March 24, 2016

MEMORANDUM FOR: Willie E. May, Ph.D.
    Director
    National Institute of Standards and Technology

FROM: Richard Bachman
    Assistant Inspector General for Financial and Intellectual Property Audits

SUBJECT: NIST Must Strengthen Justifications for Remaining ULOs and Review Procedures
        Final Report No. OIG-16-024-A

This final report contains the results of our audit of the effectiveness of the National Institute of Standards and Technology’s (NIST’s) unliquidated obligation (ULO) review policies and procedures developed in response to an OIG audit report issued in June 2013 (OIG-13-026-A). In that report, we concluded that Department-wide controls over the management of ULOs needed strengthening.1 Further, effective management of outstanding obligation balances allows agencies to review and deobligate unneeded funds, promoting a better use of federal resources.

In this follow-up audit, we found that although NIST has generally achieved the intent of our recommendations,2 NIST’s ULO review policies and procedures implemented since our June 2013 report need improvement. Specifically, we found that NIST had a decentralized approach to monitoring and managing ULO balances by delegating the responsibility to three different divisions (Acquisition Management Division (AMD), Grants Management Division (GMD), and Finance Division (Finance)).3 Our recommendation is for NIST to develop a NIST-specific process that will consolidate the ULO oversight efforts into one centralized monitoring process to improve efficiency and effectiveness. We also identified approximately $1.5 million in ULO balances that could have been deobligated, and recommend that NIST policies and procedures should be enhanced to increase both the frequency of the reviews and the supporting documentation justifying ULOs (see findings I and II).

To accomplish our audit, we first obtained an understanding of NIST’s ULO oversight process by reviewing the policies and procedures that were implemented in response to our prior

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2 NIST reduced its overall ULO balances from approximately $787 million as of December 2011 to approximately $457 million as of July 2015.
3 Both the Acquisition Management Division and the Grants Management Division are within NIST’s Office of Acquisition and Agreements Management (OAAM). The Finance Division is within NIST’s Office of Financial Resource Management (OFRM).
We then tested the effectiveness by reviewing the implementation of these controls for fiscal years (FYs) 2013, 2014, and 2015—the period subsequent to the issuance of our 2013 report—as well as analyzing the impact on NIST’s outstanding obligation balances. We selected obligation documents with unliquidated balances as of July 2015 and determined whether there was sufficient evidence that a valid need existed to justify open obligations. See appendix A for further detail on our audit scope and methodology; see appendix B for further detail about the ULOs tested; and see appendix C for the approximately $1.5 million in monetary benefits that could be realized in the form of funds put to better use.

**Background**

An *obligation* is the formal reservation of agency funds—for the amount of an order placed, contract awarded, or service purchased during an accounting period—to sufficiently cover all future payment. Examples of obligations include signed contracts, purchase orders, issuance of travel authorizations, and lease agreements. An *unliquidated* obligation is an amount of funds that has been designated for a specific purpose but has not been disbursed. Obligations must be liquidated within certain time limits. If obligated funds are not used for their original purpose within these time frames, the agency is required to release the funds for other allowable purposes or, depending on restrictions placed by Congress, return the money to the U.S. Department of the Treasury.

In our June 2013 audit report, we reviewed the Department’s policies, procedures, and controls to manage ULO balances. Generally, we found

- obligation balances that could not be verified,
- obligations recorded in accounting records before becoming valid,
- ineffective bureau monitoring and obligation status reporting, and
- contract obligations that were improperly liquidated.

Our conclusions were based on the evaluation of a sample of balances as of December 2011, which determined that the Department had approximately $159 million of unneeded obligation balances that could have been deobligated. We recommended that the Department develop

- an initiative related to the timely liquidation, deobligation, and closure of unneeded open obligations, and
- guidance for consistent monitoring and deobligation of ULO balances, as well as quarterly verification of open obligations.  

To address these recommendations, NIST implemented

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4 We made two additional recommendations in OIG-13-026-A: to investigate instances where contract obligations may have liquidated against an incorrect FY funding source, and to provide training on the proper methodology for funding invoices of multiple-year contracts. However, we did not consider the additional recommendations because they do not apply to NIST. NIST is primarily funded with no-year budget authority which means there would not be any instances of incorrect FY funding source or multiple-year contracts.
- Grant and contract close-out procedures to review and deobligate outstanding FY 2013 and FY 2014 ULO balances as necessary, and
- Departmental ULO review and deobligation guidance for FY 2015 ULO balances.

In addition, NIST is in the process of developing a centralized NIST-specific internal control process to review and deobligate ULOs in the near future.

ULOs are monitored separately in three different divisions within NIST: (1) AMD, (2) GMD, and (3) Finance. Although there is some informal collaboration between these separate divisions, there are no centralized policies to ensure consistent oversight.

At AMD, the semiannual review process begins with OFRM preparing a report of current contractual ULOs. OFRM then sends the report to AMD for review, which then sends it on to the respective ULO beneficiaries, or customers. The customers then report back to AMD providing input on whether the ULOs are still needed. In coordination with OFRM, AMD then makes its determinations and takes appropriate action: to either (1) deobligate the ULOs, or (2) ensure a valid need exists to keep the ULOs open.

At GMD, the semiannual review process begins with the grants specialist reconciling the grant recipient’s final federal financial report of the grant award. The specialist then determines if deobligation of any ULOs within the grant award is required, and forwards a deobligation request to a grants technical assistant, as appropriate. The assistant then processes the deobligation request and creates a deobligation project within the internal grants management information system, which would then reduce the grant award by the amount deobligated.

At Finance, the semiannual review process begins with OFRM requesting all financial managers to review ULOs for potential deobligation. The managers then report the status of each ULO along with requests to deobligate, as appropriate.

**Objective, Findings, and Recommendations**

Our objective was to evaluate the effectiveness of NIST’s obligation and deobligation review policies and procedures implemented in response to our June 2013 audit report, which reviewed the Department-wide controls over the management of ULO balances as of December 2011. This audit focused on the procedures implemented by NIST since our previous report to satisfy our prior recommendations.

Since our prior review of obligations in December 2011, we found that NIST reduced its overall ULO balance by more than 40 percent as of July 2015, reducing the outstanding ULO balance from $787 million to about $457 million. NIST had taken steps to aggressively close out outstanding grants and contracts during FYs 2013 and 2014, and thereby closing out the ULOs embedded within those grants and contracts. In addition, NIST began to implement the

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5 An AMD ULO beneficiary—or customer—is also the contract recipient since the ULO is embedded in the contract.

6 The grant recipient is also the ULO recipient since the ULO is embedded in the grant.
Departmental ULO review and deobligation procedures immediately as of July 2014\(^7\) which further reduced its ULO balance.

We found that NIST’s obligation and deobligation review policies and procedures implemented since our previous report have not effectively addressed the condition of its ULO balances. We noted that NIST needs to develop a NIST-specific internal control process that will consolidate the ULO oversight efforts at the three different divisions (AMD, GMD, and Finance) into one centralized monitoring process. We also noted both the frequency of the reviews and the supporting documentation justifying ULOs can be improved.

I. NIST’s ULO Review Procedures Have Not Been Fully Effective

We reviewed the documentation for the obligation reviews conducted during FYs 2013, 2014, and 2015 (as of July 31, 2015), including supporting spreadsheets, correspondences, and submitted justifications. We concluded that although NIST has significantly reduced its outstanding ULO balances, it has not developed a NIST-specific set of policies and procedures to periodically monitor ULOs. In both FYs 2013 and 2014, NIST relied on its existing grants and contracts close-out procedures to deobligate embedded ULOs. For FY 2015, NIST implemented Departmental ULO review and deobligation guidelines to semiannually review ULOs. As a result, we concluded that even though NIST has taken the initiative to timely deobligate its ULOs, it has not developed NIST-specific guidance for consistent quarterly monitoring of ULOs. Table 1 below shows each of the recommendation elements and the results of our testing.

**Table 1. Summary of NIST’s ULO Review Process**

<table>
<thead>
<tr>
<th>Applicable Recommendations from Our June 2013 Audit Report</th>
<th>Does the NIST’s ULO Review Process Satisfy the Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Develop an initiative related to the timely liquidation, deobligation, and closure of unneeded open obligations.</td>
<td>Yes</td>
</tr>
<tr>
<td>(2) Develop guidance for consistent monitoring and deobligation of ULO balances and for quarterly verification of open obligations.</td>
<td>No</td>
</tr>
</tbody>
</table>

*Source: OIG analysis of NIST documentation*

NIST currently has a decentralized oversight process for its three primary divisions responsible for ULOs. Because there is no centralized monitoring process in place, there can be potential overlaps in obligation oversight resulting in monitoring inconsistencies (for example, Finance may potentially deobligate a ULO that is still

\(^7\) *Policy for Monitoring Undelivered Orders* was issued as a memorandum on July 15, 2014, from the Department’s Chief Financial Officer to all Bureau Finance, Procurement, and Grant officials.
The Departmental ULO guidance prescribes consistent ULO monitoring for all bureaus, as well as for the bureaus to develop and implement written procedures to execute Department-wide policy. The U.S. Patent and Trademark Office (USPTO) and the U.S. Census Bureau have implemented the Departmental guidance by developing their own centralized, bureau-specific internal control process. Their process interconnects their organizations responsible for ULO management through one primary oversight entity, which allows USPTO and Census to provide more streamlined and efficient monitoring of their respective ULOs. We believe NIST can also benefit from having its own centralized ULO oversight process which would promote greater consistency and reduce risks of potential monitoring overlaps.

In addition, we noted that the current procedures—which are performed semiannually—do not comply with Departmental standards for quarterly reviews. According to the Office of Financial Management's *Accounting Principles and Standards Handbook* (revised September 2011), bureaus must review and verify undelivered orders at least quarterly. Although a semiannual review process may have been deployed due to the volume of outstanding items balanced with limited resources, we believe that NIST has made significant progress in reducing the outstanding ULOs, and therefore, quarterly reviews would further enhance its controls for monitoring ULOs.

II. NIST Lacks Justifications for Many Remaining ULOs

Overall, we found that NIST’s efforts to monitor and deobligate excess balances have generally achieved the intended effect and had a positive impact on its outstanding obligations. However, we did note that justification documentation was inadequate to support some of the remaining unliquidated balances.

Departmental ULO oversight policy requires obligations that are no longer valid, or have been inactive for more than 1 year, to be deobligated as applicable. In addition, bureaus are required to ensure proper justifications exist to support the validity of open obligations. Valid justifications would include explanations such as: evidence of pending or unpaid expenses, outstanding invoices, additional work to be completed by the contractor, or the obligation is under review for closeout.

To test whether the remaining obligation balances were valid, we judgmentally selected a sample of 125 ULOs that had no activity for more than 1 year. Our sample totaled approximately $74 million and was representative of the different obligation types, such as grants, contracts, and interagency agreements. We requested supporting justifications for the 125 obligations left open to determine whether the items were still valid or needed. We found that 15 of the items sampled, or 12 percent, could not be supported and should be deobligated (see appendix A and appendix B). NIST did not provide

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8 Our subsequent review determined that deobligation actions were generally valid.
9 *Policy for Monitoring Undelivered Orders*.
10 We selected this threshold because NIST requires valid justifications from its program offices for all dormant ULOs with no activity for more than a year.
sufficient justifications to maintain these open balances as required by Departmental policy. For example, some of the justifications we received included explanations such as: (1) deobligation actions pending assignment to closeout team; and (2) request for deobligation submitted—even though each of these items were left open with no activity for more than a year.

As a result, we identified approximately $1.5 million that may be deobligated and put to better use (see appendix C). Table 2 below summarizes the testing results:

<table>
<thead>
<tr>
<th>Number of Obligations Tested</th>
<th>Total Amount of Obligations Tested</th>
<th>Number of Obligations That Can Be Deobligated</th>
<th>Total Amount That Can Be Deobligated</th>
</tr>
</thead>
<tbody>
<tr>
<td>125</td>
<td>$74,330,791</td>
<td>15</td>
<td>$1,519,328</td>
</tr>
</tbody>
</table>

Source: OIG analysis of documentation provided by NIST

In discussions with NIST management, we determined that this audit finding occurred primarily because of NIST's previous prioritizing regarding the review of larger or older balances as well as not dedicating adequate resources to provide effective oversight. Because of the progress the bureau has already made, we did not view this as a significant deficiency in their control structure.

Recommendations

We recommend that the NIST Director instruct the Division Chiefs of NIST's Finance Division, Grants Management Division, and Acquisition Management Division to

1. follow up on the 15 obligations specifically identified in this report to ensure that, if they are no longer needed, appropriate action is taken; and
2. develop and execute a process for conducting quarterly obligation reviews on all open balances.

On March 14, 2016, OIG received NIST’s response to the draft report’s findings and recommendations, which we include here as appendix D. NIST concurred with our findings and agreed with our recommendations. This final memorandum report will be posted on the OIG’s website pursuant to section 8M of the Inspector General Act of 1978, as amended (5 U.S.C. app. 3).

In accordance with Departmental Administrative Order 213-5, please submit to us—within 60 calendar days of the date of this memorandum—an action plan that responds to the recommendations of this report.
We appreciate your cooperation and courtesies extended to us by your staff during our audit. If you have any questions or concerns about this report, please contact me at (202) 482-2877 or Susan Roy at (404) 730-2063.

cc: Amy Egan, Audit Liaison, NIST
Appendix A.
Objective, Scope, and Methodology

The objective of this audit was to evaluate the effectiveness of NIST’s obligation and deobligation review policies and procedures that were implemented since our June 2013 audit report Monitoring of Obligation Balances Needs Strengthening.

To satisfy this objective, we reviewed Departmental policies and procedures pertaining to the monitoring and oversight of ULOs including the following:

- the Department’s Office of Financial Management’s Accounting Principles and Standards Handbook (revised September 2011)
- the Department’s Policy for Monitoring Undelivered Orders (issued as a memorandum on July 15, 2014, from the Department’s Chief Financial Officer to all Bureau Finance, Procurement, and Grant officials)

For the purpose of this review, we judgmentally selected a sample of 125 ULOs from a total of 9,895 ULOs based upon the following selection factors:

- ULOs that had no activity for more than 1 year
- ULOs from FYs 2013, 2014, or 2015 (as of July 31, 2015)

We conducted a site visit at NIST headquarters to gain an understanding of how the ULO review process works. Our fieldwork occurred from August–December 2015 under the authority of the Inspector General Act of 1978 (5 U.S.C. app. 3), as amended, and Department Organization Order 10-13, dated April 26, 2013. We performed our work at NIST offices in Gaithersburg, MD.

We performed our work in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence that provides 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 conclusions based on our audit objective.
## Appendix B.
Sample of ULOs Tested

<table>
<thead>
<tr>
<th>Obligation Type</th>
<th>Total Number of Obligations Tested</th>
<th>Total Amount of Obligations Tested</th>
<th>Number of Obligations That Can Be Deobligated</th>
<th>Total Amount of Obligations That Can Be Deobligated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants</td>
<td>31</td>
<td>$44,048,331.99</td>
<td>2</td>
<td>$956,014.62</td>
</tr>
<tr>
<td>Contracts</td>
<td>54</td>
<td>3,193,555.20</td>
<td>12</td>
<td>200,504.58</td>
</tr>
<tr>
<td>Finance</td>
<td>40</td>
<td>27,088,904.07</td>
<td>1</td>
<td>362,809.01</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>125</strong></td>
<td><strong>$74,330,791.26</strong></td>
<td><strong>15</strong></td>
<td><strong>$1,519,328.21</strong></td>
</tr>
</tbody>
</table>

*Source: OIG analysis of documentation provided by NIST*
### Appendix C.
**Potential Monetary Benefits**

<table>
<thead>
<tr>
<th>Funds Put To Better Use</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding II, Table 2</td>
<td>$1,519,328</td>
</tr>
</tbody>
</table>
Appendix D.
Agency Response

MEMORANDUM FOR: Richard Bachman
Assistant Inspector General for Audit

FROM: Mary Saunders
Associate Director for Management Resources

SUBJECT: NIST Response to OIG’s Draft Memorandum NIST Must Strengthen Justifications for Remaining ULOs and Review Procedures

This memorandum responds to the draft memorandum from the Office of the Inspector General titled, NIST Must Strengthen Justifications for Remaining ULOs and Review Procedures. The draft memorandum identifies deficiencies in NIST unliquidated obligation (ULO) policies and procedures. NIST concurs with the overall findings and recommendations outlined within the draft memorandum.

Further, NIST will develop and submit a corrective action plan to adequately address the risks identified within the OIG’s draft memorandum.

cc: Amy Egan, NIST OIG Liaison
Cecelia Royster, Director, Office of Acquisition and Agreements Management, NIST
George Jenkins, Chief Financial Officer, NIST

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