



October 2, 2015

MEMORANDUM FOR: Cecelia V. Royster
Director, Office of Acquisition and Agreements Management
National Institute of Standards and Technology

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FROM: Richard Bachman
Assistant Inspector General for Audit

SUBJECT: *Significant Firm-Fixed-Price (FFP) Contract Actions in Fiscal Years (FYs) 2011–2013 Cannot Be Verified from Documentation in NIST Contract Files—Final Memorandum No. OIG-16-001-A*

This memorandum reports the results of our audit of NIST Office of Acquisition and Agreements Management's (OAAM's) management, monitoring, and administration of NIST FFP contracts during FYs 2011–2013. Our objectives were to determine whether

1. NIST OAAM has managed, monitored, and administered the FFP contracts in accordance with federal and Departmental requirements;
2. contract officer's representative (COR) requirements were met and completed in accordance with federal and Departmental requirements; and
3. all invoice payments were valid, reasonable, and paid on a timely basis in accordance with federal and Departmental requirements.

In general, we found that NIST OAAM did not document all contract administration actions in the contract files we audited and was not consistent with the guidance found in the Federal Acquisition Regulation (FAR) Subpart 4.802. (For further details, see "Findings.") We used statistical sampling procedures, described in further detail in appendix A ("Objectives, Scope, and Methodology"), to select 40 contracts to test for contract administration compliance with the FAR and the *Commerce Acquisition Manual's* (CAM's) contract monitoring and contract administration guidance. For a table summarizing the details of our findings, see appendix B.

Background

The National Institute of Standards and Technology (NIST) obligated approximately \$1.2 billion in contracts from FYs 2011–2013. Approximately \$1 billion, or 87 percent, was awarded as firm-fixed-price (FFP) contracts; the remaining amount, approximately \$200 million, was awarded among other contract types (see table I, next page). The CAM identifies FFP contracts as a low-risk form of contracting for the Department.

Table I. Summary of FYs 2011–2013 Contract Awards and Obligation Amounts Processed by NIST

	Type of Contract				
	Firm-Fixed-Price	Labor-Hour	Time-and-Materials	Other Types	Total
Number of contract awards	12,408	90	24	25	12,547
Base and all options contract value (\$)	1,021,979,341	100,627,335	27,254,041	25,126,951	1,174,987,668
Percentage of total value awarded	87.0	8.6	2.3	2.1	100.0

Source: FPDS-NG System

Since 2009, the federal government has increased its efforts to regulate and reduce the use of high-risk contracts. A presidential memorandum on government contracting issued March 4, 2009, further emphasized the importance of federal agencies becoming more fiscally responsible in their contracting actions, governing the appropriate use and oversight of all contract types, and cutting contract costs.¹ In July 2009, the Office of Management and Budget (OMB) directed agencies to reduce the use of high-risk contracts.²

Previous OIG audits have reported findings about time-and-materials (T&M) and labor-hour (LH) contracts administered by OAAM. Our November 2013 audit report on T&M/LH contracts, and our June 2013 audit report on the monitoring of obligation balances, found weaknesses in post-award contract management within the NIST acquisition process.³ Based on the risk identified in these earlier audits of NIST contract management practices, we reviewed contract management related to FFP contracts administered and managed by NIST OAAM.

¹ Executive Office of the President, March 4, 2009. “Memorandum for the Heads of Executive Departments and Agencies: Subject: Government Contracting,” https://www.whitehouse.gov/the_press_office/Memorandum-for-the-Heads-of-Executive-Departments-and-Agencies-Subject-Government/ (accessed April 17, 2015).

² Executive Office of the President, Office of Management and Budget, July 29, 2009. Memo from OMB Director Peter R. Orszag to heads of department and agencies, “Improving Government Acquisition,” memo no. M-09-25, https://www.whitehouse.gov/sites/default/files/omb/assets/memoranda_fy2009/m-09-25.pdf (accessed April 17, 2015).

³ U.S. Department of Commerce, Office of Inspector General, June 18, 2013. *Monitoring of Obligation Balances Needs Strengthening*, OIG-13-026-A. Washington, DC: DOC OIG. Ibid., November 8, 2013. *The Department’s Awarding and Administering of Time-and-Materials and Labor-Hours Contracts Needs Improvement*, OIG-14-001-A. Washington, DC: Department of Commerce OIG.

Findings

Relating specifically to objective 1, we found that (a) 32 contract actions were missing critical documentation and (b) some contract files were missing. Pertaining to objective 2, we found that the CORs generally met requirements in accordance with federal and Departmental requirements. However, we also found that 15 contract invoices were missing or incomplete in the contract files. (Further details follow below.)

Significant Contract Actions Could Not Be Verified

Federal procurement regulations require agencies to establish and maintain files of all records of contractual actions. The purpose of establishing these files is to provide a complete background of all decisions and actions, information for reviews and investigations, and essential facts in the event of litigation or congressional inquiries. However, in our review of 40 sample contract files, we could not determine the validity of the contract award or payment because a significant quantity of key documentation was incomplete or missing.

FAR subpart 4.802(a) illustrates the required supporting contract documentation to be present in every contract file, including

- basis for the acquisition and award;
- assignment of contract administration; and
- actions prerequisite to, substantiating, and reflecting contract payments.

FAR 4.802(d) states “If the contract files or file segments are decentralized (e.g., by type or function) to various organizational elements or to other outside offices, responsibility for their maintenance must be assigned. A central control and, if needed, a locator system should be established to ensure the ability to locate promptly any contract files.” In addition, FAR Subpart 4.803 lists additional documents that should be included in a contract file if they are applicable to that contract.

Finally, FAR section 32.905⁴ states that the payment will be based on receipt of a proper invoice and satisfactory contract performance.⁵ It also states that the billing office must return the invoice to the vendor if it does not comply with the requirements.⁶

Our review of the invoices in the NIST contract administration files disclosed numerous errors and missing or incomplete documentation, such as the statement of work, valid invoices, or evidence of acceptance. We based our review on 40 randomly selected contracts at two NIST locations with onsite visits at both locations and inquiries with management. Out of the sampled contracts, we found 32 were missing critical documentation. (See table 2, next page, for a summary of our results.)

⁴ Codified at 48 CFR § 32.905(b), which states what items must be included in a proper invoice.

⁵ 48 CFR § 32.905(a).

⁶ 48 CFR § 32.905(b)(3).

Table 2. Summary of Contract Documentation Findings, by Location

Description	Gaithersburg, Maryland ^a	Boulder, Colorado
Insufficient payment support	8	3
Incomplete monitoring of contractor performance	21	11
Missing statement of work	4	0
Incomplete monitoring over receipt of deliverables	9	3
Missing contract files	2	0

Source: OIG review of contract files.

^a The Gaithersburg Acquisition Management Division could not locate two contract files. In addition, one contract file contained wrong contract documents, and one contract file was incomplete.

Specifically, we found the following:

1. *Insufficient payment support.* NIST OAAM’s contract files contained invoices that were incomplete, did not have supporting documentation for the invoices, or had incomplete supporting documentation for the invoices. Some of the audited invoices contained out-of-sequence invoice numbers, were missing contract line item numbers, or listed line item dollar amounts without including a description of the contract task performed. For example, a \$5 million refrigeration system purchase and install contract’s payment log has a record of 16 invoice payments made by NIST to the contractor. However, the contract file contained only one invoice and no documentation to verify that NIST ensured the refrigeration system was installed in accordance with the contract’s terms and conditions. In total, we found 23 contract files were incomplete. Of the 23 contract files, 12 files contained no forms and 11 files contained erroneously completed forms or were missing some of the forms.
2. *Missing critical documentation.* In addition to the insufficient payment support documentation discussed above, we also found that 32 of the 40 contract files we audited were missing other documents. FAR Subpart 4.803 identifies the types of documents that should be included and maintained in the contract file that NIST is required to maintain by FAR Subpart 4.802. The missing documents included statements of work, payment records, and records of contractor surveillance.
3. *Missing contract files.* NIST could not locate contract files for 2 of the 40 contracts we audited. Because we have not audited the 2 missing contract files, we have not determined whether NIST met FAR Subpart 4.802 contract file documentation requirements.

Because many of the contract records were incomplete or missing, we did not determine whether the contractors performed the required tasks, performed the tasks to required standards, or were paid correctly for the work performed. Without appropriate contract administration documentation, NIST OAAM cannot provide evidence of acceptable contractor performance, or that services it paid for were received.

Recommendation

We recommend that the Director, NIST OAAM, do the following:

- I. Ensure that contracting officials properly prepare, maintain, and safeguard all applicable FAR Subpart 4.803 identified contract documents in accordance with FAR Subpart 4.802(c).

NIST provided technical comments and separately informed us that it concurs with the recommendation. We will work with NIST on audit resolution subsequent to receipt of its action plan. In accordance with Department Administrative Order 213-5, please provide us with your action plan within 60 days of the date of this memorandum.

This final memorandum report will be posted on OIG's website pursuant to section 8M of the Inspector General Act of 1978, as amended.

If you have any questions, please contact me at (202) 482-2877 or Kenneth Stagner, Regional Inspector General for Audit, at (303) 312-7650.

Appendix A.

Objectives, Scope, and Methodology

We reviewed NIST FFP contracts to assess post-award monitoring activities of the individual contracts, as well as overall administration of the files. More specifically, this audit examined NIST OAAM's management, monitoring, and administration of NIST FFP contracts during FYs 2011–2013. Our three objectives were to determine whether

1. NIST OAAM has managed, monitored, and administered the FFP contracts in accordance with federal and Departmental requirements;
2. COR requirements were met and completed in accordance with federal and Departmental requirements; and
3. all invoice payments were valid, reasonable, and paid on a timely basis in accordance with federal and Departmental requirements.

We reviewed NIST FFP contract files at agency offices in Boulder, Colorado, and Gaithersburg, Maryland. A statistical sample was derived from approximately 12,000 contracts on record between the dates of October 2010 and September 2013.

We accomplished our objectives by doing the following:

- Developing a sample size from NIST by requesting the list of all FFP contracts issued between FYs 2011 and 2013.
- Stratifying the universe of 12,000 contracts using a threshold of a total obligation amount greater than \$700,000, in order to reduce our sample universe to 96 contracts that contained files from both closed and active contracts at the time of our audit.
 - In order to have a 90 percent confidence level, it was shown that, of those 96 contracts, 40 would give us a sample size that could accurately project the results over the larger universe of contracts (see table A-1).
 - Out of the 40 contracts, we requested 12 from NIST's Boulder, Colorado, location and 28 from its Gaithersburg, Maryland, location for analysis in three areas: contract administration, COR performance, and invoicing and payments.
- Traveling to each location to examine the physical file contents for documents pertaining to the three areas, and concentrating on the post-award areas of the process using the file index contained in each file, for visual proof that the documents were present in the file.
- Excluding four public utility (electricity and natural gas) contracts from our audit analysis.
- Tabulating all documents available from each file for each location in a matrix as audit evidence.
- Generating findings with recommendations based on information collected during the audit.

The audit was conducted under the authority of the Inspector General Act of 1978, as amended, and Department Organization Order 10-13, dated April 26, 2013, at the Department's offices in Gaithersburg, Maryland, and Boulder, Colorado. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and recommendations based on our audit objectives.

Table A-1. Details of 40 FFP Contracts Examined by OIG

Award Procurement Instrument Identification Number	Delivery Order	Original Award Obligation Amount (\$)	Award Type	Contract Status
SBI341-11-NC-0028	00000	30,585,898.76	Delivery order	Closed
SBI341-13-NC-0029	00000	14,923,309.49	Delivery order	Closed
SBI341-11-CN-0040	00000	9,482,264.87	Definitive contract	Closed
SBI341-12-SU-0556	00000	5,026,849.00	Purchase order	Open
SBI341-13-CN-0072	00000	3,325,468.00	Definitive contract	Open
SBI341-12-CN-0089	00000	3,290,150.00	Definitive contract	Open
SBI341-13-SU-1403	00000	3,177,000.00	Purchase order	Open
SBI341-11-SE-0411	00000	2,787,909.54	Purchase order	Open
SBI341-11-CN-0119	00000	2,230,680.36	Definitive contract	Closed
SBI341-13-UE-0002	00000	2,123,851.52	Purchase order	Closed
SBI341-12-SU-0365	00000	2,097,066.07	Purchase order	Open
SBI341-13-CN-0084	00000	1,791,368.00	Definitive contract	Open
SBI341-12-SE-0828	00000	1,745,210.80	Purchase order	Open
SBI341-12-UE-0003	00000	1,677,098.00	Purchase order	Closed
SBI341-12-CN-0082	00000	1,648,348.50	Definitive contract	Open
SBI341-13-CN-0068	00000	1,480,970.00	Definitive contract	Open
SBI341-11-CN-0134	00000	1,477,384.13	Definitive contract	Closed
SBI341-12-CT-0006	00000	1,464,252.10	Delivery order	Open
SBI341-11-SU-0898	00000	1,379,000.00	Purchase order	Open
SBI341-11-CN-0105	00000	1,280,277.00	Definitive contract	Closed
SBI341-10-CQ-0010	11236	1,267,933.58	Delivery order	Open
SBI341-10-BR-0003	12-404	1,253,000.00	BPA call	Closed
SBI341-11-CQ-0017	11153	1,174,316.44	Delivery order	Open
SBI341-12-CQ-0031	13-424	1,172,970.00	Delivery order	Open
SBI341-11-CN-0133	00000	1,098,155.17	Definitive contract	Closed
SBI341-13-SU-1406	00000	1,049,977.00	Purchase order	Open

Award Procurement Instrument Identification Number	Delivery Order	Original Award Obligation Amount (\$)	Award Type	Contract Status
SBI341-11-SU-0341	00000	989,670.00	Purchase order	Closed
SBI341-12-CN-0076	00000	981,500.00	Definitive contract	Closed
SBI341-11-CQ-0010	13-293	917,369.00	Delivery order	Open
SBI341-12-CQ-0031	13-431	897,851.00	Delivery order	Open
SBI341-13-SU-1306	00000	865,000.00	Purchase order	Open
SBI341-13-CN-0049	00000	851,272.00	Definitive contract	Open
SBI341-12-CN-0110	00000	850,547.00	Definitive contract	Closed
SBI341-13-CN-0042	00000	831,682.49	Definitive contract	Open
SBI341-13-SU-1323	00000	782,525.00	Purchase order	Open
SBI341-13-NC-0720	00000	768,193.00	Delivery order	Open
SBI341-12-SE-0110	00000	752,061.73	Purchase order	Closed
SBI341-12-CN-0106	00000	751,814.60	Definitive contract	Open
SBI341-12-CN-0102	00000	741,941.00	Definitive contract	Open
SBI341-13-SU-0740	00000	718,790.00	Purchase order	Open
Total sample value		111,710,925.15		

Source: NIST OAAM award

Appendix B. Summary of Findings

Award Number	Delivery or Task Order Number	Original Award Obligation Amount (\$)	Missing Statement of Work	Incomplete Monitoring of Contractor Performance	Incomplete Monitoring of Receipt of Deliverables	Incomplete Payment Support
SBI1341-12-CN-0082	00000	1,648,348.50		X		
SBI1341-12-CQ-0031	13-431	897,851.00		X	X	X
SBI1341-11-CQ-0017	11153	1,174,316.44		X		
SBI1341-12-CN-0106	00000	751,814.60		X		
SBI1341-12-CQ-0031	13-424	1,172,970.00		X		
SBI1341-12-CN-0102	00000	741,941.00		X		
SBI1341-12-CT-0006	00000	1,464,252.10		X		
SBI1341-13-CN-0072	00000	3,325,468.00		X	X	X
SBI1341-13-CN-0049	00000	851,272.00		X	X	X
SBI1341-11-CN-0119	00000	2,230,680.36		X		
SBI1341-11-CN-0105	00000	1,280,277.00		X		
SBI1341-10-BR-0003	12-404	1,253,000.00		X	X	X
SBI1341-10-CQ-0010	11236	1,267,933.58	X	X	X	X
SBI1341-11-CN-0040	00000	9,482,264.87		X		
SBI1341-11-CN-0133	00000	1,098,155.17	X	X		
SBI1341-11-CN-0134	00000	1,477,384.13		X	X	X
SBI1341-11-CQ-0010	13-293	917,369.00		X	X	X
SBI1341-11-NC-0028	00000	30,585,898.76	incomplete documentation	incomplete documentation	incomplete documentation	incomplete documentation
SBI1341-11-SE-0411	00000	2,787,909.54		X		
SBI1341-11-SU-0341	00000	989,670.00	X	X	X	X
SBI1341-11-SU-0898	00000	1,379,000.00		X		
SBI1341-12-CN-0076	00000	981,500.00	incomplete documentation	incomplete documentation	incomplete documentation	incomplete documentation
SBI1341-12-CN-0089	00000	3,290,150.00	incomplete documentation	incomplete documentation	incomplete documentation	incomplete documentation
SBI1341-12-CN-0110	00000	850,547.00		X		
SBI1341-12-SE-0828	00000	1,745,210.80		X		
SBI1341-12-SU-0365	00000	2,097,066.07	incomplete documentation	incomplete documentation	incomplete documentation	incomplete documentation
SBI1341-12-SU-0556	00000	5,026,849.00		X		
SBI1341-13-CN-0042	00000	831,682.49		X		
SBI1341-13-CN-0068	00000	1,480,970.00	X	X	X	
SBI1341-13-CN-0084	00000	1,791,368.00		X	X	X
SBI1341-13-NC-0720	00000	768,193.00		X		
SBI1341-13-SU-0740	00000	718,790.00		X	X	X
SBI1341-13-SU-1306	00000	865,000.00		X	X	X
SBI1341-13-SU-1323	00000	782,525.00		X		
SBI1341-13-SU-1403	00000	3,177,000.00		X		
SBI1341-13-SU-1406	00000	1,049,977.00		X		
Total (Excluding Incomplete Documentation)		55,279,989.58	4	32	12	11

Source: OIG review of NIST contract files

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