OGC IMIS IOT RFQ/CFP Clarifications - as of 11 May 2015

This version of the Clarifications document presents questions that have been received by the date shown above. Responses to questions received to date are provided below. Please send any corrections or additional questions to <u>imis-iot-responses@opengeospatial.org</u>.

Revision log:		
Date	Name	Description
30 April 2015	Lew Leinenweber	Initial version
1 May 2015	Lew Leinenweber,	• Q11-14; Q16-Q20
	Josh Lieberman	
4 May 2015	Lew Leinenweber, Josh	• Q21-25
	Lieberman	
11 May 2015	Lew Leinenweber, Josh	• Q26 - Q28
	Lieberman	

<u>General Questions</u> <u>RFQ Specific</u> <u>Sponsor-provided additions and corrections</u>

1 General Questions

- Q1. Can potential participants submit further questions by email?
- A. Yes, by 11 May 2015 to imis-iot-responses@opengeospatial.org. Each question will be reviewed and a response provided via the Clarifications document.
- Q2. My organization is not familiar with the initiative process. What's the best way to navigate the RFQ?
- A. Please refer to the Bidder's Quick Start Guide section developed to welcome organizations such as yours to the process. http://www.opengeospatial.org/projects/initiatives/imisiot
- Q3. My organization has never participated in OGC Interoperability Program efforts before. Will this impact our ability to win any work?
- A. For a listing of the evaluation criteria, refer to Section 8 Evaluation Criteria of the RFQ Main Body found here: <u>https://portal.opengeospatial.org/files/?artifact_id=63029</u>
- A. As you can see, prior participation in OGC initiatives is not a requirement for participation and is not an explicit evaluation criterion. Having said that, it definitely helps to have participated before (both to be familiar with the collaborative rapid prototyping and agile environment the initiative is about, and to be more "tuned" to the requirements that directly build on the results of prior initiatives).
- A. To best position your proposal, make sure you review the outcomes of prior initiatives and show clear understanding of the sponsor requirements and the relevance of your proposal to those requirements.
- Q4. Should we expect 100% cost recovery for our work? Are we expected to propose a specific proportion of in-kind vs. cost-share?
- A. In-kind contributions are not required, but are one of the criteria in the evaluation of the proposals. The exact percentage depends on various criteria.
- A. Be honest about your proposed contributions to both in-kind and cost-share budgets. Further consideration of contribution and reimbursement leading to a final award will be determined during a period of negotiations with selected participants.
- Q5. Can we submit a proposal if we are not OGC members at the moment?
- A. Application to OGC membership must be submitted with the proposal. Membership will need to be established prior to being invited to the kickoff.
- Q6. Is Kickoff attendance required?
- A. Yes, funded organizations must have a representative at the kickoff. GoToMeeting and telecon arrangements may be established to make the kickoff accessible to additional persons from the attending organizations.

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- A. The kickoff is a critical event to ensure a most successful initiative. For participants who have been selected to receive Cost-Share funding, attendance is considered mandatory. If a participant is selected and agrees to provide In-Kind only contributions, then in-person attendance may be a matter of negotiation leading up to the Kickoff. In all cases, in-person attendance at the Kickoff is considered the best opportunity to establish the team working relationships and coordination to achieve a most successful initiative.
- Q7. Are travel costs to the kickoff reimbursed?
- A. Not directly. The offers to selected organizations are based on the deliverables in each thread.
- Q8. Can a participant propose against multiple threads in their proposal?
- A. Yes participants can and are encouraged to propose against multiple threads (follow the response template).
- Q9. Will only one organization be selected for each task or can multiple participants work on the same task?
- A. Multiple participants can be selected for the same task.
- Q10. Are the sponsors involved in the evaluation and selection process?
- A. Yes, the sponsors are actively involved in the evaluation and selection process. That process as well as the evaluation criteria is detailed in the RFQ.

2 **RFQ Specific**

Q11. RFQ Main Body, Section 2.2, Sponsor Objectives lists development of a Springboard Test Environment. Please describe this in more detail. Does this refer to a specific OGC testing template for a testing suite?

A. Springboard Test Environment is IJIS Institute's evaluation and certification program designed to help advance information sharing in justice, public safety, and homeland security communities. Springboard provides independent services to industry and government for the evaluation and certification of implementations of standards-based information sharing solutions.

More details about are available at the IJIS website location here: https://ijis.site-ym.com/?page=Springboard

IJIS is responsible for development of Springboard Test Harnesses for new or enhanced standards or profiles that may result from this IMIS IoT initiative.

Q12. RFQ Main Body, Table 3, IMIS IoT Component Deliverables. Is this list absolute, meaning every component listed must be part of the final system?

A. The components shown in the table are considered necessary to exercise and test the capabilities of interface standards or profiles, information sharing and interoperability of components to satisfy sponsor requirements. Each Bidder may choose to propose to provide one or more deliverables from the list that it believes best matches its expertise, capabilities and business interests.

Q13. RFQ Main Body, Table 3, IMIS IoT Component Deliverables shows a Desktop Client. Can a web application running in a web browser be considered to be a "Desktop Client"?

A. Yes.

Q14. Specifics regarding physical sensors are not specified. Is it up to the participants to find suitable sensors from vendors to meet these requirements for this prototype, or will there be some direction given here as to what to use?

- A. Specific sensor devices will need to support measurement of parameters consistent with the pilot scenario and use cases. They will also need to be network-compatible with suitable hub-router components. There will need to be a capability to simulate sensor measurements either physically or computationally for the purpose of testing and demonstration. Specific sensor technology is otherwise not specified. We expect that appropriate sensor products can be provided, lent, and/or constructed by a combination of participants, sponsors, and interested vendors.
- Q15. One of the objectives stated in the main document is to:
 - Develop a Springboard Test Environment that can be used to test conformance of vendor solutions with proposed specifications
 In Table 1, setup of this test environment is scheduled to be completed by 15 January 2016. However, neither it nor any conformance tests are mentioned among the deliverables in Tables 2 and 3.

What is Springboard and how is it used? Are any references available?

A. See answer in Q11. Link to more information is available at the IJIS website here: <u>https://ijis.site-ym.com/?page=Springboard</u>

Q16. Annex B, 5.3.3 mentions CSW 3.0 and OpenSearch. Both of these are draft specs. Would a CSW 2.0.2 implementation be acceptable?

A. Yes. CSW (2.0.2 or 3.0) is one alternative. Other interoperable methods of registering and discovering sensors may be proposed

Q17. In Annex B, Fig. 3 many components are shown to interact with a "sensor hub" (S-Hub). Is there an existing specification for such a hub? Or will this be a product of the pilot project?

A. There is no single specification or best practice for a sensor hub, although many products exist to route between local wireless network standards such as Zigbee and Internet standards. A report and best practice for connecting SWE service interfaces to locally connected sensor devices is one of the deliverables (RFQ Annex B 2.1.1.2)

Q18. Can we get some clarification of what "HubCat" is? In Table 3 of the main body of the RFQCFP document, HubCat is listed as deliverable C7. In Annex B, it is listed as item 2.1.2.7 of the Component Deliverables, and shown in Figure 3.

A. According to section 2.1.2.7: "The HubCat catalog shall be deployed to register automatically and provide a well-known facility for discovering other IoT components in the Pilot, particularly S-Hubs." These two functions define the operation of the HubCat component. Proposals to provide this component should indicate what combination of protocols and technology will be used to implement the functionality.

Q19. Is HubCat an open-source/proprietary catalogue that OGC has already identified or is it something that will be created as part of this pilot project?

A. A particular software component has not been identified. A standards-based best practice for implementing HubCat functions should be an outcome of the pilot.

Q20. Is the HubCat intended to be transactional, meaning that information respecting sensors/actuators can be dynamically updated?

A. Automatic registration functionality should include the capability to update registration information when the availability or features of IoT components changes.

Q21. Can we also submit a proposal to IMIS IoT that it would be based on a PhD research project?

A. Yes, provided that the proposal addresses requirements of the RFQ/CFP consistent with the scenario and deliverables.

Q22. Are the incident scenario and use-cases mentioned in the Annex B of IMIS IoT are fixed? Or, the participant organizations could be able slightly change the scenario and use-cases in their response proposal?

A. Generally, yes. You may propose changes to the scenario provided you are consistent with the overall scenario and required deliverables.

Q23. Could the outcome of the activities undertaken by the participating organizations be also published as journal or conference articles (in addition to the OGC best practices)?

A. Yes. Once the project is complete and the results have been approved to be published as publicly-available reports and via a demonstration.

Q24. Could we focus on exploiting the already deployed sensors rather than deploying new sensors in the scenario that we consider in our response proposal?

A. Yes, you may propose to use existing, already deployed sensors that satisfy the deliverable requirements of the RFQ/CFP and scenario.

Q25. While location information is crucial, there is a lot of other kinds of information relevant to the first responder use cases. How much of this other information is expected to be defined and supported in this effort?

A. Indeed, location information is a key part to this initiative as pertains to OGC encoding and service standards. However, the RFQ/CFP recognizes that other information associated with sensors to be tested in the project will provide information relevant to the needs of first responders associated with the described scenario and response.

Q26. How is the need for localization addressed in the system sketched in the call? Do we assume that the position of all devices is somehow known?

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A. Position is of course an essential element of sensing the physical world. The locations of devices are a means to the end of determining the real world features that are being sensed. The bidder is free to propose feasible positioning mechanisms for devices being deployed in the system as long as these mechanisms contribute towards determining the targets of observations. For example, the positioning alone of drone is not sufficient to determine what it's camera may be imaging.

Q27. Is there interest on proposals regarding localization services for of ad-hoc wireless networks or is it out of the scope of this call?

- A. The bidder is free to propose a mechanism of positioning that leverages wireless networks as long as it serves the purpose described in Q26.
- Q28. Is there a requirement for testing and demonstration set up?
- A. There is a stated requirement that IJIS will set up a test environment under their Springboard program. See also answers to previously submitted questions (Q11 and Q15).

Details for a demonstration would be developed and refined during the Kickoff meeting with all selected participants involved to satisfy the sponsor requirements. In addition, there will be customary Technology Integration Experiments (TIEs) (integration testing) conducted during the initiative to ensure that components and clients are working together properly. At this stage, it is not known what changes to OGC standards might be recommended; however, any such changes if approved might call for updates to OGC testing suites.

3 Sponsor-provided additions and corrections

Q1. None at this time.