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Request for Quotation (RFQ)
and
Call for Participation (CFP)

AECOO Testbed – Phase 1
(AECOO-1)
buildingSMART alliance Project 2008-STP-01

Clarification 2

Clarification Issuance Date: May 22, 2008

Proposal Due Date: May 30, 2008

1 Preface

This clarification document summarizes questions and answers from the May 19th Bidder's Conference, and adds a final clarification on the Business Performance and Energy Analysis (BPEA) use case.

2 Bidder's Conference Attendees

Mark Palmer – NIST

Robert Lipman – NIST

Steve Hagan - GSA

Mario Guttman – HOK

George Percivall – OGC

Raj Singh – OGC

Ben Welle – OGC

Thomas Liebich – OGC

Patrick Suermann – University of Florida

Igor Starkov – Tokmo Solutions

Andy Smith– Bentley

Mike McSween - Bentley

Jim Forrester – Informa

John Sullivan – Autodesk

Frank Moore - Autodesk

Louise Sabol – DC Strategies

Kimon Onuma – OPS

Young-Ku Kim – OPS

Wayne Warner –Yumatech

Yuan Panushev – Horizontal

Vladimir Bazjanac – LBNL

Patrick McHallan – Grafton Technologies

Richard See – Digital Alchemy

Hector Camps – PhiCubed

Mike Panesis – Whitestone Research

Shiva Davoodpour - CID Engineering, Inc.

Reza Jafari - National Institutes of Health, Office of Research Facilities

Alessandro Triglia - OSS Nokalva

Cameron Stephenson – Active Facility

3 Bidder's Conference Questions and Answers

Questions and Responses:

Q1. Will the web service return a file or objects?

A1. Responses will be files that are subsets of a BIM. The method for identifying the subset is a view of the IFC model or other query to be identified by participants. We do not foresee that model view servers will be able to respond to arbitrary queries. The servers will have a few BIM model views/subsets that they support, and they will be able to respond to requests for those views as a whole.

Q2. What do the terms funding and cost sharing mean?

A2. A funded deliverable is one for which some funds are available to offset your costs. This funding is called cost sharing because we only expect that it will offset up to one-third of your actual costs of participation in the Testbed.

Q3. What are the Intellectual Property requirements?

A3. Software code is not a deliverable for the Testbed and so there is no transfer of intellectual property for the software. The specifications that derive from the Testbed will be governed by the OGC Intellectual Property Rights Policy: http://www.opengeospatial.org/about/?page=ipr. Each of the participants will be required to sign a participation agreement that includes agreeing to the OGC IPR Policy. Policies for the Testbed are defined in The OGC Interoperability Program (05-127r1) http://www.opengeospatial.org/ogc/policies/ippp.

Q4. Why is the Communications, Project Delivery and Decision Support (CPD) thread not funded?

A4. OGC is currently working to identify sponsorship for the CPD thread. Please do not let this prevent you from proposing against this work. Responses will be helpful in showing sponsors interest

Q5. Is funding to individual companies?

A5. OGC will contract with individual companies. If several organizations submit a joint proposal, one of the organizations will need to be the "prime" contract. Alternatively each of the organizations can submit an individual proposal.

Q6. What building will the Testbed use?

A6. A subset of GSA 1800F - see posted clarification 1.

Q7. Do we anticipate a using a subset of an entire building model?

A7. Yes. A subset of a full building model will be used for this Testbed.

Q8. Is the 1800F model before or after the renovation?

A8. Before renovation, but additional modifications will be made to "scrub" the building for security and confidentiality concerns.

Q9. In what format will the 1800F building model be supplied?

A9. In IFC, and in the proprietary models for several vendor tools.

Q10. Why does the clarification say that the MVDs and implementations be developed by the same organizations? This seems like a bad idea.

A10. This was a mistake in clarification 1. MVD specification and software implementations of those model views are two separate, distinct deliverables. However, there is nothing to prevent a single firm from being awarded both deliverables if they have the best proposal.

Also, in general, MVDs will be developed in collaboration between all participants and the IPTeam. The development is led by the thread lead, and the company awarded with the deliverable has the final writing and editing responsibility.

Q11. Please elaborate on the connection of MVDs to the collaborative environment?

A11. MVD development expects to follow the general approach developed by buildingSMART international as presented in its last summit in Brisbane (November 2007). However, Testbed methodology is to favor processes that work for developers over strict adherence to existing standards. If participants find that another approach is required to accomplish the work, then that new approach will be used and documented, resulting in critical feedback into the standards development process.

Q12. Is there any particular third party vendor that we should work with on QTO reports?

A12. No. We have no preconceived notions regarding the best vendors or formats for QTO information formats or contents.

Q13. There are many different methods for doing QTO. Is there a preferred method for this Testbed?

A13. No. These are perfect questions for Testbed to address. Please put your innovative ideas into your proposals.

Q14. Any possibility to extend the deadline for responses?

A14. For fairness, a proposal must be submitted by the stated deadline. If you have organizational issues that may hinder a full response by May 30, please contact OGC.

Q15. What is the time and time zone on the May 30 due date?

A15. This is intentionally vague. Consider it 5 PM in your time zone.

Q16. What if it is submitted on Sunday at midnight?

A16. OGC expects to begin proposal review immediately, so that would be a late submission.

Q17. What is the matching funding?

A17. Cost-share funding maximum is 50%, but typically 10 to 20%.

Q18. What is the budget for the Testbed?

A18. There is about $100K of participant funding available for the two funded threads.

Q19. Is one thread more important than the other?

A19. Two threads are funded. One is not. There is no different in important between the funded threads.

Q20. How to get manufacturers to contribute their family of products as BIM models?

A20. While we know and understand the connection, we are currently focused on the conceptual stages, so this should not be an issue.

Q21. Does the model include mechanical items?

A21. No. The starting point is a spatial model with closure. It does not have mechanical elements such as ducts, piping, terminal boxes, etc. Since the focus of this Testbed is on conceptual design, that level of detail is not needed. However, the consideration of different HVAC system types (e.g. natural ventilation vs. radiant vs. VAV) may be desirable during conceptual design, particularly if the thermal and cost performance and thus feasibility of the different system types have strong dependencies on the passive design strategies considered early in the project.   It is included in the scope of this Testbed to determine the level of detail of HVAC information that is valuable and feasible to evaluate during conceptual design, and propose options on how that information could best manifest itself within a BIM. If needed, mechanical elements will be added to the existing spatial model to support these developments.

Q22. The "Workflow Process and Information Exchanges" sections of the peak loading and annual performance analysis use cases seem to be the same. Is this a cut-and-paste error?

A22. Yes and no. Consider it as one use case because they are so similar.

Q23. Question for NIH: given that you are participating on the call, is NIH interested in entertaining funding for OGC under the SBIR initiative?

A23. NIH may be interested but I am not volunteering myself.

Q24. If a vendor wants to demonstrate the MVD in action, when will they get access to the MVD?

A24. All participants will be involved in the process. MVD development will begin at the kickoff. MVD and IDM deliverables date will be early in the process. Software applications will then implement the MVD.

Q25. What is the Testbed's definition of model view definitions?

A25. MVDs will be based upon IFCs. Will use the IFC MVD methodology. Additions and modifications will be developed and offered back to the buildingSMART Initiative standards group.

4   BPEA Use Case Clarification

With the focus of the Testbed on conceptual design, there will be only one Use Case for the BPEA Thread as opposed to two. The single Use Case will correspond to Use Case 2-Annual Energy Performance currently in the RFQ.

Use Case 1-Peak Loading was originally intended to address the common practice of utilizing specialized load calculation software such as Carrier HAP or Trane Trace for the actual sizing of HVAC equipment during the latter stages of design. Although we are eliminating Use Case 1, conceptual design phase estimation of peak thermal loads is still an integral component of the BPEA thread. Since peak load thermal requirements are calculated during the initial stages of most annual energy performance simulations, information requirements to support both of these business processes will be addressed with the single Use Case.