The following questions and answers were collected by email and webinar as of 12-August-2013. Please send any corrections or additional questions to <u>techdesk@opengeospatial.org</u>.

Revision log:		
2013-08-05	Nadine Alameh	First Draft
2013-08-07	OWS-10 IP Team	Updated with questions from webinar
2013-08-09	OWS-10 IP Team	More questions via techdesk
2013-08-12	Nadine Alameh	Final Document
2013-08-13	Nadine Alameh	Update with additional sponsor
		clarifications

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1. General Questions

- Q1. Can potential participants submit further questions by email?
 - A. Yes, by Aug 9 2013 to <u>techdesk@opengeospatial.org</u>. Each question will be reviewed and a response provided via the Clarifications document.
- Q2. My organization is not familiar with the testbed process. What's the best way to navigate the RFQ?
 - A. Please refer to the quickstart guide developed to welcome organizations such as yours to the process. <u>http://www.opengeospatial.org/pub/www/ows10/rfq/quickstart.html</u>
 - B. Make sure you participate in to the webinar for an opportunity to learn about the process and ask questions
 - https://portal.opengeospatial.org/public_ogc/register/130806ows10.php
 - C. Email <u>techdesk@opengeospatial.org</u>
- Q3. My organization has never participated in testbeds or other 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 5 Evaluation Criteria of the RFQ main body (http://www.opengeospatial.org/pub/www/ows10/rfq/index.html)
 - B. 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 testbed is about, and to be more "tuned" to the requirements that directly build on the results of prior initiatives).
 - C. 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.
 - B. Be honest about your proposed contributions to both in-kind and cost-share budgets. Further consideration of contribution and reimbursement leading to a final aware 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. Webex and telecon arrangements may be established to make the kickoff accessible to additional persons from the attending organizations.
- B. 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. Why are there 2 kickoffs this time?
 - A. The Aviation Thread will be kicking off on the last day of the TC/PC meeting in Frascati to accommodate the Aviation sponsors' schedules and availability.
 - B. The CCI and Open Mobility Thread kickoffs will be taking place at GMU, Fairfax, VA (same location as OWS-9). We expect this kickoff to last 2 days. More information will be provided along with the offers to selected organizations.
- Q9. 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).
- Q10. 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.
- Q11. 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.
- Q12. There are several deliverables in Annex A (http://www.opengeospatial.org/pub/www/ows10/rfq/annexa.html) that are designated as U (unfunded). Can you clarify what that means? Should we still propose against these deliverables?
 - A. For cost sharing funding, proposing organizations should focus on funded deliverables. You are encouraged to propose against unfunded deliverables, which would be treated

as in-kind contributions to the testbed. Note that unfunded deliverables are certainly of interest to the sponsors, and are listed in the RFQ because they do play an important role in realizing the architecture.

- B. In some cases, OGC may be still actively in discussions with other potential sponsors to cover the unfunded deliverables. If the status of a deliverable changes from unfunded to funded as outcome of these discussions, a clarification would be issued to that effect.
- Q13. Is it possible to know which sponsors are involved in which threads?
 - A. **CCI**: NGA, AGC, USGS, UK DSTL, GeoConnections NRCan, LMCO
 - B. **Aviation**: FAA, EUROCONTROL, NWS, Harris
 - C. Open Mobility: NGA, ESA, UK DSTL, USGS
- Q14. Where can I find the slides presented during the webinar on Aug 6, 2013? A. <u>https://portal.opengeospatial.org/files/?artifact_id=54853</u>
- Q15. The Integrated Client deliverable shown in Annex A is listed as Funded item, but in Annex B it's listed as unfunded. Please clarify
 - A. Annex A is correct. Annex B has been revised to reflect that on Aug 6, 2013.
- Q16. I'm interested in the progress of one of the threads and am wondering if I can observe the kickoff.
 - A. The OGC Testbed 10 team would highly encourage you to consider responding to the RFQ if you're interested in the requirements presented in the RFQ. This way, you will get the opportunity to not only observe but also influence the work. To minimize the level of commitment or manage expectations, consider responding with an in-kind only proposal against specific deliverables. If you won't be responding to the RFQ but are still interested in observing the kickoff, please email Nadine Alameh <u>nalameh@opengeospatial.org</u> directly about your interest. OGC Testbed 10 sponsors will be consulted before we get back to you.
- Q17. I'm finding it hard to work out what specific items from the WBS should be addressed in our proposal. Any guidance on that?
 - A. For your response, follow the response template <u>https://portal.opengeospatial.org/files/?artifact_id=54700</u>. You'll see that the focus is on which deliverables you are proposing against and how you intend to deliver them (technical approach). For the WBS part, fill the table to the best of your ability. Targeted and concise answers are encouraged.
- Q18. I'm planning to respond to this call with a collaborator. Is this encouraged?
 - A. You are free to collaborate with any OGC member organization on a proposal.

2. CCI Clarifications

- Q1. There seems to be no mention of temporal dependency in the Virtual Global Gazetteer requirements. The temporal aspect is of high importance and especially for gazetteers, they should require temporal tagging of place names and allow queries with temporal filters. Is this in scope for OGC Testbed 10?
 - A. The sponsors definitely acknowledge the value of temporality in the case of the Virtual Global Gazetteer (amongst many other OGC components). Unfortunately, it's too late to change the scope of the requirements at this stage due to funding limitations and finalized commitments. Proposing organizations are however highly encouraged to cover this topic in their responses with an emphasis on proving or recommending how the temporal requirements can be accommodated within the current framework.
- Q2. Is Linked WPS a separate deliverable or should we propose against it under Conflation WPS?
 - A. Linked WPS is a combination of Conflation WPS and the VGI Component. Respond to both of these deliverables if you're interested in working on the Linked WPS requirements.
- Q3. We are interested in responding to the Gazetteer component but believe that a CSW-ebRIM web service is a better vehicle than WFS. It can return GML and natively support taxonomies, associations, and collections. Would such a response be permitted?
 - A. Implementing the Gazetteer component via WFS is a strong suggestion. Other interoperable approaches are valid and welcome and will not be penalized for not taking the WFS approach. However the respondents should take into account the outcomes of the OWS-9 work in this area and build on it to the extent possible.
- Q4. On the Profiles requirements
 - A. The sponsors of the Profiles activity DGIWG WFS 2.0 Profiles (https://portal.opengeospatial.org/files/?artifact_id=54910) anticipate that vendors fully support both the Basic Profile and the Transactional (Locking) Profile (although not necessarily by the same vendor).
 - B. The sponsors have special interest in evaluation/testing of the following:
 - i. Stored Queries (define Stored Queries by theme)
 - ii. Transactional/Locking
 - iii. FeatureVersion
 - iv. Response Paging
 - v. Spatial joins, temporal joins
 - C. The sponsors anticipate full support for the DGIWG WMS 1.3 profile (document to be posted shortly). The sponsors have special interest in evaluating/testing of the following
 - i. DGIWG WMS CRSs
 - ii. Time and elevation with respect to OGC Metoc Best Practice
 - iii. Support for sample dimensions

3. Aviation Clarifications

- Q1. No link is provided for the document "SAE-G10 Human Factors Minimum Requirements and Recommendations for the Flight Deck Display of Data Linked Notices to Airmen (NOTAMs) ARP 6467" and the document does not appear to be freely available on the Web. How can we get access to this document?
 - A. This document is currently available as a draft. The SAE-G10 group is in the process of finalizing the document and, for copyright reasons, is only making it available to members of the SAE-G10 group. However, liaison membership to SAE-G10 can be obtained without any cost. If you are interested, please provide your contact information to <u>techdesk@opengeospatial.org</u>. OGC will then forward your information to SAE-G10.
- Q2. We are interested in proposing against the Aviation client deliverable but we are in the early stages of development and it's unlikely that we will be able to finish a fully featured client within the timeframe. Can we propose against a subset of the requirements? Or should we include that as our in-kind contribution?
 - A. For the client component, a strong preference is for one client that meets all the requirements of the deliverable, as listed in the RFQ. With that in mind, if you are proposing against other deliverables, you are strongly encouraged to propose to propose a client as your in-kind contribution. This way you are not required to meet all the requirements of the client deliverable, but you can still contribute towards that requirement.
- Q1. Which version of WXXM does the WGDS support?
 - A. WXXM 1.1
- Q2. Which bindings does the WGDS support SOAP v1.1, SOAP v1.2, anything else?
 - A. SOAP v1.2
- Q3. No link is provided for the "Presentation on Web Gridded Document Service (WGDS), December 2012". Where can we find this presentation?
 - A. The presentation is available at: <u>http://www.mdl.nws.noaa.gov/~WGDS/powerPointPresentations/WGDS_OWS-</u> <u>9_Jan15_total.pptx</u>

Note that additional information, like WSDL, XML Schema, examples, and even code for WGDS is available at: <u>http://www.mdl.nws.noaa.gov/~WGDS</u>

 C source code library (dwmllib) that does the formatting of the XML returned from the getWGDSCoverage soap function: <u>http://www.mdl.nws.noaa.gov/~WGDS/C_sourceCode/degrib/src/dwmllib/</u>

- Php code that processes the WGDS requests and responses and hosts the 3 SOAP functions getWGDSCapabilities, describeWGDSCoverage, and getWGDSCoverage are located in here:
 - 1. <u>http://www.mdl.nws.noaa.gov/~WGDS/php-code/</u>
 - 2. (http://www.mdl.nws.noaa.gov/~WGDS/php-code/ndfXMLserver.inc is the main driver)
- iii. The 3 main SOAP function schemas are here, with WGDS.xsd being the top level schema:
 - 1. http://www.mdl.nws.noaa.gov/~WGDS/schemas/WGDS.xsd
 - 2. <u>http://www.mdl.nws.noaa.gov/~WGDS/schemas/wgdsGetCapabilities.</u> xsd
 - 3. <u>http://www.mdl.nws.noaa.gov/~WGDS/schemas/wgdsDescribeCoverage.xsd</u>
 - 4. <u>http://www.mdl.nws.noaa.gov/~WGDS/schemas/wgdsGetCoverage.xs</u> <u>d</u>
- iv. The WXXM schema file that was modified by NWS is located at: http://www.mdl.nws.noaa.gov/~WGDS/schemas/WXXM/schemas/1.1/wx/w xCoverage.xsd
- Q4. The last sentence in the background description of the "Explore new sources for weather information" requirements section (RFQ Annex B section 4.2.4) appears to be incomplete.
 - A. The full sentence is: "The response contains WXXM formatted weather data that matches the request parameters".
- Q5. The requirement "Advance support of AIXM in development tools (J2EE, .NET) described in section 6.2.7 of the RFQ Annex B states that the goal of the investigation, testing and documentation of XML Schema binding creation and use is to auto-generate program code from the AIXM XML Schema and that this code is used in a software component to perform a complete round-trip of AIXM data.

Questions: What dimensions are expected from the auto-generation? Should a completely new framework be developed or could a solution also depend on existing code generation frameworks (e.g. JAXB, JiBX, XMLBeans - just to name some Java candidates)? Or should the task mainly focus on investigating/testing/deploying existing frameworks?

- A. The AIXM XML Schema bindings shall be created using the XML Schema binding facilities provided by at least the two mentioned development environments (Java: Glassfish/Metro and Microsoft .NET with XSD.EXE). As stated in the RFQ, additional code generation frameworks can also be investigated/tested.
- Q6. Regarding the requirement "Advance support of AIXM in development tools (J2EE, .NET) described in section 6.2.7 of the RFQ Annex B: as Glassfish/Metro has support for OSGi, should these be investigated as well?
 - A. An investigation regarding OSGi is not required. This is a potential add-on, see the next question.

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Q7. The note in section 6.2.7 of RFQ Annex B states that: "the focus of this task is in XML (Schema) binding technologies. However, investigations and testing could go further and analyze solutions that facilitate development of components that use AIXM. For example, it could include software libraries/APIs – preferably based on open source – that defines (via open interfaces) or supports (as actual code) more functional tasks related to AIXM data: evaluation of feature state (with or without schedule evaluation), geometry computations, change management, etc."

This could cover research on available APIs. From a workflow perspective, these tools may be applied after the actual code-generation (or: after the binding/unmarshalling of XML has been applied) and in the scope of the underlying technology (Java, .NET)? So, they do not have to be related to XML/XSD but to general aspects of feature operations/management at a sort of low level (-> the programming language/environment)?

A. While the specific focus of this requirement is to investigate, test and document recommendations for improving the binding of AIXM XSDs to development tools, the overall goal is to advance support of AIXM in these tools. XML Schema binding to ultimately realize serialization and deserialization of XML encoded AIXM data is but one part of this (albeit a key one, and focus of this task).

Components that process AIXM encoded information need to perform various additional tasks, for example to compute the state of an AIXM feature for a specific point in time (based upon the information that is encoded in AIXM timeslices). The code modules that support/realize these tasks likely depend on the outcome of the XML Schema binding – either directly (when directly using the classes generated via the XML Schema binding) or indirectly (for example if there is an AIXM API that is common for a development environment or even multiple development environments).

Any investigations/developments/tests of additional software modules, libraries and APIs that support the development of components processing AIXM data are optional, but can increase the value of your proposal.

4. **Open Mobility Clarifications**

- Q1. Regarding deliverable 1.3.10 Mobile GeoPackage and OWS Context Client, is the target platform set in stone? Or can we propose a BlackBerry 10 platform GeoPackage and OWS Context Client?
 - A. The platform is definitely not set in stone. The more platforms that support the standard the better it is for interoperability.

Q2.

A.

5. Sponsor-provided additions and corrections related to Annex B (None to-date)

Q1. Big Data and Cloud Computing are a major part of the Open Mobility thread. As background, applicants are encouraged to familiarize themselves with this recent report from ESA on "Big Data from Space". The final report may be found here:

http://www.congrexprojects.com/docs/default-source/13c10_docs/here.pdf?sfvrsn=0

And conference presentations are here: http://www.congrexprojects.com/2013-events/13c10/programme

- Q2. The following is a list of data sources being provided by the sponsors for use in the demonstrations. This is not an all-inclusive list of data but the sponsors would like to make clear the availability of this data to selected vendors
 - A. The NGA Topographic Data Store (TDS) formatted vector datasets over Monterey California (same data used in OWS-9)
 - B. The NGA Digital Nautical Chart (DNC) Vector Product Format (VPF) data off the coast of Monterey California. (DNC Coastal A13B, DNC Approach A1316240, DNC Harbor 1316240, DNC Harbor 1316260, DNC Harbor 1316270)
- Q3. A document deliverable was missing from the CCI Thread deliverables list. Annex A (list of deliverables for CCI) and Annex B (description of Deliverables for CCI) have been updated (Aug 15, 2013)
 - A. WPS Profiles Engineering Report to include
 - i. Analysis of WPS 2.0 core ability to support multiple profiles
 - ii. Clear definition of opportunities for commonality between OGC Testbed 10 WPS profiles
 - iii. Description of unique requirements to support conflation as described in the RFQ