

REQUEST FOR PROPOSAL (RFP)

To develop SINGAPORE STANDARDS (SS) for:

- (1) **DIGITAL DESIGN OBJECT LIBRARIES (DOL) for ARCHITECTURAL WORKS**
- (2) **COLLABORATIVE DESIGN PROCESSES (CDP) AND TEAMING ARRANGEMENTS**

Dated: 28 June 2010

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SECTION A: INSTRUCTIONS TO POTENTIAL RESPONDENTS

A1 SCOPE

A1.1 To develop Singapore Standard for Digital DOL for architectural works. The aim is to promote the use of Building Information Modeling (BIM) technologies among design professionals in the local building industry;

A1.2 To develop Singapore Standard for Collaborative Design Processes and Teaming Arrangements. The aim is to guide design professionals working in collaboration during the design and construction phases of building projects.

A2 SUBMISSION OF PROPOSAL

A2.1 Proposals are due on **19 July 2010 at 12.00 PM**. Proposals received after that time will not be considered. Proposals can be submitted by hand, post or E-mail and address to:

buildingSMART Singapore 5 Maxwell Road #16-00 MND Complex Singapore 069110 Attn: Ms Irene Tan

A2.2 All queries regarding the RFP can be directed to:

Ms Irene Tan Tel:(065) 6325 5907 E-mail: irene_tan@bca.gov.sg

A2.3 Potential respondents shall request for annexes A, B and C. Please send email to Irene with the following information: Name, Address, Contact number and e-mail address.

A3 EVALUATION AND SELECTION OF PROPOSAL

A3.1 Proposals submitted shall be complete with annexes A, B and C and comply with mandatory contractual and technical requirements.

A3.2 Shortlisted proposals will be evaluated on how well the deliverables are met and points assigned accordingly. For the purpose of facilitating and coordinating the works specified in the Proposal, preference will be given to Respondents with local staff or partner and office in Singapore.

A3.3 The selection committee will review the proposals and prepare the evaluation report for approval by buildingSMART Singapore.



SECTION B: TERMS AND CONDITIONS

B1 INTERPRETATION

The following words and expressions shall have the meanings hereby assigned except where the context otherwise requires. Words importing the singular shall also include the plural and vice versa where the content requires.

B1.1 'Proposal' shall mean the documents submitted by the Respondent in response to this Request for Proposal.

B1.2 "Respondent" shall mean the organization or a group of individuals or an individual, which has submitted a proposal in response to this Request for Proposal.

B2 VALIDITY OF PROPOSAL

The Proposal submitted shall be valid for **NINETY DAYS** from the date of submission. The Respondent shall ensure that information in the Proposal is true, accurate and complete at the time of submission.

B3 DOCUMENTATION

buildingSMART Singapore reserves the right to retain a copy of the Proposal without being liable for the costs of such documents, notwithstanding the fact that the Proposal may not be accepted at the end of the evaluation.

B4 ORGANISATION BACKGROUND AND BUSINESS EXPERIENCE

The Respondent shall provide full information on their capital and manpower resources as well as and technical alliance with any country or manufacturer.

B5 ADDITIONAL INFORMATION

Notwithstanding the provisions in clause 2, from time to time buildingSMART Singapore may require the Respondent to furnish additional information with respect to this RFP. The Respondent shall supply the information in a timely manner.

B6 CANVASSING

The Respondent shall not engage in any form of canvassing pertaining to this RFP. In the event that any canvassing is being discovered after the Proposal has been accepted, the contract awarded to the successful Respondent shall be deemed to be null and void.

B7 CONFIDENTIALITY

B7.1 The Respondent undertakes not to divulge or communicate to any person or company any confidential information however acquired which refers to the Proposal without first having obtained the written consent from buildingSMART Singapore.

B7.2 For the purpose of this Proposal, all information furnished by buildingSMART Singapore shall be deemed confidential unless otherwise indicated. These obligations of confidentiality do not apply to information that is or becomes publicly available without breach of confidentiality; or is released for disclosure with written consent from buildingSMART Singapore.

B8 COPYRIGHT

Copyright of documents in this Request for Proposal shall vested be with buildingSMART Singapore.

B9 DEMONSTRATION OF CLAIMED CAPABILITIES

The Respondent shall at the request of buildingSMART Singapore, conduct such demonstrations and presentations to substantiate the claims in the Proposal.

B10 ACCEPTANCE

buildingSMART Singapore reserves the right to accept the Proposal in full or partially and subject to the condition that the Respondent agrees to work with other Respondent(s) or industry partner(s), if required by buildingSMART Singapore.

B11 AGREEMENT

The following documents shall form the legal agreement between buildingSMART Singapore and the successful respondent(s):

- a) RFP document;
- b) Respondent’s Proposal;
- c) Any other documents specifying further terms and conditions should a negotiation carried out thereafter.

B12 DISCLAIMER

buildingSMART Singapore shall have the absolute discretion to accept or reject any submission made without being liable to give any reason thereof.



SECTION C: TECHNICAL REQUIREMENTS FOR DIGITAL DESIGN OBJECT LIBRARIES for ARCHITECTURAL WORKS

C1 OBJECTIVES

C1.1 To standardize the design and development of DOL so as to increase the productivity of design professionals in the design and construction of buildings;

C1.2 To increase the efficiency and effectiveness of the submission and checking processes of the relevant authorities as well as designers through the use of BIM-based digital designs;

C1.3 To facilitate early and timely exchange of digital product information between designers and suppliers of various products in order to promote commercial activities electronically within the building industry.

C2 SCOPE

C2.1 Conduct survey among the industry practitioners for feedback and inputs in terms of current practices and requirements which are needed to be incorporated into the design and development of SS for DOL;

C2.2 Review, identify and propose the information schema, interfaces, parameters and conditions that the SS for DOL should comply with in order to be used for local design and construction;

C2.3 Propose and implement a Proof-of-Concept software prototype project to test the feasibility of the proposed SS for DOL.



SECTION D: TECHNICAL REQUIREMENTS FOR COLLABORATIVE DESIGN PROCESSES & TEAMING ARRANGEMENTS

D1 OBJECTIVES

D1.1 To propose a project framework to facilitate the collaboration and sharing of design information among the Architects and Engineers during the design and construction phases of building projects;

D1.2 To propose a set of best practices that can be adopted by the design professionals involved throughout the design and construction phases of building projects;

D1.3 To identify and appropriately address different issues that may directly and/or indirectly affect the successful adoption of the proposed collaborative design guidelines.

D2 SCOPE

D2.1 Conduct survey among local and foreign industry practitioners for feedback and inputs in terms of current practices and requirements that are needed to be incorporated into the collaborative BIM design processes for use in the local context;

D2.2 Review, identify and propose new collaborative design guidelines for local professionals in creating BIM design models for building projects;

D2.3 Pilot-test the BIM collaborative design guidelines in three (3) identified local building projects as well as document the key learning points from the pilot projects in the form of case studies;

D2.4 Highlight all technical and non-technical issues associated with the successful use of the design guidelines as well as propose possible solutions and recommendations to resolve the identified issues.



SECTION E: DELIVERABLES

The Proposal provided by the Respondent shall include the following deliverables:

- a) Project plan and resource allocation plan for both SS;
- b) Research report on existing practices and feedback from industry players for both SS.;

- c) Requirement study report for both SS;
- d) Case study reports for Collaborative Design & Teaming Arrangements;
- e) Proof-of-Concept software prototype project for the Digital DOL for Architectural Works, to demonstrate the feasibility of proposed concepts such as organization/classification of design objects and all relevant application interfaces to standard BIM software commonly used locally;
- f) Public comment feedback report, evaluation and recommendations both SS;
- g) Industry presentations both SS;
- h) Final drafts of SS for (i) Digital DOL for Architectural Works and (ii) Collaborative Design & Teaming Arrangements;
- i) Project documentation for both SS.

All correspondences, presentations, minutes of meeting, drafts, reference documents, recorded notes, public feedback and comments, progress reports, users list and any other documentation in connection with the project must be documented.

Upon the completion of each milestone, the specified deliverables in the form of reports /drafts should be submitted to and accepted by buildingSMART Singapore.

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SECTION F: MAJOR MILESTONES AND DELIVERABLES

F1 The Respondent shall provide a detailed project plan specifying the dates for completion of all milestones and deliverables, subject to acceptance by buildingSMART Singapore.

F2 The time frame for all the deliverables and completion of SS for Digital Design Object Libraries for Architectural Works shall not exceed **EIGHTEEN MONTHS (18)** from date of acceptance of the Proposal.

F3 The time frame for all the deliverables and completion of SS for Collaborative Design Processes and Teaming Arrangements shall not exceed **NINE (9) MONTHS** from date of acceptance of the Proposal.

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SECTION G: PROJECT COST AND PAYMENT SCHEDULE

G1 The budget for SS for Digital DOL for Architectural Works is up to a maximum of Singapore dollars One Hundred Thousand, \$100,000 (excluding GST)

G2 The budget for SS for Collaborative Design & Teaming Arrangement is up to a maximum of Singapore dollars Fifty Thousand, \$50,000 (excluding GST)

G3 Payment shall be made in accordance to the disbursement terms as specified in the Cost Proposal which is tied to the completion of major milestones and subject to the approval of buildingSMART Singapore. Payment shall be made based on the submission of invoice(s) and any other documents as may be required.

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SECTION H: GUIDELINES FOR PREPARING PROPOSALS

H1 COMPANY / INDIVIDUAL PROFILE (ANNEX A)

The Company / Individual profile should include but not limited to the following:

- a) Ownership structure and registration;
- b) Principals, partners, major shareholders, affiliates and subsidiaries;
- c) Financial capacity;
- d) Relevant completed projects;
- e) Schedule of contracts currently executed

H2 TECHNICAL PROPOSAL (ANNEX B)

The Technical Proposal should include but not be limited to the following:

- a) Demonstration of understanding of the nature and context of the tasks and where appropriate, suggestions for modification and amplification;
- b) Detailed plan to complete the various tasks within the specified time frames;
- c) Project team organisation chart complete with lines of report and responsibility;
- d) Curriculum vitae, track record and experience of key project personnel;
- e) Resource histogram showing anticipated total staff requirement over the period of appointment including anticipated man-days;
- f) Undertaking to safeguard official information;
- g) Project team shall include domain experts from the construction industry, who are familiar with the procedures and requirements of building projects.

H3 COST PROPOSAL (ANNEX C)

The Cost Proposal should include fees for the entire scope of works specified in this RFP without any claims for variation works that are related to the SS.

H4 WORK SCHEDULE

Propose schedule for the work activities or deliverables, including milestones.

Respondent shall submit a proposal in full compliance with the scope of work on how to carry out the Services (base offer). Respondent may also submit further improvements (as Options) which will be considered in the evaluation of the Proposal.