%</td></tr><tr><td>Satisfactory</td><td>75%</td></tr><tr><td>Moderate</td><td>50%</td></tr><tr><td>Poor</td><td>0%</td></tr></table></td></tr>
<tr><td>A4. Innovative Suggestions</td><td></td></tr>
<tr><td>There are two types of innovative suggestions

(i) Innovative Suggestion Type I – innovative suggestions that are directly relevant to the services being procured by this invitation of work assignment.

(ii) Innovative Suggestion Type II – innovative suggestions that are not directly relevant to the services being procured by this invitation of work assignment but can bring about one or more positive value(s) or benefit(s) to the Government or public at large.</td><td>A proposed Innovative Suggestion scoring marks must be considered effective and practicable from the Government’s point of view. Marks will only be given to those proposed Innovative Suggestions which the Government considers that the Contractor would be capable of implementation from the practicable and effective perspectives.

An innovative suggestion shall only earn mark under either Innovative Suggestions Type I or Innovative Suggestions Type II, but not both.

Where an Innovative Suggestion Type I as designated by the Contractor in may also qualify as Innovative Suggestion Type II, that Innovative Suggestion will only be evaluated under Innovative Suggestion Type I but not also under Innovative Suggestion Type II. If the Contractor does not label the Innovative Suggestion as either Type I or Type II, the Government has the discretion to decide to which type it belongs.

One Innovative Suggestion Type I achieving more than one type of positive values and/or benefits will normally be treated as one Innovative Suggestion Type I only.

One Innovative Suggestion Type II achieving more than one type of positive</td></tr>
</table>

<table>
<tr><th>Assessment criteria</th><th>Rules for awarding marks</th></tr>
<tr><td></td><td>values and/or benefits will normally be treated as one Innovative Suggestion Type II only.</td></tr>
<tr><td>A4.1 Innovative Suggestions Type I

The proposed innovative suggestion shall bring benefits/positive values to the Government and/or B/Ds on:

• better quality of the Services
• saving of manpower resources for delivering the Services
• increased utilization of the Services
• increased user satisfaction
• economical use of resources for the operation, e.g. electricity, water, paper
• higher operational efficiency / performance reliability of the System
• earlier delivery schedule / project implementation;
• shortening of gearing-up period
• higher security standard
• better service quality / durability of the product or system
• improved or greater flexibility to adapt to operational changes
• enhanced compatibility with other systems
• easier maintenance

Maximum mark for Innovative Suggestion Type I is 8.</td><td>Marks will be given as follows:

<table><tr><th>No. of Innovative Suggestions Type I accepted</th><th>Mark</th></tr><tr><td>0</td><td>0</td></tr><tr><td>1</td><td>4</td></tr><tr><td>2 or more</td><td>8</td></tr></table></td></tr>
<tr><td>A4.2 Innovative Suggestions Type II

The proposed innovative suggestion shall bring benefits/positive values to the Government and/or B/Ds on:

• sustainable development of the IT industry
• development of new IT technology
• employment of the elderly persons, persons with disabilities, or the underprivileged in the society</td><td>Marks will be given as follows:

<table><tr><th>No. of Innovative Suggestions Type II accepted</th><th>Mark</th></tr><tr><td>0</td><td>0</td></tr><tr><td>1</td><td>3</td></tr><tr><td>2 or more</td><td>6</td></tr></table></td></tr>
</table>

<table>
<tr><th>Assessment criteria</th><th>Rules for awarding marks</th></tr>
<tr><td>

- improve the accessibilities of the disabilities or the underprivileged in the society
- positive images of to the Government
- environmental protection, such as operations that use less papers

Maximum mark for Innovative Suggestion Type II is 6.

</td><td></td></tr>
<tr><td colspan="2">Section B: Experience and Qualification</td></tr>
<tr><td>B1. Experience of Contractor</td><td></td></tr>
<tr><td>

B1.1 Experience of Contractor in the business area / technology area

The IT Project(s) delivered by the Contractor must meet all the conditions below:

(i) match with both the technology area specified below;

<table>
<tr><td>Technology area</td><td>Building plan checking</td></tr>
<tr><td>Technology area</td><td>IT Projects related to BIM</td></tr>
</table>

and

(ii) with completion date fell within 5 years preceding the Proposal Closing Date, regardless of whether the date has been extended subsequently.

Maximum mark is 7.5.

</td><td>

Marks will be given according to the total number of IT Project(s) delivered by a Contractor that met all of the conditions set out in the first column, as follows:

<table>
<tr><th>Total number of IT Project(s)</th><th>Mark</th></tr>
<tr><td>Nil</td><td>0</td></tr>
<tr><td>1-2</td><td>1.5</td></tr>
<tr><td>3-4</td><td>3</td></tr>
<tr><td>5-6</td><td>4.5</td></tr>
<tr><td>7-8</td><td>6</td></tr>
<tr><td>9 or more</td><td>7.5</td></tr>
</table>

</td></tr>
<tr><td>

B2. Experience of Key Project Staff

Maximum mark is 7.5.

<u>Examples on scoring</u>

(i) Years of IT experience required

<table>
<tr><th>Key Role</th><th>Experience Area</th><th>Years of IT experience required [a]</th></tr>
<tr><td rowspan="3">Project Manager</td><td>Biz 1</td><td>4</td></tr>
<tr><td>Tech 1</td><td>3</td></tr>
<tr><td>Tech 2</td><td>2</td></tr>
<tr><td></td><td>Tech 1</td><td>3</td></tr>
</table>

</td><td>

Mark will be given to according to the average of marks obtained for all business area/ technology area/ agile software development approach (where applicable) (“Experience Area”) for all key project staff in relation to the excess years of IT experience for each Experience Area.

For each Experience Area, mark will be given according to the number of years of IT experience in excess of the essential requirements specified in Clause 4.3.2.1 (“Excess years of IT experience”), as follows:

</td></tr>
</table>

Assessment criteria	Rules for awarding marks

System Analyst	Agile	2
Analyst Programmer	Tech 1	1

(ii) Assessed years of experience

Key Role	Nominee	Experience Area	Assessed years of experience [b]
Project Manager (PM)	PM 1	Biz 1	9.5
		Tech 1	5
		Tech 2	4
	PM 2	Biz 1	5.5
		Tech 1	4
		Tech 2	4
System Analyst (SA)	SA 1	Tech 1	5.5
		Agile	2.5
Analyst Programmer (AP)	AP 1	Tech 1	3

(iii) Marks obtained

Nominee	Experience Area	Years of IT Experience			Mark
		Required [a]	Assessed [b]	Excess [b] – [a]	
PM 1	Biz 1	4	9.5	5.5	7.5
	Tech 1	3	5	2	3
	Tech 2	2	4	2	3
PM 2	Biz 1	4	5.5	1.5	1.5
	Tech 1	3	4	1	1.5
	Tech 2	2	4	2	3
SA1	Tech 1	3	5.5	2.5	3
	Agile	2	2.5	0.5	0
AP 1	Tech 1	1	3	2	3
Total Areas:	**9**	**Total marks:**			**25.5**
Average:					**2.83**

(iv) Assessment

- The number of required business/ technology area for all key project staff ("Total Areas") is 9. The sum of marks obtained by each of business/technology area ("Total marks") is 25.2. Hence, the average of marks obtained for all business/technology areas for all the key project staff is 25.5 / 9 = 2.83.

Excess years of IT experience	Mark
< 1	0
≥ 1 and < 2	1.5
≥ 2 and < 3	3
≥ 3 and < 4	4.5
≥ 4 and < 5	6
≥ 5	7.5

Section C: Past Performance

<table>
<tr><th>Assessment criteria</th><th>Rules for awarding marks</th></tr>
<tr><td>C1. Past Performance in SOA-QPS

Maximum mark is 15.</td><td>Mark will be given according to the following:

<table><tr><th>Contractor Performance Score (CPS)</th><th>Marks</th></tr><tr><td>0 – 15</td><td>0</td></tr><tr><td>> 15</td><td>(CPS – 15)</td></tr></table>
Note: Please refer to Clause 7.2.5 below.</td></tr>
<tr><td>Total Technical Mark: 100</td><td></td></tr>
</table>

The marking standard is as follows:

- A "Very Good" grade will be given if the proposed plan:
  (i) is highly effective and practicable; and
  (ii) provides clear, logical and detailed information on all listed items that exceeds the requirement.
- A "Satisfactory" grade will be given if the proposed plan:
  (i) is effective and practicable; and
  (ii) provides clear, logical and detailed information that meets the requirement in full.
- A "Moderate" grade will be given if the proposed plan:
  (i) is generally effective and practicable; and
  (ii) provides clear, logical and detailed information that meets the requirement marginally.
- A "Poor" grade will be given if the proposed plan:
  (i) is impracticable; or
  (ii) fails to provide information in the requirement.

7.2.3 The Contractor should explain clearly in their proposed execution plan how to carry out the Service or perform the Contract to facilitate the evaluation. The Contractor should provide sufficient elaboration on how to fulfil the purpose and the requirements of the execution plan and to achieve the desirable technical aspects of the proposed solution.

7.2.4 The Contractor should also highlight the proposed innovative suggestions and explain clearly the benefits/positive values that their proposed innovative suggestions can bring about in their submissions to facilitate Proposal evaluation. The Contractor may also be requested to provide supporting documents or a demonstration to prove the practicability of their innovative suggestions. All practicable innovative suggestions included in the proposed plans submitted by the successful contractor and accepted by the Government shall also form part of the Contract.

7.2.5 The Contractor Performance Score (CPS) for a Contractor is the average of the CPAR scores of all CPARs of the Contractor under the individual Category/Group same as the Category/Group of this work assignment. Please refer to Section 4.4 of Annex 5 of Part V – Project Specifications of the SOA-QPS5 Tender Documents for details.

8. CONTRACTOR'S PROPOSAL

8.1 PROPOSAL SUBMISSION

8.1.1 The Contractor is requested to submit the Technical and Price Proposals (in 2 files) via the e-Procurement System (e-PS) of OGCIO **no later than 12:00 noon on 20 September 2022 ("Proposal Closing Date"). Late proposals will NOT be considered.**

In case Tropical Cyclone Warning Signal No. 8 or above is hoisted, or Black Rainstorm Warning Signal or "extreme conditions after super typhoons" announced by the Government is/are in force for any duration between 09:00 and 12:00 on the Proposal Closing Date, the latest date and time before which Proposals are to be submitted via the e-Procurement System (e-PS) of OGCIO will be extended to 12:00 noon on the next working day (all times mentioned are Hong Kong time).

8.1.2 The Contractor should also note that its Proposal, even submitted, for this work assignment shall not be considered if the Contractor is suspended from bidding the Category of this work assignment due to poor performance on SOA-QPS5 Contracts according to the Clause 6, Annex 5 of Part V – Project Specifications of the SOA-QPS5 Tender Documents. In particular, Clauses 6.6 and 6.7 in Annex 5 of Part V – Project Specifications of the SOA-QPS5 Tender Documents are extracted below:

"6 Suspension from bidding future work assignments

……

6.6 The Government will notify the Contractor the suspension period in writing. The Contractor will be suspended from bidding work assignments with invitation date (the 1st day of the invitation period) falls within the suspension period. The Government also reserves the rights not to consider the proposals submitted from such Contractor prior to the suspension period.

6.7 The suspension will be lifted after the suspension period if the Contractor is no longer having poor performance as assessed in accordance to sections 6.4 and 6.5 above. The Government will notify the Contractor accordingly and it may resume bidding work assignments with the invitation date after the suspension period.

8.2 TECHNICAL PROPOSAL

8.2.1. Essential Items

The Contractor shall submit the following information with its Proposal on or before the Proposal Closing Date. Otherwise, the Proposal will not be considered further.

8.2.1.1. The proposed project team composition including the staff to be deployed to the roles of the Contractor's assignment team and their staff categories to fulfil the essential requirements in Clause 4.3.2 of this Brief;

8.2.1.2. Detailed estimation of man-effort required in providing the Services of the work assignment expressed in terms of the staff category of Category A under SOA-QPS5.

8.2.2. Required Items

The Proposal to be submitted shall demonstrate the Contractor's ability in undertaking the work assignment. **The Contractor shall submit the following information at the same time when its Proposal is submitted. If the information is missing in its Proposal, the Government may, but is not obliged to, make a request for the missing item. If any of the following information is still not provided by the time specified by the Government, the Proposals will <u>not</u> be considered further**.

8.2.2.1. The proposed work approach which shall include:

a. A detailed description of how the Contractor is going to provide the required Services;

b. Any other standards and methodologies that the Contractor will adopt for this work assignment in addition to those specified in Clause 4.4.1;

8.2.2.2. A description of the proposed roles and responsibilities of the Contractor, any proposed sub-contractor(s), and FSD users that are specifically required to deliver the Services for this work assignment;

8.2.2.3. The manpower effort required from FSD and any expected or possible service interruption;

8.2.2.4. The measures and procedures that the Contractor will take to comply with any security requirements mentioned in this Brief;

8.2.2.5. A project plan showing the project stages and milestones, tasks, their dependencies and relationships, the Deliverables, and the schedule start date and completion date of each stage and task. A milestone for team formation must also be included;

8.2.2.6. Concise description including the table of contents for each written Deliverable;

8.2.2.7. The Contractor experience in delivering the IT Project and the professional qualifications, skills, experiences and job histories, and their responsible areas and duties of the proposed staff of the project team with respect to this work assignment. **All proposed staff must be employees of the Contractor or the proposed Sub-Contractor(s).** A suggested format for such information is provided in Annex 2 - Contractor Experience and Project Team Composition. Copies of certificates must also be submitted as documentary proof of the project team's professional qualification.

8.2.2.8. Payment schedule of the work assignment in accordance with Clause 4.7 of this Brief;

8.2.2.9. Declaration of Use of Licensed Software

The Contractor shall declare in the Proposal that all software possessed or used by the Contractor in the delivery of Services under the work assignment are licensed software;

8.2.2.10. Declaration of Actual or Perceived Conflict of Interest

The Contractor shall declare any actual or perceived conflict of interest (whether financial, commercial, personal or otherwise) that the Contractor, its sub-contractors and members of the proposed project team may have which conflicts or competes, or may conflict or compete, directly or indirectly, with any interest of the Government and/or with any of the duties of the Contractor arising from provision of the Services to the Government. The Contractor shall immediately inform the Government in writing of any or all facts or matters incidental to or related to its obligations under the provisions of SOA-QPS5 with respect to any actual or perceived conflict of interest, including any such facts and matters affecting all the proposed personnel and sub-contractors/agencies to be involved in the work assignment;

Nil return is required in the Proposal by specifically stating that: "We declare that there is no actual or perceived conflict of interest arising from provision of the Services to the Government";

8.2.2.11. Any dependencies, limitations and assumptions of the work assignment;

8.2.2.12. Any potential risks of the work assignment;

8.2.2.13. Any other suggestions related to the service delivery for the work assignment and the requirements specified in the Brief;

8.2.2.14. The proposal of Execution Plan which explains how the service could be carried out in response to the requirements of specified plan(s) in the work assignment. The Contractor should note that the Government may, but is not obliged to, request the missing information if the Contractor does not submit the proposal of Execution Plan (which comprises of items A.1 - A.4, namely Proposed Solution, Team Structure and Resources Allocation, Project Management Plan and Innovative Suggestions respectively). Consequently, no mark will be given to the Contractor's proposal according to the scoring arrangement of these items as stipulated in Clause 7.2.2 of this Brief;

8.2.2.15. The proposal of innovative suggestions which explains clearly the benefits/positive values that can bring about in the submission. All practicable innovative suggestions included in the proposed plans submitted by the successful contractor and accepted by the Government shall also form part of the Contract. ***Without prejudice to the generality of the foregoing, where the Contractor has proposed any Innovative Suggestions in this Part, any costs arising from the implementation or operation of such Innovative***

Suggestions shall be borne solely by the Contractor save to the extent they are absorbed by applicable Unit Charging Rate(s). The Contractor shall provide in the Table below the details of each Innovative Suggestion. A separate table shall be prepared for each Innovative Suggestion. If no innovative suggestion will be submitted in the proposal, the Contractor should enter a "NIL" in the following table:

Innovative Suggestion No.	
Please identify whether it is Innovative Suggestion Type I or Type II	* Type I / Type II
Details of the Innovative Suggestion:	
The benefits that the Innovative Suggestion will achieve as mentioned in Clause 7.2.2 of this Brief	
Deliverables to be produced in the implementation of the Innovative Suggestion:	
Performance indicators for the Innovative Suggestion and committed performance levels:	

(*) Please delete whichever is not applicable.

8.2.2.16. A Statement of Compliance as set out in Annex 3 hereof duly signed by the Contractor;

8.2.2.17. A Statement of Independent Bid as set out in Annex 4 hereof duly signed by the Contractor.

8.3 PRICE PROPOSAL

8.3.1 Essential Items

The Contractor shall submit the Price Proposal on or before the Proposal Closing Date. **The total price** must be completed. **A Price Proposal without completing these essential items will not be considered further.**

Note: Contract shall include and complete the following table in the Price Proposal.

Contractor Name:	
Signature:	
Full Name & Title:	
Date:	

8.3.2 Required Items

The Contractor shall also provide detailed cost breakdown, by each payment milestone in proposed payment schedule, in terms of the estimated man-effort of various staff categories required and their corresponding charging rate. **If the information is missing in its Proposal, the Government may, but is not obliged to, make a request for the missing item. If the information is still not provided by the time specified by the Government, the Proposal will <u>not</u> be considered further.**

An example of the detailed cost breakdown, by each payment milestone in proposed payment schedule, in terms of the estimated man-effort of various staff categories required and their corresponding charging rate is given below:

Payment Milestone Abbr.	Staff Categories	Resident/ Non-resident	Charging Rate (HK$) (A)	Estimated man-effort (in days) (B)	Subtotal (C=A x B)	Total Price (HK$)
PM1	*Cat n1*	*Non-resident*	*$x,xxx*	*nn*	*$x,xxx*	
	Cat n2	*Non-resident*	*$x,xxx*	*nn*	*$x,xxx*	*$xx,xxx*
PM2	*Cat n1*	*Non-resident*	*$x,xxx*	*nn*	*$x,xxx*	
	Cat n2	*Non-resident*	*$x,xxx*	*nn*	*$x,xxx*	*$xx,xxx*
	Cat n3	*Non-resident*	*$x,xxx*	*nn*	*$x,xxx*	
PM3	*Cat n1*	*Non-resident*	*$x,xxx*	*nn*	*$x,xxx*	
	Cat n2	*Non-resident*	*$x,xxx*	*nn*	*$x,xxx*	*$xx,xxx*
	Cat n3	*Non-resident*	*$x,xxx*	*nn*	*$x,xxx*	
PM4	*Cat n1*	*Non-resident*	*$x,xxx*	*nn*	*$x,xxx*	*$xx,xxx*

Payment Milestone Abbr.	Staff Categories	Resident/ Non-resident	Charging Rate (HK$) (A)	Estimated man-effort (in days) (B)	Subtotal (C=A x B)	Total Price (HK$)
	Cat n2	*Non-resident*	*$x,xxx*	*nn*	*$x,xxx*	
					Total price	*$xxx,xxx*

* Note: Contractors should only include charging rates of those staff categories (Resident/Non-resident/Off-shore) that were proposed in their proposal during the tendering stage of SOA-QPS5, where the respective ceiling rates were previously submitted in their tender proposals and approved by OGCIO when awarded with the SOA. Refer to Annex 2.1 of Part III – Conditions of Standing Offer Agreement of the SOA-QPS5 Tender Documents for details.

8.4 COUNTERPROPOSALS AND NEGOTIATION

8.4.1 Subject to the terms and conditions stated in Clauses 3.1 (d), (e), (f) and (i) of Part III – Conditions of Standing Offer Agreement of the SOA-QPS5 Tender Documents, counterproposals (if any) shall be drafted in the manner as stated in 8.4.2 below.

8.4.2 Any counterproposal must be drafted and submitted in the following manner:

a. The counterproposal must be put under an annex called "Counterproposal to the Brief / Individual Contract";

b. The counterproposal must adhere to the format of the Brief / Individual Contract;

c. Original version of the relevant provision must be fully recited before any proposed alteration or deletion is made;

d. Any alteration to any terms or requirements must be underlined and must bear the corresponding clause number unless it is an addition to the Brief / Individual Contract;

e. Words to be deleted should be crossed out by a single line only; and

f. Explanation should be given below any such alteration or deletion and put in brackets [ ].

8.4.3 A counterproposal which is not submitted in accordance with Clause 8.4.2 of the Brief will be ignored and will not form part of the Individual Contract, and the Contractor concerned will be deemed to have agreed to the original term to which the counterproposal relates.

9. ENQUIRIES

The tentative date for notification of result is 20 October 2022. For any enquiry concerning this work assignment, please contact:

Name:	Mr. CHOW Shun-kit
Post:	Assistant Divisional Officer (Information Technology Management Unit) Special Duties
Bureau/Department:	Fire Services Department
Address:	North Wing, 3/F, Fire Services Headquarters Building, 1 Hong Chong Road, Tsim Sha Tsui East, Kowloon
Tel.:	2733 5828
Fax.:	2739 6040
Email:	ado_sd_itmu@hkfsd.gov.hk

Please acknowledge the receipt of this invitation via the e-Procurement system (e-PS).

Dated this 22nd day of August 2022.

(CHOW Shun-kit)
for Director of Fire Services

ANNEX 1 – TABLE OF CONTENTS OF FS REPORT

PART I – FEASIBILITY STUDY MANAGEMENT SUMMARY

Section	Description
1. Executive Summary	• Highlight the key recommendations of the Feasibility Study indicating the overall costs and implementation plan
2. System Objectives	• State the scope of study and the objectives of the proposed system / technical option
3. Background	• Describe the background and other relevant information of the business environment and the existing systems
4. Present Situation	• Describe briefly the current operations, environment and functions of the business function and systems under study
5. Problems / Improvement Areas	• Examine the functionalities and limitations of the existing system • Describe the problems encountered or anticipated and improvement areas identified
6. Proposed Business Changes / Improvement Measures	• Describe the proposed business changes / improvement measures and future business processes
7. Proposed System	• Describe in high-level terms the proposed system and define the system scope for the subsequent System Analysis & Design study
8. Resources Implication	• Estimate the resource requirements and other implications of the proposed system
9. Costs	• Estimate the non-recurrent and recurrent costs of the proposed system • Provide a break-down of cost estimation in accordance with the phased implementation plan
10. Benefits	• Describe the tangible and intangible benefits of the proposed system and future business processes, and the realization process • All benefits must be quantified as far as possible in monetary values or measurable terms such as productivity and performance indicators

Section	Description
11. Cost-benefit Analysis	• Evaluate the cost effectiveness and business viability of the proposed system indicating the break-even period, and yield on return of investment
12. Recommendations	• List the recommendations and propose the way forward for the implementation project with phased approach
13. Implementation Plan	• Outline the implementation approach and timeline preferably in the format of Gantt Chart with key stages indicated

PART II – FEASIBILITY STUDY TECHNICAL SPECIFICATION

Section	Description
1. Current Environment Description	• A collection of information on the existing business operation that the project is required to address
1.1. Current Operations and Environment	• Business objectives • Service delivery facilities, system operation and management model • An overview on business model(s) commonly adopted in the market • Anticipated changes
2. Project Definition	• A concise description of the project
2.1. User Requirements	• Evaluation of Business Options • Requirements of the selected business option
2.2. The Proposed System	• Business functions & transactions • Data and information requirements • Workload and Performance Measurement • User profile • Outline of the selected technical system option
2.3. Implementation Approach	• Evaluation of in-sourcing or out-sourcing development and maintenance
2.4. Development Strategy	• Evaluation of various options like bespoke development, off the shelf commercial application, or customization of common application • Estimate the resource requirements and other implications of the proposed system

Section	Description
2.5. Implementation Plan	• A stage plan of various activities leading to the full implementation and production services of the proposed system
2.6. Cost Implications	• Itemised list with supporting information such as Function Point calculation, sizing, etc.
2.7. Resource Implications	• Itemised list with supporting information such as Function Point calculation, sizing, etc.

ANNEX 2 - CONTRACTOR EXPERIENCE AND PROJECT TEAM COMPOSITION

a. Contractor Experience in delivering IT Project:

Technology Area	Number of IT Projects delivered that match with Technology Area
Building plan checking	
IT Projects related to BIM	

Technology Area	Number of IT project delivered that match with Technology Area				
	Department/ Company Name	Project Name	Project Description	Start Date (mm/yyyy	End Date (mm/yyyy)

Note: Please refer to Clause 7.2.2(B1) for more details.

b. The proposed team members to be deployed for the delivery of the required services (including the Innovative Suggestions in the proposed plan) for this work assignment are:

Staff Name	Staff Category	Role [Note]	Responsible Areas and Duties with respect to the work assignment

Note: Should match with the role(s) defined in Clause 4.3.2.1.

Nominees for key roles

Key Roles	Names of the nominees

Note: Please refer to Clause 7.2.2(B2) for more details.

c. Details of Proposed Team Members:

Staff Name:

Professional qualifications/Skills/Experiences:

Name of certification of professional qualification obtained/ skill	Number of years of experience with the qualification/ skill

Attach certification

Job history:

Employer Name	Position Held	Project (with description)	Project Roles/ Duties	Start Date (mm/yyyy)	End Date (mm/yyyy)	Duration

……..

ANNEX 3 – STATEMENT OF COMPLIANCE

It is acknowledged that I/we, the undersigned/the limited company hereunder mentioned do hereby confirm that the Proposal submitted is in accordance with the terms, conditions and other matters referred to in the following documents: -

(i) Part III – Conditions of Standing Offer Agreement of the SOA including all the Annexes;

(ii) Part IV – Conditions of Individual Contract of the SOA including all the Annexes;

(iii) Part V – Project Specifications of the SOA including all the Annexes and Appendices; and

(iv) Brief of Work Assignment (in particular Clauses 4.1 - 4.7).

Contractor Name:	
Signature:	
Full Name & Title:	
Date:	

ANNEX 4 – STATEMENT OF INDEPENDENT BID

It is acknowledged that I/we, the undersigned/the limited company hereunder mentioned do hereby confirm that I/we have not made any agreement in respect of this contract with other contractors which were invited to bid for this contract and that the Contractor made the price bid for this contract without disclosing it to or consulting other contractors which were invited to bid for this contract.

Contractor Name:	
Signature:	
Full Name & Title:	
Date:	