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U.S. Department of the Interior  
U.S. Geological Survey

## **USGS Geospatial Liaison Guide to the USGS Geospatial Product and Service Contracts (GPSC)**

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National Geospatial Technical Operations Center, 2012

Version 2.2

*This document is for USGS personnel, USGS contractors/ contractors, and USGS business partners. It has not been reviewed for conformance with USGS editorial standards and has not been approved for formal publication. Any use of trade names is for descriptive purposes only and does not constitute endorsement by the US Government.*

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Major Changes by Version

**Version 1.1 (February 2007)**

- State Liaison to Geospatial Liaison
- Financial Information updated

**Version 1.2 (February 2007)**

- Defined “reimbursable” customer clearly at the beginning and removed the “reimbursable” descriptor of customer later in the document
- Additions in 5.1.3 and 5.3.1

**Version 1.3 (March 2007)**

- Liaison comments incorporated
- Expanded definition of “Commercial Partnerships Team.”
- Added definition of IGCE
- Added QA/QC planning to the SOW definition.
- Clarified “Lines of Communication” figure.
- Clarified RA and TO.
- QA/QC
- SOW vs. TO and RA (diagram)

**Version 1.4 (March 2007)**

- Expanded definition of SOW (must define responsibilities of interested parties)
- 5.1.2—SOW, must also define responsibilities of interested parties.
- 6—“may need separate agreement” rather than “requires separate agreement.” NGTOC Technical Staff to definitions
- 4.1—involve NGTOC early in process if their services are being requested.
- 4.6—paragraph 2
- Updated FIG 1 description.

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- 5.1.3 Last paragraph is new and relates to “off the cuff” ballpark estimates.

### **Version 1.5 (April 2007)**

- Minor editorial changes.
- Project Planning forms for Lidar and Ortho-Imagery added in Attachment I.

### **Version 2.0 (February 2008)**

- Updated NGTOC II and III names
- Updated Contact List
- Updated Financial Section (From using Regional Agreement Coordinator to using the NGTOC Agreement Coordinator at Rolla)
- Added sample SOW
- Updated Technical Points of Contact
- Added new Lidar Planning Document version
- Updated Attachment G, NGTOC Information for Other Agency Purchase Orders
- Updated “Roles and Responsibilities” diagram
- Updated NGTOC Agreement Routing Sheet

### **Version 2.1 (May 2008)**

- Updated Contacts
- Updated contact procedure

### **Version 2.2 (October 2012)**

- Updated Contacts
- Defined roles for “Agreements Staff” and “Agreements Coordinator”
- Defined roles for NGTOC “Finance Staff”

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- Updated Program and Technical Points of Contact
- Removed former Attachments “E” and “H” and re-lettered remainder

**Future Version**

- “Quick Start” Guide
- Check “definitions” vs. “responsibilities” sections for overlap
- Add brief case histories of past Task Orders

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## 1 Introduction

This document is a guide for USGS Geospatial Liaisons (hereafter referred to as Liaisons) to Federal, State, local governments, and other organizations. It provides high-level information about procedures for making the Geospatial Product and Service Contracts (GPSC) available to non-USGS federal, state and local organizations.

This paper contains no procurement-sensitive information and may be freely shared with Federal, State/local organizations. A list of acronyms and points of contact can be found in Attachments A and B respectively.

## 2 Definitions

**Contracting Officer (CO)** – Though ultimately responsible for everything surrounding the GPSC, the CO is not within the scope of this document. Liaisons will normally have no contact with the CO.

**Contracting Officer’s Representative (COR)** – Monitors the contractor’s technical efforts to ensure that performance strictly conforms to the terms of the contract. The COR is also the primary interface between the contractor and the Contracting Officer on matters pertaining to the contractor’s technical effort as well as day-to-day operations. The COR is not authorized to direct the contractor to perform work beyond that described in the contract. The current COR is Tim Saultz (see Attachment B for full contact information).

**Commercial Partnerships Team (CPT)** – Organizational unit in Rolla that manages the GPSC. The CPT includes product and operations experts who help prepare technical requirements, Independent Government Cost Estimates (IGCE), and provide technical guidance to Liaisons and customers.

**Commercial Partnerships Team Point of Contact (CPT POC)** – Members of the CPT who serve as primary sources of information about the GPSC; currently Tim Saultz, Mike Duncan, Gail Dunn, Robert Kelly, Joe Scott, and Pat Emmett (see Attachment B for full contact information).

**Customer or Client** – These are Government organizations that use the GPSC to obtain geospatial data or services. The relationship between customers and the CPT is initiated, organized, and managed by the Liaison. There are two major categories of customers. The first category is reimbursable customers. Reimbursable customers are typically State or local organizations that sign Joint Funding Agreements (JFAs) with USGS, Federal agencies that sign Interagency Agreements, or if they are military, Military Interdepartmental Purchase Agreements (MIPRs). The second category of customers is USGS organizations using the GPSC through the exchange of *appropriated funding* via Changes of Allocation (COA).

**Note:** *For the purposes of this document, we will focus on the **reimbursable customer only**.*

**Independent Government Cost Estimate (IGCE)**-A *best effort* estimate based on many hours of research by the CPT. A well-defined Statement of Work (SOW) is critical in formulating the IGCE. Slight variations in the specifications of a project can result in substantial differences in the final cost of the project.

**NGTOC Contracts Point of Contact (POC)** – Initial point of contact for all NGTOC contracts.

**NGTOC Agreement Coordinator**- Works with Liaisons, and Federal, State, and Local partners to ensure that agreements are complete, accurate, and legal. The agreement coordinator routes agreements

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through the operations branch for a thorough technical review by subject experts and other stakeholders at the NGTOC. Once the agreement is deemed accurate and complete, the agreements coordinator forwards the documents through to Admin & Finance for BASIS+ and FBMS entry under OAFM guidelines.

**NGTOC Management** – The management chain of the CPT. This chain is currently:

Supervisor & GPSC COR: Tim Saultz  
Shared Services Manager: Kevin Wood  
NGTOC Director: Kari Craun

**NGTOC Technical Staff-** Provide assistance to Liaisons in the formulation of specifications for specific products and may also provide services such as evaluation of deliverables. Provide technical assistance to CPT as needed.

**Reimbursable or Master Agreement:** The Reimbursable Agreement is a formal document that obligates reimbursable funding for the project from the customer to the NGTOC (see Attachment C for “Steps Required to Process USGS Reimbursable Agreements”). The Statement of Work is referenced as an integral part of the Reimbursable Agreement. As noted in the Customer definition, the main types of Reimbursable Agreement documents are the Joint Funding Agreement (State/Local customers), the Interagency Agreement (Other Federal agencies), and Military Interdepartmental Purchase Agreements (MIPRs with Department of Defense agencies).

**Statement of Work (SOW)** – A description of the specific work to be performed by the contractor that clearly states the nature and requirements of the project including area of interest, product specifications, deliverables, delivery dates, and QA/QC plans. An accurate and timely SOW will help speed the contracting process and ensure the end customer receives the products they need. The first version of an SOW is normally written by the customer and/or Liaison, and is later refined into the Task Order by CPT staff, and into the Reimbursable Agreement by the Liaison and the NGTOC Agreement Coordinator. As an integral part of the Reimbursable Agreement, the SOW must also clearly define responsibilities of the various interested parties (i.e. USGS, Contractor, and Customer(s)). It is expected that the SOW will go through much iteration before being finalized and included in the Reimbursable Agreement and Task Order. See Attachment I for an example.

**Task Order (TO)** – The document sent from the CPT to a contractor via the Contracting Officer defining the work of a project. The Task Order is a formal contracting document between GPSC (NGTOC) and the contractor. The Task Order evolves *from* the SOW through a series of reviews and enhancements.

**Contractor or Contractor**– Private companies that have successfully bid on the GPSC advertisement, thereby winning the right to be assigned specific contract tasks. *Contact between contractors and Liaisons must always be through the CPT POCs or COR.*

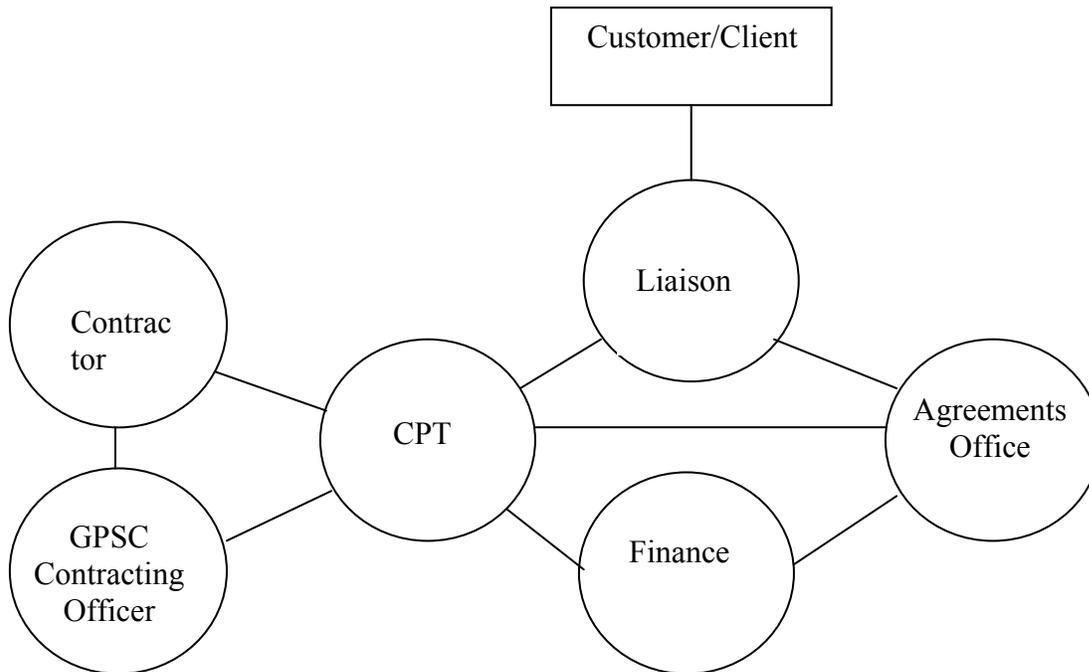
### **3 Products and services**

The following is a brief outline of the products and services within the scope of the GPSC.

1. Aerial data acquisition and off-the-shelf archived aerial imagery (photography, Lidar, IFSAR, RADAR, digital multi-spectral and hyper-spectral imaging, and all forms of digital sensor system technologies. Both film and digital output.
2. Survey and control services
3. Analytical aerotriangulation
4. Scanning services  
All types of materials. Also includes data merging, registration, alignment, and geo-referencing.
5. Orthophotography
6. Acquisition of ancillary data (data obtained by contacting other government agencies, through library searches, database and web searches, etc.)
7. Map collection and revision (production of USGS-standard quadrangle maps and quadrangle-based digital products).
8. Product generation (production of graphic publication separates and other hard copy products from digital files and scribed compilation manuscripts).
9. Thematic mapping (mapping done from a variety of remotely sensed sources and existing ancillary data including, but not limited to: land characterization, terrain modeling, plant vitality, soil moisture, thermal variance, and vegetation themes).

Other services that cannot be readily assigned to the above categories, including but not limited to custom mapping, GIS analysis, software development and support, standards development and review, quality control and assurance.

## 4 Roles and responsibilities



**Figure 1. Lines of communication for GPSC contract work.**

The absence of a direct link between two entities indicates that communication should involve a third and sometimes fourth party. For example, communication between the Customer and the CPT should include the Liaison and communication between the Customer and GPSC Contractor must *always* include the CPT and preferably the Liaison also.

*The scope of this diagram is the GPSC contracting process. It does not imply (for example) that a customer organization is prohibited from calling a GPSC contractor to discuss other business not related to any task contracted through GPSC.*

### 4.1 USGS Geospatial Liaisons

The Liaisons are the primary USGS point of contact with the customer. They have a major role in the inception of the project. Liaisons must understand both the customer's needs and the GPSC processes and services well enough to moderate and foster discussions between the customer, the CPT, the NGTOC Agreement Coordinator, and in some cases, other functional areas of the NGTOC. The Liaison is responsible for creating the first draft of a SOW and initiating the reimbursable agreement document. (refer to Attachment C for a list of the Steps Required to Process USGS Reimbursable Agreement.)

During the development of the SOW, the Liaison will work in tandem with both the CPT in the development of the Task Order and with the NGTOC Agreement Coordinator POC in working through the agreement process. Early involvement of the CPT, the NGTOC Agreement Coordinator and if needed, the NGTOC, is vital to a successful and timely contracting process.

### 4.2 GPSC Contracting Officer's Representative (COR)

The COR represents the Contracting Officer (CO) in all aspects of the Contract and Task Order management. The COR is also a CPT POC, but is "first among equals" within this group, and is responsible for maintaining a broad perspective of all projects in work. All communications with the CO go through the COR.

### ***4.3 Commercial Partnerships Team Points of Contact (CPT POC)***

The CPT POCs act for the COR in most routine discussions and transactions. They accept functional and technical requirements from the Liaison and customer, coordinate technical support provided by other parts of the NGTOC, prepare IGCEs, and do most of the actual work of assembling completed Task Orders, coordinating with contractors, and monitoring assigned Task Orders.

### ***4.4 NGTOC Agreement Staff***

The NGTOC Agreement Staff is responsible for ensuring the Reimbursable Agreement is in proper order, and that the USGS Reimbursable Checklist is completed (see Attachment D). All aspects of the agreement package are reviewed for completeness and accuracy, and for compliance with legal statutes. The Agreement Staff serves as a coordination mechanism between Geospatial liaisons, partners, CPT, Admin and Finance staff, Operations Staff, and other stakeholders and subject experts. The primary goal of the Agreements Staff is to assist in the process of executing reimbursable (and other types of partner agreements) toward the successful outcomes prescribed by the agreements themselves.

### ***4.5 NGTOC Admin and Finance Staff***

The NGTOC Finance Section manages appropriated and reimbursable funding that passes through the GPSC. They work closely with the NGTOC Agreement Coordinator to ensure reimbursable agreements signed by NGTOC contain the administrative and financial elements required by the USGS Office of Accounting and Financial Management (OAFM). They also work with other USGS offices to coordinate GPSC funding transfers to NGTOC via changes of allocation (appropriated) and sub-allocations (reimbursable). The Finance Section is also responsible for entering reimbursable agreements in the Financial and Business Management System (FBMS), creating Sales Orders, creating Work Breakdown Structures (accounts) to track expenses, processing GPSC purchase requisitions, processing GPSC contractor invoices, resolving billing issues with reimbursable customers, and providing guidance on financial matters.

### ***4.6 National Geospatial Technical Operations Center***

The NGTOC provides the environment and management infrastructure for the operation of the CPT. The NGTOC also provides technical support as needed to assist the CPT with project planning. NGTOC staffing is often not adequate to do everything requested by customers and liaisons. NGTOC management allocates resources, sets priorities for the flow of contract management work, and resolves disagreements about priorities and scope of work.

Deliverable inspection and validation of GPSC deliverables are possible roles of the NGTOC. This may involve separate agreements and negotiations between the customer/Liaison and the NGTOC. The NGTOC must be notified early in the planning process if their services will be needed.

## 5 Procedures

### 5.1 Task Order development overview

Developing and awarding a GPSC Task Order normally involves many discussions and several review cycles of the SOW. There are some hard requirements and fixed milestones in the process but between these milestones the work tends to be personal and iterative; progress is made through discussions and meetings rather than by (say) filling out forms. See Attachment G for Milestones and Checklists.

The following is an outline of the process at a high enough level of abstraction to be relevant to most cases.

#### 5.1.1 Project concept formation

Projects typically begin with informal discussions between Liaisons and customers. Customers at this point often have an undefined requirement for data and are interested in understanding how the USGS might help them satisfy that requirement through an existing contract.

The Liaison's primary objective at this stage is to bring a reasonable level of precision to the discussion. The overall objective is to determine if a solution to the customer's problem exists between these constraints:

1. Are the customer's requirements for deliverables both technically and contractually possible?
2. Are the customer's timeline requirements feasible?
3. Can the customer's requirements be met within their budget and the contract awarded before the end of the customer's fiscal year?

In the early stages of project planning it is common for there to be a huge disconnect between the product the customer wants (or believe they want) and the amount of money they can spend. Quantifying, explaining, and then narrowing this gap is one of the most important objectives of this early planning phase. *Liaisons are encouraged to involve the CPT in the process as early as possible in order to help clarify these issues to the customer.*

**NOTE: Please submit the Project Planning forms (Lidar example shown in Attachment G) when defining specifications for Lidar and/or Orthoimagery projects. MS Word versions can be downloaded from:**

Lidar: [http://thor-f5.er.usgs.gov/GPSC/LIDAR\\_Project\\_Planning\\_Requirements\\_V2.1.doc](http://thor-f5.er.usgs.gov/GPSC/LIDAR_Project_Planning_Requirements_V2.1.doc)

Ortho: [http://thor-f5.er.usgs.gov/GPSC/Ortho\\_Imagery\\_Project\\_Planning\\_Requirements\\_4\\_11\\_2007.doc](http://thor-f5.er.usgs.gov/GPSC/Ortho_Imagery_Project_Planning_Requirements_4_11_2007.doc)

#### 5.1.2 Statement of Work (SOW)

When requirements have been adequately defined, the Liaison prepares a SOW attaching the appropriate Project Planning form for Lidar or Ortho-Imagery projects (See Attachment G or download MS Word version from links above). It is not uncommon for the SOW to undergo several revisions as the Liaison moves through the planning process with the customer, CPT, Agreement Coordinator, and possibly the NGTOC. The Liaison will work in tandem with the CPT in the development of the Task Order, with the NGTOC Agreement Coordinator in working through the Reimbursable Agreement process (Figure 2), and possibly with the NGTOC if requesting services or technical expertise when defining specifications. See Attachments C, D, and E for supporting financial documentation.

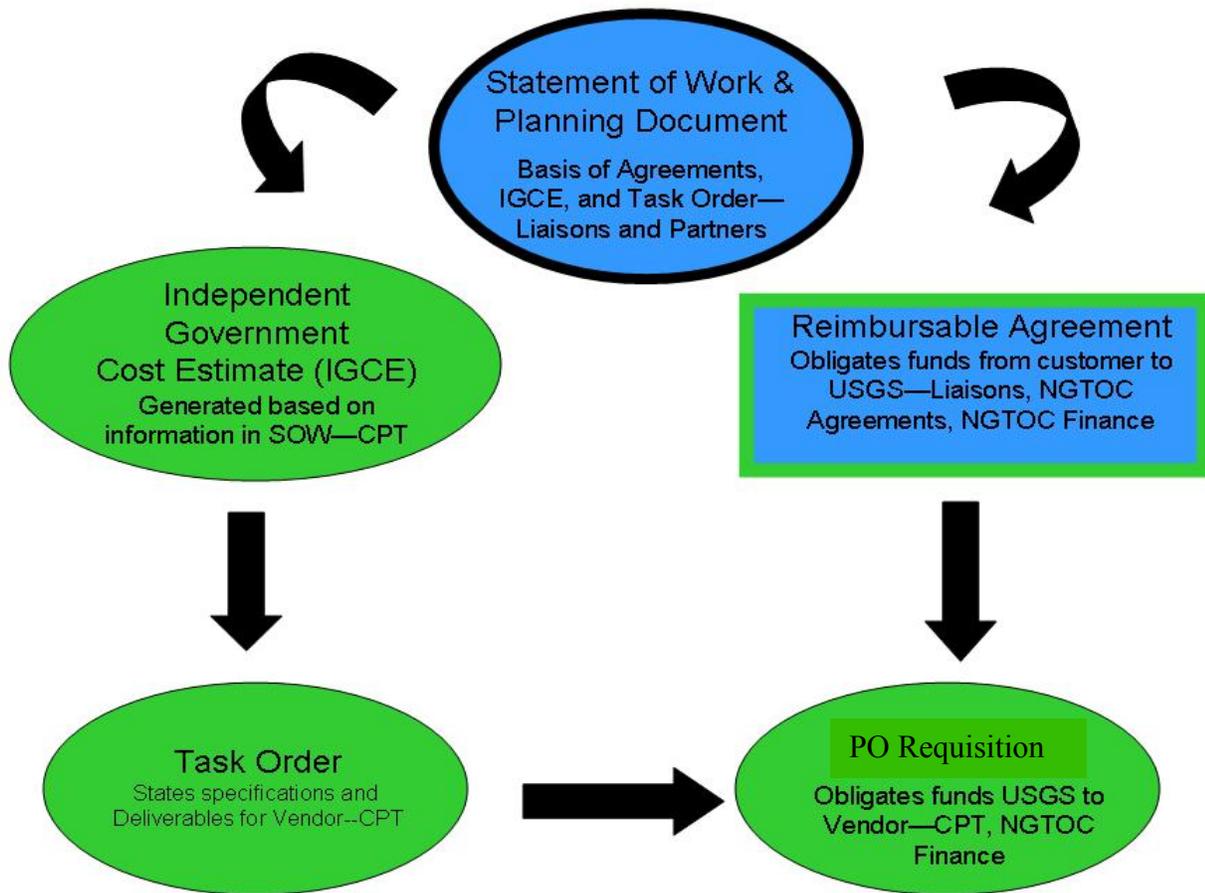


Figure 2

The SOW describes the customer’s technical requirements, the precise geographic extent of the project area, deliverables, proposed timelines, QA/QC contingencies, and clearly defined responsibilities of the involved parties (who is responsible to deliver or produce what). The CPT depends on clear specifications in order to provide the Liaison and customer with timely and accurate cost estimates. It is the Liaison’s responsibility to make the SOW a clearly understood document which accurately reflects the needs of the customer and doesn’t request deliverables that cannot be reasonably met. For example, the SOW should only propose deliverables that can be predicted to be within the customer’s budget, and within practical delivery schedules. The CPT is available to assist the Liaison with the SOW. NGTOC is also available to assist Liaisons on technical matters relating to the definition of specifications. See Attachment B for Points of Contact.

Liaisons should interact with contractors only through the COR for the GPSC, and should counsel customers to be similarly cautious. Confidentiality of information becomes critical at approximately the time the first version of the SOW is drafted.

### 5.1.3 Independent Government Cost Estimate (IGCE)

For most customers, the question “what will it cost?” is second in importance only to the question “what can I get?” Both questions normally come up extremely early in the agreement formulation process.

The term “cost estimate” has a precise meaning in a contracting process. The release of an IGCE by the CPT is a *best effort estimate* based on many hours of research by the CPT. The importance of a well defined SOW is critical in formulating the IGCE. Slight variations in the specifications of a project can result in substantial differences in the final cost of the project. The **final** cost of the project cannot be determined until GPSC negotiations with the contractor have been completed. It is critically important that all participants have a common understanding of exactly what is being promised for the amount estimated and to keep in mind that achieving this common understanding may take a significant amount of time. The customer will not have an accurate estimate for their request until the IGCE is completed.

The NGTOC proposes to work toward a solution to this dilemma by publishing brief case histories of past Task Orders. These narratives will be sanitized and simplified, but will allow Liaisons and customers to make reasonable inferences about the costs of common products and services.

Liaisons need to have a reasonable assurance of funding before they request an IGCE. The CPT cannot make “off the cuff” ballpark estimates. What may look like a small change in the specifications can result in a very different IGCE. Each time an IGCE is calculated, it takes additional hours and sometimes days to accomplish.

*Please note that the GPSC assessment is **NOT** included in the IGCE amount.*

### 5.1.4 Draft Task Order

The CPT uses the preliminary SOW to make a draft Task Order from which an IGCE is developed. Liaisons and customers review and approve the draft Task Order and IGCE amount.

### 5.1.5 Obligation of Reimbursable Funds from the Customer

Before a Task Order can be sent to a contractor and negotiations can begin, funds must be formally obligated from the customer agency to the USGS. This is an extremely important task, as delays in acquiring funding are often a significant bottleneck in the overall process and have, at times, caused aerial data acquisition to be delayed until the following flying season. The USGS cannot negotiate a Task Order until this step is completed by an appropriate exchange of official agreement paperwork or sub-allocation of funds. **Negotiating with the contractor earlier than this would commit the USGS to paying for the contractor’s work, which is a violation of Federal law.** Once agreement(s) are signed, processed, and approved (or sub-allocations have been received), negotiations between the CPT and contractors can begin. The Liaison should be working with the NGTOC Agreement Coordinator from the outset of the project in order to ensure the financial process runs smoothly. Documents relating to the obligation of funds, including “Steps Required to Process USGS Reimbursable Agreements,” can be found in Attachments C, D, and E.

### 5.1.6 Negotiations

Once a signed agreement or sub-allocation has been confirmed by the NGTOC Finance Section, negotiations between the contractor, CPT POC, COR, and CO begins. Upon completion of a successful

negotiation and customer approval, a Task Order is awarded. It is common for some revision of the Task Order and project cost estimates to take place at the conclusion of the negotiations.

### 5.1.7 Awarding of the Task Order

The CPT and CO proceed with the award process. These steps are mostly transparent to the customer – one of the primary benefits to customers using the GPSC.

### 5.1.8 First deliverables, inspection and validation

Details of deliveries – requirements, schedule, media, destination, etc. – are specified in the Task Order. Where the products are delivered may depend on what inspection and validation procedures are desired by the customer.

In some cases there will be some inspection by an independent organization to evaluate whether or not the terms of the contract have been met, and in most cases, initial deliveries will be made to the CPT to ensure that project delivery requirements are met. Deliveries that do not meet specifications may be sent back to the contractor for rework. Inspection and validation is important and complicated, and is therefore discussed further in Section 6.

### 5.1.9 Final deliverables and sign-off

CPT POC and COR communicate with the contractor as needed to track progress. When all deliverables have been received and accepted by the customer, the COR notifies the CO, NGTOC Agreement Coordinator, and contractor. Once the contractor's invoice is received, it is reviewed for accuracy, approved by the COR, and then submitted to USGS for payment. The customer is billed based on the type of agreement and other arrangements as outlined in the reimbursable agreements document.

## 5.2 *Timelines*

The time required for the processing in Section 5.1 varies widely. In one emergency case, the CPT took an entire Lidar project, from initial concept to execution, in less than 8 hours, with final delivery in 10 days. Elapsed times of 3-6 months are much more normal, and at times, longer than a year.

Contracting is a bureaucratic process that requires the cooperation of many people and the coordination of many schedules. No one person can control the overall process. Early involvement of the CPT and the NGTOC Agreement Coordinator will help to speed the process. Major influences on the timeline include:

- The initial definition of requirements. Does the customer have a clear idea of what they want, and does this line up with available funding? The definition of requirements may change depending upon the scope of the project, until the TO is sent to contracts.
- The official transfer of funds via a signed agreement or sub-allocation at the appropriate time.
- Previously scheduled workloads of contractors. There are relatively few flying days in a year, especially for imagery, and only so much work can be accomplished on these days. The earlier the process is begun, the earlier the project will enter the contractors work queue. Waiting until the last minute means rushed documents with possibly incomplete or incorrect specifications and delays in contractor scheduling.
- Existing obligations of Liaisons and CPT POCs.

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- The relationship of desired work to the fiscal year cycles of both the Federal government and the customer organization.
- The level of post-production inspection and QA desired, and what organization will do this work.
- The number of customers and/or individual agreements that must be processed.

It is the position of NGTOC management and the CPT that awarding tasks quickly is not an inherent virtue. The desire for speed, while understandable, must always be tempered by a more fundamental requirement to provide data or services that will meet the customer's needs.

### 5.3 *Data ownership*

The ownership of the final deliverables is specified in the Task Order. While there are exceptions, in most instances the organization that pays the bill owns the data and other deliverables.

The USGS normally has an interest in obtaining a copy of these data for inclusion in national geospatial databases. If any USGS funds are used to purchase, process, or validate data, the data must be in the public domain and USGS is entitled to a copy of the data. Liaisons should explore this with customers and NGTOC management and attempt to negotiate mutually satisfactory data-sharing agreements early in the planning process.

## 6 Evaluation of deliverables

A normal part of any contracting process is to perform some inspection or evaluation of the deliverables. Ideally, this inspection is performed by an independent party, one that is not involved in the production of the data.

The CPT recommends two avenues for evaluation of deliverables.

1. **Another GPSC contractor (other than the data producer) performs the validation.** This has been done a few times, and has worked well. An advantage of this method is that the customer can specify, within very broad limits, how complete and rigorous the inspection should be. A disadvantage is that this adds additional costs. Having a contractor perform inspection and validation requires a separate Task Order, but this is transparent to the Liaison and customer. **Important Note:** If the customer is going to pay for QA under a single agreement, he should be aware that at the point he signs the initial agreement, the QA cost is still an estimate that will be finalized prior to QA Award.
2. **The NGTOC performs the validation.** In the past, this has been more common, but it is not necessarily a better option. It requires early contact with NGTOC to ascertain availability of resources for the project. An advantage is that the NGTOC may do the work at no cash cost in exchange for a copy of the data for inclusion in USGS national geospatial databases. A disadvantage is that NGTOC data validation capabilities are more limited than those of contractors.

Other options would include the customer doing the inspection themselves, or independently contracting with some other entity. While such options are theoretically feasible, the CPT would not normally recommend them. Both options tend to introduce instability into the business relationships of the major parties to the Task Order. If a contractor has no history with the GPSC or the Task Order contractor, it may be hard to achieve a reasonable common understanding of what comprises acceptable or unacceptable data.

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Cases have also occurred in which a customer has wanted to use the GPSC for inspection or validation of work that was contracted through some other vehicle. This is feasible, but requires considerable advance work to make the two different contract Task Orders consistent. It is not a good idea to hastily craft a GPSC inspection and validation task for another contract that is already finalized and in work.

Finally, there is of course the option of simply accepting the deliverables without inspection. This is not recommended, for obvious reasons.

## **7 Emergency Operations**

The GPSC can be used as a contracting vehicle for emergency data collection, for example, to fly Lidar or aerial photography in the immediate aftermath of a hurricane, tornado, or other disaster. Since this is such an important subject it is treated in a separate document, “Standard Operating Procedure for USGS Geospatial Product and Service Contracts (GPSC) Response to Emergency Requests for Imagery,” available by contacting the CPT at [gpssc@usgs.gov](mailto:gpssc@usgs.gov).

The importance of becoming familiar with these procedures **before** an actual emergency occurs cannot be overemphasized. Liaisons should be personally familiar with these procedures and work to transfer the knowledge to our data partners.

## **Attachment A. Acronyms**

A&E	Architect and Engineering
AOI	Area of Interest
CPT	Commercial Partnerships Team
CPT POC	Commercial Partnerships Team POC
CO	Contracting Officer
COA	Change of Allocation
COR	Contracting Officer's Representative
DI-1	Department of Interior Requisition Form (now called "Purchase Requisition")
GIS	Geographic Information System
GPSC	Geospatial Product and Service Contracts
GSD	Ground Sample Distance
IA	Interagency Agreement (between Federal agencies)
IFSAR	Interferometric Synthetic Aperture Radar
IGCE	Independent Government Cost Estimate
JFA	Joint Funding Agreement (uses DOI Form 9-1366R (Oct 2005))
IPAC	Interdepartmental Payments and Collections
Lidar	Light Detecting and Ranging
MIPR	Military Interdepartmental Purchase Request (used by DOD agencies)
PAT	Planning and Analysis Team (NGTOC-Rolla)
POC	Point of Contact
QA/QC	Quality Assurance/Quality Control
NGTOC	National Geospatial Technical Operations Center

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NSDI	National Spatial Data Infrastructure
RA	Reimbursable Agreement
RFP	Request for Proposal
RGIO	Regional Geospatial Information Office
RADAR	Radio Detection and Ranging
SM	Survey Manual
SOW	Statement of Work
TO	Task Order
USGS	United States Geological Survey

## Attachment B. Points of Contact

**Mark Gewinner, NGTOC Agreements Coordinator**

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Office: (573) 308-3549  
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**Nate Singleton, Program Analyst, NGTOC Agreements Office**

USGS NGTOC  
1400 Independence Road  
MS 307  
Rolla, MO 65401  
Email: [nsingleton@usgs.gov](mailto:nsingleton@usgs.gov)  
Office: (573) 308-3542  
Fax: (573) 308-3652

**Tim Saultz, COR, Chief, Commercial Partnership Team**

USGS NGTOC  
1400 Independence Rd.  
MS 670  
Rolla, MO 65401  
Email: [tsaultz@usgs.gov](mailto:tsaultz@usgs.gov)  
Office: (573) 308-3654  
Fax: (573) 308-3810

**Gail Dunn, CPT POC**

USGS NGTOC  
1400 Independence Rd.  
MS 663  
Rolla, MO 65401  
Email: [gdunn@usgs.gov](mailto:gdunn@usgs.gov)  
Office: (573) 308-3756  
Fax: (573) 308-3810

**Robert Kelly, CPT POC**

USGS NGTOC  
1400 Independence Rd.  
MS 665  
Rolla, MO 65401  
Email: [ckelly@usgs.gov](mailto:ckelly@usgs.gov)  
Office: (573) 308-3612  
Fax: (573) 308-3810

**Patrick Emmett**

USGS NGTOC  
1400 Independence Rd.  
MS 666  
Rolla, MO 65401  
Email: [pemmett@usgs.gov](mailto:pemmett@usgs.gov)  
Office: (573) 308-3587  
Fax: (573) 308-3810

**Joe Scott**

USGS NGTOC  
1400 Independence Rd.  
MS 661  
Rolla, MO 65401  
Email: [jwscott@usgs.gov](mailto:jwscott@usgs.gov)  
Office: (573) 308-3700  
Fax: (573) 308-3810

**Mike Duncan**

USGS NGTOC  
1400 Independence Road  
MS 668  
Rolla, MO 65401  
Email: [jduncan@usgs.gov](mailto:jduncan@usgs.gov)  
Office: (573) 308-3799  
Fax: (573) 308-3810

**Mark Jessip, NGTOC Admin & Finance Section Chief**

USGS NGTOC  
1400 Independence Road  
MS 333  
Rolla, MO 65401  
Email: [mjessip@usgs.gov](mailto:mjessip@usgs.gov)  
Office: (573) 308-3706  
Fax: (573) 308-3652

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**Deborah Prater, Program Analyst, NGTOC Admin & Finance Section**

USGS NGTOC  
1400 Independence Road  
MS 311  
Rolla, MO 65401  
Email: [dprater@usgs.gov](mailto:dprater@usgs.gov)  
Office: (573) 308-3643  
Fax: (573) 308-3652

**USGS Geospatial Liaisons contact information can be accessed from**

<http://liaisons.usgs.gov/geospatial/>

## **Program and Technical Points of Contact**

The following people can be used as initial points of contact for background and technical information. For example, it would be appropriate to contact people on these lists to get information about the differences between Lidar and IFSAR, or to learn more about how the NGTOC inspects and validates Lidar data, but these are not the people to discuss (for example) preparation of a Task Order for contracting a specific Lidar collection project.

<b>Agreements</b>	Mark Gewinner (Rolla); Jim Almekinder (Rolla)
<b>Archive/Scanning/Graphics</b>	Robert Rinehart (Rolla)
<b>Common Systems/development</b>	Paul Wiese (Denver)
<b>GNIS/Names</b>	Maria McCormick (Denver); Jane Messenger (Rolla)
<b>Imagery/Elevation</b>	Russ Caton (Rolla)
<b>National Hydrography Dataset</b>	Paul Kimsey (Denver); Christine Lund (Denver)
<b>Standards/FGDC</b>	Jennifer Walter (Denver)
<b>TNM Viewer</b>	Calvin Meyer (Rolla)
<b>Trans/Structures/Boundaries</b>	Chuck Matthys (Denver)

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**Attachment C. Steps Required to Process USGS Reimbursable Agreements (as of 10/1/12).**

<b>Steps Required to Process USGS Reimbursable Agreements (02/28/2007)</b>				
<b>Steps</b>	<b>RGIO</b>	<b>Cost Center Signing Master Agreement</b>	<b>Cost Center Responsible for Actual Work</b>	<b>Average Time to Perform Task</b>
Agreement discussions with reimbursable customer using USGS checklist as guide	X			1 to 3 months per agreement
Decision on Cost Center for work/agreement owner	X	X	X	4 to 5 work days per agreement
Cost Center estimate		X	X	4 to 5 work days per agreement
Drafting agreement	X	X	X	4 to 5 work days per agreement
Agreement review		X	X	2 to 4 weeks per agreement
Agreement signing by both parties		X	X	1-2 weeks per agreement
Complete NGPO Routing Sheet (attachment B to "Draft Signature Authority for NGPO Agreements dated 8/26/2005)		X	X	2 to 5 work days per agreement
Agreement entry into FBMS		X		1-2 days (including approvals)
Account creation into BASIS+			X	1-2 days (including approvals)
Enter reimbursable agreement into ACIS		X		1 to 2 hours per agreement
Enter labor and other expenses information into BASIS+			X	1 to 2 hours for labor (X see hard copy) 15 minutes for GPSC contracts
Monitor progress of work/contractors			X	1 hour monthly per contractor
Review contractor work and approve/process payments to contractors			X	30 to 60 minutes monthly per contract DI-1
Bill customer		X		1 hour per reimbursable agreement (manual bills only)
Delivery of products/services			X	1 to 2 hours per delivery

## Attachment D. Reimbursable Agreement Checklist (Sample and Example)

Please use the latest versions of the checklist available on the web. Separate checklists now exist for Federal and State customers.

Customer #: \_\_\_\_\_ Agreement #: \_\_\_\_\_ Cost Center: \_\_\_\_\_

<b>Elements of Agreement:</b> All elements on the checklist must be included in the agreement package when applicable. Indicate by N/A if the element is not applicable. Each section must be verified by initialing on the line provided. The items where a check mark exists in the Page # column are <u>mandatory</u> and the page number must be provided to identify where the element can be found in the agreement package. The agreement package consists of the signed agreement and/or modification; cover/acceptance letter, addendum, or email; completed and signed reimbursable agreement checklist; and any other supporting documentation (e.g., cost share worksheet, special rate approval).		
<b>CUSTOMER INFORMATION SECTION:</b>		<b>Initials:</b> _____
	<i>Page #</i>	<i>Comments</i>
1) Agreement Number/DCN	√	
2) Name of Organization/Cost Center	√	
3) Legal authority to enter into agreement ( <i>Federal</i> )	√	<b>Must be included if agreement based on customer's authority</b>
4) TIN ( <i>non-Federal, excluding foreign</i> )	√	
5) DUNS Number ( <i>Federal</i> )	√	
6) Point of Contact		
7) Address		
8) Office phone, Fax and/or Email		
<b>USGS INFORMATION SECTION:</b>		<b>Initials:</b> _____
	<i>Page #</i>	<i>Comments</i>
1) Organization and Cost Center	√	
2) Legal authority to enter into agreement	√	<b>Must be in the Agreement Package</b>
3) DUNS Number ( <i>Federal agreements</i> )	√	
4) Project Chief/Principal Investigator		
5) Address		
6) Office phone, Fax, and/or Email		
7) Signatures		<b>Is Agreement signed in accordance with Financial Delegations of Authority; for Non-Standard JFAs see SM 205.13.A</b>
<b>SCOPE OF WORK SECTION :</b>		<b>Initials:</b> _____
	<i>Page #</i>	<i>Comments</i>
1) Period of Performance	√	<b>Start &amp; End Date</b>
2) Description of Services and Responsibilities		
3) Agreement Deliverables ( <i>If applicable</i> )		
4) Authority to Publish	√	
5) If in-kind services provided, describe in agreement ( <i>If applicable</i> )		<b>Voucher must be sent in with agreement. If not currently available, date you plan to forward to Fiscal Services.</b>
6) Equipment/Property requirements or restrictions ( <i>If applicable</i> )		
7) Multiple Tasks ( <i>If applicable</i> )		
<b>FUNDING INFORMATION SECTION:</b>		<b>Initials:</b> _____
	<i>Page #</i>	<i>Comments</i>
1) Total Amount of Agreement	√	
2) Modification Number ( <i>If applicable</i> )	√	
3) Amount of Modification ( <i>If applicable</i> )	√	
4) Agreement Type	√	<b>(Circle All Applicable) Fixed Price, Reimb, JFA, Coop, Other</b>
<b>BILLING INFORMATION SECTION :</b>		<b>Initials:</b> _____
	<i>Page #</i>	<i>Comments</i>
1) Billing Address/Contact /Office Phone	√	<b>Verify address/contact in VEND table (non-Federal, excluding foreign)</b>
2) Frequency of Billing	√	<b>(Circle One) Monthly, Quarterly, Semi-annual, Annual</b>
3) Federal Customer Agency Location Code	√	
4) Federal Customer Treasury Fund Account Symbol	√	
5) DOD Agreements – Include FSN and MIPR Accounting Classification Code	√	
6) Mandatory Termination Clause (see attached)	√	

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<b>INTERNAL INFORMATION SECTION:</b>		
1) FFS CUSTOMER NUMBER AND FFS AGREEMENT NUMBER (WRITE IN)		
<b>Miscellaneous (If Applicable):</b>		<i>If Applicable:</i>
2) Cost Share		<b>Attach Cost Share Worksheet</b>
3) Calculations for blended assessment rate ( <i>e.g. interdisciplinary work</i> )		<b>Copies must be filed with the agreement</b>
4) Special Rate Approvals		<b>Copies must be filed with the agreement</b>
5) Cover/Acceptance Letter		<b>Copies of Official letter to accept funds, state authority to publish, reimbursable, etc., must be filed with the agreement</b>
6) Supports USGS Program		<b>Write In - Program Element:</b>
7) Cost Calculations for Direct Costs		<b>Must be available at Cost Center</b>
8) Cost Calculations for Indirect Costs		<b>Must be available at Cost Center</b>
<b>Project Chief/Principal Investigator</b> ( <i>Name/Phone/Signature</i> )		<b>Date</b>
<b>Cost Center Financial Reviewer</b> ( <i>Name/Phone/Signature</i> )		<b>Date</b>



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5) Cover/Acceptance Letter	IAA 4/5/2007	Yes	Copies of Official letter to accept funds, state authority to publish, reimbursable, etc., must be filed with the agreement
6) Supports USGS Program		Yes	Write In - Program Element: 84000
7) Cost Calculations for Direct Costs		BASIS+	Must be available at Cost Center In BASIS+
8) Cost Calculations for Indirect Costs		BASIS+	Must be available at Cost Center In BASIS+
<b>Project Chief/Principal Investigator</b> (Name/Phone/Signature) Craig Neidig 304/347-5130 x237			<b>Date</b>
<b>Cost Center Financial Reviewer</b> (Name/Phone/Signature) Debbie Prater 573/308-3643			<b>Date</b>

## Attachment E. NGTOC Information for Other Agency Purchase Orders or Agreements

### National Geospatial Technical Operations Center (NGTOC) Information for Other Agency Purchase Orders or Agreements (9/19/2012)

**Authorized Person to Sign/Accept Purchase Order:**

Kari Craun, Director, National Geospatial Technical Operations Center  
U. S. Geological Survey  
1400 Independence Road, MS 302  
Rolla, MO 65401

Phone: (573) 308-3802  
Fax: (573) 308-3652

**Financial Point of Contact:**

Debbie Prater  
U.S. Geological Survey  
National Geospatial Operations Center Rolla  
1400 Independence Road, MS 311  
Rolla, MO 65401

Phone: (573)308-3643  
Fax: (573) 308-3652

**Or**

Jim Almekinder  
U.S. Geological Survey  
National Geospatial Operations Center Rolla  
1400 Independence Road, MS 336  
Rolla, MO 65401

Phone: (573)308-3549  
Fax: (573) 308-3652

**Accounting Information:**

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USGS Agency Location Code (ALC): 1408-0001

NGTOC Data Universal Numbering System (DUNS) No: 19-596-4445

USGS Employer/Tax ID Number (TIN): 53-0196958

USGS Appropriation Code/Symbol (for collection): (14y0804 where “y” = type of funding – 2/3 for 2012/2013; 3/4 for 2013/2014; “x” for “No-year”))

Should you have additional questions, please call Debbie Prater at (573) 308- 3643 or Jim Almekinder at (573) 308-3549.

Liaisons should note that NGTOC will need the ALC and DUNS codes for ALL Federal agencies. Military agencies must also supply Fiscal Station Number (FSN) and state/local agencies must supply TIN

## Attachment F. Milestones and checklists

### ***State Liaison checklist (pre-award)***

\_\_\_\_\_ Define project parameters and expectations with customer (use Project Planning document, Attachment I, if appropriate).

\_\_\_\_\_ Initiate Contact with the GPSC COR and CPT.

\_\_\_\_\_ Initiate Contact with NGTOC Agreement Coordinator.

\_\_\_\_\_ Determine product specifications (product type, ground resolution, processing level, accuracy levels, sun angle, leaf-off, CIR, natural color, features, stereo models, format, etc.).

\_\_\_\_\_ Clearly define area of interest (AOI) using a shapefile or geographic boundary.

\_\_\_\_\_ Explore and discuss QA/QC options with customer:

1. Customer QA/QC
2. Contractor QA/QC (can be included in task)
3. USGS QA/QC (separate agreement must be reached with NGTOC Rolla or Denver.)

\_\_\_\_\_ Explore funding considerations with customer including funding source, assessments, and partnerships.

\_\_\_\_\_ Prepare financial documentation working with the GPSC Agreement Coordinator.

\_\_\_\_\_ Prepare and submit SOW to GPSC COR, include AOI shapefile, bounding coordinates, list of counties, or similar description of study area, and Project Planning forms (attachment I) where appropriate.

\_\_\_\_\_ Once the Independent Government Cost Estimate (IGCE) and draft Task Order are received from GPSC COR and CPT POC, discuss and finalize documents with customer.

\_\_\_\_\_ Upon customer approval of IGCE and SOW, finalize and submit Reimbursable Agreements to the NGTOC Agreement Coordinator..

### ***GPSC COR and CPT POC checklist (pre-award)***

\_\_\_\_\_ After initial contact from Liaison, contact CO and NGTOC Agreement Coordinator and advise them of possible new tasking.

\_\_\_\_\_ Assist Liaison with questions regarding SOW.

\_\_\_\_\_ Once SOW is received from the Liaison the GPSC COR will determine the appropriate contract vehicle (A&E, Best Value, CAP-C).

\_\_\_\_\_ The CPT POC will prepare the Independent Government Cost Estimate (IGCE) using the SOW.

\_\_\_\_\_ The IGCE and draft SOW are submitted to the customer via the Liaison for review and approval.

\_\_\_\_\_ Once the Reimbursable Agreements are in place and confirmed by the NGTOC Agreement Coordinator, the Purchase Requisition is prepared and signed by NGTOC officials.

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\_\_\_\_\_ Submit Task Order, Purchase Requisition, and supporting financial documentation to the CO at Central Regional Services, Acquisitions and Grants Branch.

**TASK ORDER MILESTONES**

Request for Proposal (RFP) prepared by the CO and sent to Contractor.

Contractor submits Technical & Cost Proposal.

GPSC COR, CPT POC, and CO review Technical & Cost proposal. (Technical Proposal and overall cost is shared with customer and Liaison).

Negotiations are held between contractor and the government represented by the CO, GPSC COR, and CPT POC.

After successful negotiations, the Task Order is awarded to the contractor.

Contractor begins works and submits monthly progress reports.

CPT POC monitors deliverables and monthly report schedules.

CPT POC keeps GPSC COR, NGTOC Agreement Coordinator, Liaison, and customer apprised of progress, developments, delays, or work quality.

GPSC COR keeps CO informed. Contract modifications, if needed are recommended by GPSC COR and completed by CO.

Deliverables are reviewed according to terms agreed to in the Task Order.

CPT POC advises GPSC COR of deliverable review and recommends acceptance or rework of deliverable.

**POST AWARD MILESTONES**

GPSC COR prepares follow-up documentation

Once all deliverables have been delivered and accepted, GPSC COR notifies CO, Liaison, Customer, NGTOC Agreement Coordinator, and contractor.

Once the contractor's invoice is received, it is reviewed for accuracy and approved by the COR. Invoices are submitted via Internet Payment Platform System (IPPS) based on guidance provided by NGTOC Finance Section.

The customer is billed based on the type of agreement and the billing terms specified in it.

## Attachment G. Sample SOW

**PROJECT DESCRIPTION  
FOR THE ACQUISITION OF DIGITAL ELEVATION DATA  
BETWEEN  
USGS, National Geospatial Program Office  
AND  
EFFINGHAM COUNTY, GA., BOARD OF COMMISSIONERS**

**DECEMBER 11, 2007**

### **Effingham County, Ga. High-resolution elevation acquisition proposal.**

#### **Purpose:**

This acquisition is for current LiDAR derived high-resolution elevation data for the full extent of Effingham County Ga., an area of approximately 483 sq. miles. Effingham is a second-tier coastal county of Georgia within the 50-mile Atlantic coastal priority area as defined by the National Geospatial-Intelligence Agency (NGA). This project also supports the National Spatial Data Infrastructure (NSDI) and will advance USGS efforts related to Geospatial One-Stop and *The National Map*.

#### **Background:**

**OMB Circular A-16** “Coordination of Geographic Information and Related Spatial Data Activities” provides for improvements in coordination and use of spatial data. Spatial data refers to information about places or geography, and has traditionally been shown on maps. This Circular describes the effective and economical use and management of spatial data assets in the digital environment for the benefit of the government and the nation. The Circular affirms and describes the National Spatial Data Infrastructure (NSDI).

The NSDI supports and advances the building of a Global Spatial Data Infrastructure, consistent with national security, national defense, national intelligence, and international trade requirements. The components of the NSDI are data themes, metadata, the National Spatial Data Clearinghouse, standards, and partnerships.

*The National Map* is a consistent framework for geographic knowledge needed by the Nation. It provides public access to high-quality, geospatial data and information from multiple partners to help support decision-making by resource managers and the public. *The National Map* is the product of a consortium of Federal, State, and local partners who provide geospatial data to enhance America's ability to access, integrate, and apply geospatial data at global, national, and local scales.

A cooperative relationship between Federal, State, and local geospatial data producing agencies is essential for the development of the National Spatial Data Infrastructure (NSDI) and successful implementation of *The National Map*. The highest priority activity for *The National Map* is the

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collection of high resolution framework data, which includes current elevation data covering the coastal priority areas as identified by the NGA. This Cooperative Agreement between the USGS and the Effingham County Board of Commissioners will result in meeting the need for current high-resolution digital elevation data over the Effingham Co. Ga., will effectively distribute the burden of production costs, and will eliminate duplication of effort between parties.

**Scope of Work:**

This is an acquisition through the USGS Geospatial Product and Service Contract (GPSC). The Effingham County Ga. Board of Commissioners, Geographic Information Systems (GIS) department, requests the assistance of the U.S. Geological Survey in the acquisition of high-resolution LiDAR derived elevation data for the county. Effingham Co., with an estimated 2007 population of 48,000 is a second-tier coastal county, lying within the 50-mile coastal zone of Georgia with a land area of approximately 483 sq. miles (Attachment A.). Adjacent to and inland from Chatham Co. and Savannah Ga. and bordering South Carolina along the Savannah River, Effingham is experiencing rapid urban development expanding from the Savannah Ga. metropolitan region.

The Federal Emergency Management Agency (FEMA) has required the County to update their floodplain mapping. The County wishes to obtain the best elevation data possible to be used in this effort. In addition, due to the location within the 50-mile coastal buffer zone, it would be financially advantageous to leverage this effort to acquire data for the entire county in anticipation of edge-matching future acquisitions in the remaining Ga. coastal zone counties; including neighboring Chatham, during the next 2-3 years. In order to meet the goals and demands of the FEMA project and obtain the best possible data, the LiDAR acquisition would need to take place in the leaf-off winter season of 2008, preferably sometime from January to March, 2008. Due to the low relief, proximity of the Atlantic Ocean, and influence of tidal effects, elevation data is needed sufficient to generate 1 ft. contours (Appendix 1, LIDAR Requirements).

Effingham County has allocated significant funding for this effort, however, in order to take advantage of the opportunity for acquiring elevation over the entire county and then provide the data for inclusion into the USGS elevation framework for The National Map, additional funding and support from the USGS would be needed. This data would then be available for inclusion in the anticipated future elevation acquisitions along the entire Georgia coast and would be within the public domain. To facilitate data discovery and comply with NSDI mandates, all elevation data produced as a result of this acquisition will have associated FGDC-compliant metadata. Effingham County GIS has been a supportive and eager partner for geospatial activities in Coastal Georgia and a strong advocate of the NSDI and data sharing.

**LiDAR Specifications (also refer to Appendix 1):**

Area of Coverage:	Entire area of the County (see Attachment A).
Total project area:	Approximately 483 mi <sup>2</sup> .
Data Acquisition Date:	January 1, 2008 to March 1, 2008
Projection:	State Plane, Ga. East
Units:	Feet
Horizontal Datum:	NAD83

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Vertical Datum: NAVD88  
Elevation Resolution: 0.7 meter  
Vertical Accuracy: 9cm  
Format: Raw and processed point cloud=LAS/ESRI GRID, 1 meter  
1ft. contours with breaklines, shapefile format.  
Delivery Media: DVD or external hard-drive

**Deliverables:**

The USGS will provide Effingham Co. GIS:

- 1) One copy of raw and processed bare earth LiDAR elevation point cloud data.
- 2) One copy of the LiDAR bare earth elevation data formatted to 1-meter post spaced grid.
- 3) Contours at one-foot interval derived from processed bare earth LiDAR with breaklines
- 4) Elevation data project index in shapefile format with extent of project area and relative position of elevation tiles and tile names.
- 5) Associated FGDC-compliant elevation metadata.

Deliver Data to:

Kresha Jones-Aycock  
Effingham County Board of Commissioners  
GIS Department  
601 North Laurel St.  
Springfield, Ga. 31329-0307  
[kjones@effinghamcounty.org](mailto:kjones@effinghamcounty.org)

Data Delivery from:

Keith W. McFadden  
U.S. Geological Survey  
3039 Amwiler Rd. Suite 130  
Atlanta, Ga. 30360  
[keithmc@usgs.gov](mailto:keithmc@usgs.gov)

**Contacts:**

**U.S. Geological Survey**  
Keith W. McFadden  
3039 Amwiler Rd. Suite 130  
Atlanta, Ga. 30360  
770-903-9150  
[keithmc@usgs.gov](mailto:keithmc@usgs.gov)

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**Effingham County GIS**  
Kresha Jones-Aycock  
GIS Department  
601 North Laurel St.  
Springfield, Ga. 31329-0307  
(912) 754-2105 ext. 4503  
[kjones@effinghamcounty.org](mailto:kjones@effinghamcounty.org)

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**LiDAR Planning Requirements**

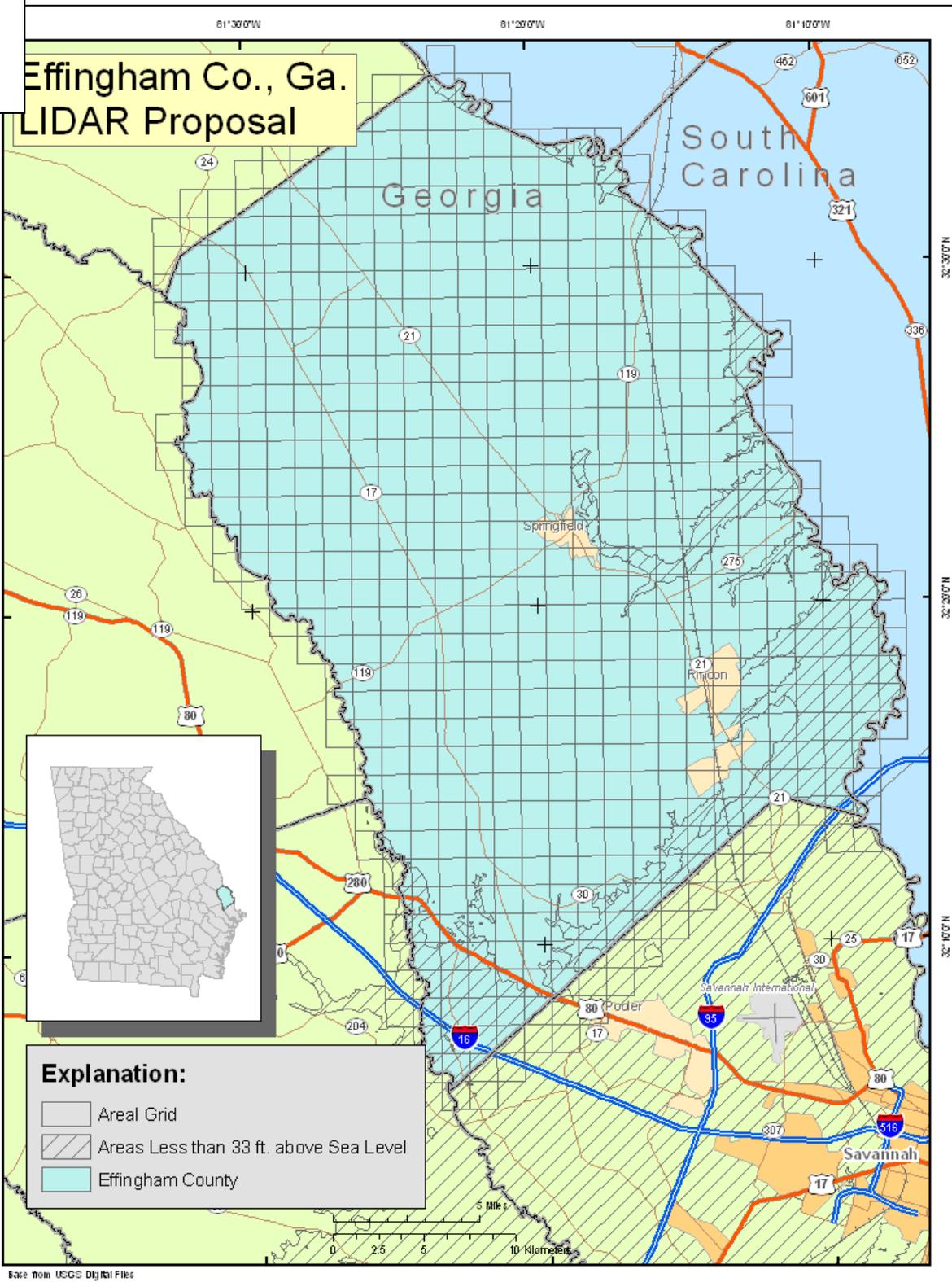
<b>LIDAR PROJECT PLANNING REQUIREMENTS</b> Submit only <b><u>ONE COMPLETE REQUIREMENT</u></b> per Form	
<b>Project Title:</b> Effingham Co. LIDAR	
<b>Primary Contact (Liaison):</b> Keith W. McFadden	
Funding Sources: (Check all that apply)	USGS - <input checked="" type="checkbox"/> : Other Federal - <input type="checkbox"/> : State Government - <input type="checkbox"/> : Local Government - <input checked="" type="checkbox"/> : Other (explain) - <input type="checkbox"/>
Partner Agency Financial Point of Contact (Name, address, phone, and e-mail -Include all if more than one agency is involved) Kresha Jones-Aycock (kjones@EffinghamCounty.org) Effingham County Board of Commissioners GIS Department 601 North Laurel Street Springfield, GA 31329-0307	
Project Foot Print (shapefile) Included : <input checked="" type="checkbox"/> If Not – Why Not and when will it be provided : Shape file parameters: Datum – NAD83 : Projection - Albers Shape files must be provided by partner before an estimate of project will be provided.	
Date Estimate is required: (Allow a minimum of 1 week for estimate from time of supplying all information. Allow more time for more complex tasks.)	
Date Project is expected to start: (Allow a minimum of 3 weeks from funding becoming available to NGTOC.)	
Date FUNDING is expected to be available and all documents signed :	
<b>VARIABLY SPACED LIDAR PRODUCTS</b>	
<b>Ground Sample Distance</b>	0.7-meter - <input checked="" type="checkbox"/> : 1.0-meter - <input type="checkbox"/> : 1.4-meter - <input type="checkbox"/> : Other:
<b>Collection Conditions</b>	Leaf Off - <input checked="" type="checkbox"/> : Snow Free - <input checked="" type="checkbox"/> : Normal Water - <input checked="" type="checkbox"/> : Other Conditions -
<b>Accuracy Required</b> (Bare Earth)	<u>Vertical</u> : 15cm VRMSE - <input type="checkbox"/> : 18cm VRMSE - <input type="checkbox"/> : Other – 9cm <u>Horizontal</u> : 1 meter RMS @ 95% confidence level - <input checked="" type="checkbox"/> : Other -
<b>Products</b> (Mass Points)	First Return - <input type="checkbox"/> : Last Return - <input type="checkbox"/> : Bare Earth - <input checked="" type="checkbox"/> : No. Returns Required -
<b>Datum</b> (select one each)	<u>Vertical</u> : NGVD 29 - <input type="checkbox"/> : NAVD 88 (default) - <input checked="" type="checkbox"/> : Other - <u>Horizontal</u> : NAD 27 - <input type="checkbox"/> : NAD 83 (default) - <input checked="" type="checkbox"/>
<b>Coordinate System</b> (select one)	Geographic: <input type="checkbox"/> : UTM: <input type="checkbox"/> - (Zone) State Plane: <input checked="" type="checkbox"/> - (Zone) Ga. East
<b>Units</b>	Meters - <input type="checkbox"/> to decimal places (meters is default for UTM) Feet - <input checked="" type="checkbox"/> to decimal places (feet is default for State Plane)

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<b>Tile Size</b>	1500m x 1500m - <input type="checkbox"/> : 2000m x 2000m - <input type="checkbox"/> (default meters) : Other - 1mile x 1mile - <input type="checkbox"/> : 2mile x 2mile - <input type="checkbox"/> (default feet) : Other -
<b>Metadata Required</b>	Project Level - <input checked="" type="checkbox"/> and/or File (tile) Level - <input type="checkbox"/>
<b>SECONDARY PRODUCTS</b> (extra cost for each)	
<b>Break Lines</b>	No - <input type="checkbox"/> : Yes - <input checked="" type="checkbox"/> (normally compiled from Intensity images)
<b>DEM</b>	1.0m - <input checked="" type="checkbox"/> : 5.0m - <input type="checkbox"/> : 10.0m - <input type="checkbox"/> : Other : Hydro Enforced? <input type="checkbox"/>
<b>Contours</b>	0.5' - <input type="checkbox"/> : 1.0' - <input checked="" type="checkbox"/> : 2.0' - <input type="checkbox"/> : 4.0' - <input type="checkbox"/> : 1m - <input type="checkbox"/> : Other -
<b>Intensity Image</b>	No - <input type="checkbox"/> : Yes - <input checked="" type="checkbox"/> (will match Bare Earth tile size – Required for Break Lines)
<b>Other</b>	State other requirement(s) not listed above:
<b>FORMAT AND DELIVERABLES</b>	
<b>Tile Sizes</b>	<u>Mass Points</u> : (See above) <u>DEM</u> : Match VS data - <input checked="" type="checkbox"/> : USGS QQ - <input type="checkbox"/> : USGS Quad - <input type="checkbox"/> : Other - <u>Break Lines</u> : Match VS data - <input checked="" type="checkbox"/> : USGS QQ - <input type="checkbox"/> : USGS Quad - <input type="checkbox"/> : Other - <u>Contours</u> : Match VS data - <input checked="" type="checkbox"/> : USGS QQ - <input type="checkbox"/> : USGS Quad - <input type="checkbox"/> : Other -
<b>Formats</b>	<u>Mass Points</u> : ASCII x,y,x,i format - <input type="checkbox"/> : LAS format - <input checked="" type="checkbox"/> : TIN - <input type="checkbox"/> : ArcShape - <input type="checkbox"/> <u>DEM</u> : USGS DEM - <input type="checkbox"/> : ESRI Float Grid - <input type="checkbox"/> : ESRI Integer Grid - <input checked="" type="checkbox"/> - Other - <u>Break Lines</u> : Arc Shape - <input checked="" type="checkbox"/> : Other - <u>Contours</u> : Arc Shape - <input checked="" type="checkbox"/> : USGS DLG-O - <input type="checkbox"/> : Other -
<b>Delivery Media</b>	CD-ROM - <input type="checkbox"/> : DVD - <input type="checkbox"/> : Firewire (external hard drive) - <input checked="" type="checkbox"/> : Other -
<b>Who Deliver To</b>	(Include Name, Address, Phone #, and e-mail): Keith W. McFadden (keithmc@usgs.gov) 3039 Amwiler Rd. Suite 130 Atlanta, Ga. 30360
<b>QA/QC</b>	
<b>Who will do QA/QC</b>	<b>Note:</b> It is the responsibility of the liaisons to arrange or secure Quality Assessment. In cases where QA will be done via contract the Commercial Partnership Team will supply a cost estimate.
Partner	<input type="checkbox"/> - Partner agrees to 100% responsibility for QA to contract specifications within contractual time frame
NGTOC	<input type="checkbox"/> - Liaison will contact NGTOC Chief for separate QA agreement

**-DRAFT-**

Via Contract	<input checked="" type="checkbox"/> - Available for additional cost if NGTOC capacity is not available					
Other Requirements not list above: <input type="checkbox"/> : EXPLAIN -						
<p><u>NOTICE</u> This document is meant to be a “living” document. Additional requirements of modifications to this document may be requested via the Commercial Partnership Team</p>						



Attachment A. -- Map of Acquisition area.