

# NASA

National Aeronautics and Space Administration

Office of Inspector General

Office of Audits

# NASA'S USE OF BLANKET PURCHASE AGREEMENTS

December 16, 2014

Report No. IG-15-009





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NASA Office of Inspector General  
Office of Audits

# RESULTS IN BRIEF

## NASA's Use of Blanket Purchase Agreements

December 16, 2014

IG-15-009 (A-14-002-00)

### WHY WE PERFORMED THIS AUDIT

Vigorous competition between vendors is the cornerstone of an effective Federal acquisition system because it saves the taxpayer money, improves contractor performance, and promotes confidence in the system's fairness. Executive Orders, statutes, and regulations direct Federal contracting officials to seek competition to the fullest extent possible in procurements, including when purchasing goods and services using blanket purchase agreements (BPA or agreement). A simplified method of acquiring goods and services, BPAs establish terms and conditions (including prices) between a Federal agency and vendors for commonly used goods and services.

NASA uses two types of BPAs – General Services Administration (GSA) schedule agreements, which incorporate the terms and conditions of an underlying GSA contract, and NASA-specific agreements – to purchase items such as copier paper and services such as engineering research support.<sup>1</sup> In fiscal years 2011 and 2012, NASA obligated more than \$248 million through 5,529 BPA orders.

We initiated this audit to determine whether NASA was maximizing opportunities for savings by establishing GSA schedule agreements with multiple rather than single vendors, requesting price discounts on GSA schedule agreements, and obtaining sufficient competition on delivery orders issued under NASA-specific agreements.

### WHAT WE FOUND

NASA contracting officials have not maximized competition when awarding BPAs. They did not consistently seek price reductions on orders, established single- rather than multiple-award agreements without appropriate justification, and failed to perform required annual reviews to ensure established BPAs still represent the best value to the Government. We found deficiencies in NASA's use of both GSA schedule agreements and NASA-specific agreements issued by Goddard Space Flight Center's (Goddard) Advanced Manufacturing Branch (Branch).

**NASA Contracting Officials Using GSA Schedule Agreements Did Not Maximize Competition or Seek Vendor Price Discounts.** Our sample included 23 orders obtained using 14 different GSA schedule agreements. We found deficiencies in 12 of these 14 agreements. Specifically, for 9 of the agreements NASA contracting officials established single- rather than multiple-award agreements without preparing written justifications or failed to request price discounts from vendors when establishing the agreements. For all 12 agreements, contracting officials failed to conduct required annual reviews. These deficiencies occurred because contracting officials were unaware of requirements or wanted to avoid the additional effort required to compete orders.

<sup>1</sup> GSA schedule BPAs follow procedures defined by Federal Acquisition Regulation Subpart 8.4, "Federal Supply Schedules," and NASA-specific BPAs follow Part 13, "Simplified Acquisition Procedures."

We believe NASA missed potential cost savings by establishing single-award agreements, not requesting price discounts, and not conducting annual reviews. Multiple-award agreements encourage vendors to offer better prices and annual reviews provide an opportunity to assess whether the BPAs still represent the best value and identifies opportunities for seeking additional discounts. Moreover, we found that when contracting officials requested discounts they often were able to achieve substantial savings. For example, in February 2009 NASA awarded a 5-year, \$23.6 million BPA to a contractor to provide aircraft maintenance services at Wallops Flight Facility (Wallops). As part of the original award, Wallops contracting officials requested and received discounts in labor rates approximately 7 percent below GSA schedule prices. As a result, NASA saved more than \$735,000 on labor costs over the 5-year period of performance.

**Goddard Contracting Officials Issued Orders without Sufficient Competition.** Our random sample included 34 NASA-specific BPA orders awarded by the Advanced Manufacturing Branch, which operates an in-house fabrication shop to manufacture parts for Goddard's science and engineering programs and projects. When the shop lacks the capacity to complete an order, it often turns to a NASA-specific BPA to acquire the needed part. We found that 27 of 34 orders (79 percent) reviewed were awarded with no more than two conforming bids, and 20 (59 percent) were awarded with a single conforming bid. In our judgment, the Branch missed opportunities to obtain lower costs by not seeking greater competition.

## WHAT WE RECOMMENDED

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To comply with FAR requirements and maximize NASA's savings opportunities when using BPAs, we recommended NASA's Assistant Administrator for Procurement establish guidance or procedures to ensure contracting officials prepare written justifications for single-awards, request vendor discounts more frequently, and conduct required annual reviews. We also recommended the Goddard's Advanced Manufacturing Branch Head make process improvements to increase the likelihood the Branch will receive more conforming bids on BPA solicitations.

In response to a draft of this report, NASA management concurred with our recommendations and described responsive corrective actions, including issuing reminders to contracting officers about the need to comply with certain FAR requirements. Because we consider management's proposed actions responsive to our recommendations, the recommendations are resolved. We will close the recommendations once the actions are completed and we have verified that the reminders are sufficient to ensure compliance.

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## Acronyms

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BPA	Blanket Purchase Agreement
FAR	Federal Acquisition Regulation
FY	Fiscal Year
GAO	Government Accountability Office
GSA	General Services Administration

# INTRODUCTION

Blanket purchase agreements (BPA or agreement) establish terms and conditions (including prices) between a Federal agency and vendors for fulfilling repetitive needs for commonly used goods and services. Because BPAs are not contracts, they do not obligate agencies to purchase a minimum quantity or dollar amount of a good or service until they place and the contractor accepts an order. Similarly, agencies obligate funds toward BPAs only when they place an order. Overall, BPAs are an efficient procurement mechanism because they enable agencies to customize terms and conditions when placing orders while gaining access to the vendors most capable of fulfilling their needs.

NASA uses two types of BPAs: General Services Administration (GSA) schedule agreements, which incorporate the terms and conditions of an underlying GSA contract, are used to purchase items such as copier paper and services such as engineering research support, while NASA-specific agreements are used to purchase items such as fabricated parts for Center science and engineering programs and projects.<sup>1</sup>

In light of the more than \$100 million NASA annually spends on BPAs, our objective was to assess whether the Agency had properly competed and economically used the agreements to support its mission. Specifically, we examined whether NASA gave preference to establishing GSA schedule agreements with multiple vendors rather than a single vendor, requested price discounts on GSA schedule agreements, and obtained sufficient competition on orders issued under NASA-specific agreements. To perform our audit, we selected a random sample of 57 BPA orders issued by the NASA Headquarters (Headquarters) Procurement Office located at Goddard Space Flight Center (Goddard), Langley Research Center (Langley), and Goddard in fiscal years (FY) 2011 and 2012.<sup>2</sup> Because NASA did not enter BPA-related data into the relevant Government database in a consistent manner, we were unable to determine whether the orders in our sample related to GSA schedule or NASA-specific agreements until we obtained and reviewed the actual procurement files.<sup>3</sup> Those files revealed our sample contained 23 orders awarded using 14 different GSA schedule agreements and 34 orders awarded by Goddard's Advanced Manufacturing Branch under NASA-specific agreements.<sup>4</sup> See Appendix A for details of the audit's scope and methodology, our review of internal controls, and a list of prior coverage.

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<sup>1</sup> Throughout the report, we discuss GSA schedule BPAs that follow the procedures defined by Federal Acquisition Regulation Subpart 8.4, "Federal Supply Schedules," and NASA-specific BPAs that follow Part 13, "Simplified Acquisition Procedures."

<sup>2</sup> We pulled our sample from FYs 2011 and 2012 orders to enable us to test whether NASA contracting officials had complied with annual review requirements for BPAs found in the Federal Acquisition Regulation.

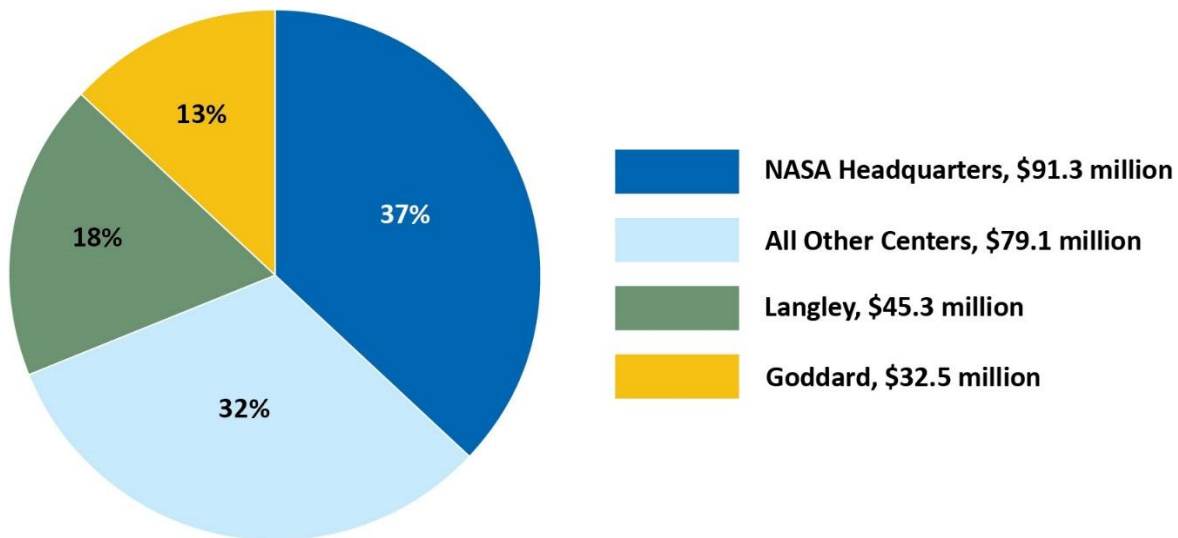
<sup>3</sup> The database is the Federal Procurement Data System-Next Generation, the primary database for information on Federal procurement actions.

<sup>4</sup> During the audit, we learned Langley had established some NASA-specific agreements; however, those agreements were not in our sample and resulted in relatively few orders compared to the level of activity from the Advanced Manufacturing Branch.

## Background

In FYs 2011 and 2012, NASA obligated more than \$248 million through 5,529 BPA orders. Headquarters, Langley, and Goddard were responsible for 68 percent of NASA's BPA obligations and 76 percent of total orders. Figure 1 shows the distribution of BPA obligations by Center.

**Figure 1: BPA Obligations by Center in FYs 2011 and 2012**



Source: NASA Office of Inspector General analysis of Federal Procurement Data System-Next Generation data.

## GSA Schedule Agreements

GSA has thousands of schedule contracts with vendors for commercial supplies and services and makes these contracts available to Federal agencies to establish as a BPA. With a GSA schedule agreement, the agencies use the framework of the underlying GSA contract but may add specialized terms and conditions, including discounts from GSA-established pricing. In addition, agencies may establish GSA schedule BPAs with one vendor (a single-award agreement) or more than one vendor (multiple-award agreement).

When using GSA schedule agreements, contracting officials must meet certain Federal Acquisition Regulation (FAR) requirements, including ensuring adequate competition, seeking price discounts, and conducting annual reviews.<sup>5</sup> To promote competition, the FAR instructs officials to give preference to multiple-award agreements to the maximum extent practicable. Moreover, if contracting officials elect to establish a single-award BPA, they must document the justification for doing so.<sup>6</sup> According to the FAR, single-award BPAs may be justified when work is unique or specialized in nature and only one source is capable of responding, when work is a follow-on to a previous requirement, or when an urgent and compelling need exists. In determining whether to establish a single- or multiple-award agreement, the contracting officer should consider the scope and complexity of the requirement, the benefits of ongoing competition and the need to periodically compare multiple technical approaches or prices, the administrative costs of BPAs, and the technical qualifications of the schedule contractors.

<sup>5</sup> FAR Subpart 8.4, "Federal Supply Schedules."

<sup>6</sup> FAR Subpart 8.405-3(a)(3)(iv).



Contracting officials are also required to seek discounts from GSA schedule prices when establishing a BPA. The FAR states that contracting officials may request a price reduction at any time before placing an order, establishing a BPA, or in conjunction with annual BPA reviews; however, they must seek a price reduction when the order or BPA exceeds the simplified acquisition threshold of \$150,000. Finally, officials must review agreements annually to determine whether the underlying GSA schedule contract is still in effect, the BPA still represents the best value, and whether additional price discounts can be obtained.

In 2009, the Government Accountability Office (GAO) assessed how five Federal agencies were using GSA schedule agreements.<sup>7</sup> GAO found the agencies had not competed agreements, frequently did not seek price discounts when establishing agreements, rarely tried to obtain better pricing when placing orders, and rarely conducted annual reviews. GAO also noted that some contracting officers lacked familiarity with FAR requirements. For example, they did not appear to understand the requirement to seek price discounts, had concluded that discounts were unnecessary because GSA had already determined the underlying contract prices to be fair and reasonable, or were unaware of the annual review requirement.

## **NASA-Specific Agreements**

The FAR permits Federal agencies to establish BPAs with agency-specific terms not tied to any underlying GSA contract.<sup>8</sup> Agency officials must ensure competition to the maximum extent practicable when establishing these agreements and annually review a random sample of associated files to ensure procurement officials are following applicable procedures. In addition, agency procurement officials must annually review and update agreements to reflect changes in sources, market conditions, or other factors that may warrant a change to existing agreements or new arrangements with different suppliers. The FAR permits NASA to use Agency-specific agreements for orders up to \$150,000.

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<sup>7</sup> GAO examined practices at the Departments of Agriculture, Health and Human Services, Justice, and Homeland Security, and the Social Security Administration. GAO, "Contract Management: Agencies Are Not Maximizing Opportunities for Competition or Savings under Blanket Purchase Agreements despite Significant Increase in Usage" (GAO-09-792, September 9, 2009).

<sup>8</sup> FAR Part 13, "Simplified Acquisition Procedures."

# NASA CONTRACTING OFFICIALS USING GSA SCHEDULE AGREEMENTS DID NOT MAXIMIZE COMPETITION OR SEEK VENDOR PRICE DISCOUNTS

We found deficiencies in 12 of 14 GSA schedule agreements in our sample. Specifically, for 9 of the agreements NASA contracting officials established single- rather than multiple-award agreements without preparing written justifications or failed to request price discounts from vendors when establishing the agreements. For all 12 agreements, contracting officials failed to conduct required annual reviews. These deficiencies occurred because contracting officials were unaware of requirements or wanted to avoid the additional effort required to compete orders. By failing to take these steps NASA may be missing opportunities to save money through increased competition and price discounts.

## Awards Deviated from FAR Requirements for Multiple-Award Agreements, Price Reductions, and Annual Reviews

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Our sample included 14 different GSA schedule agreements NASA used to acquire goods and services, such as copier paper, engineering support, and aircraft maintenance. Of the 14 agreements, 9 were awarded by the Headquarters Procurement Office located at Goddard, 2 by Langley, and 3 by Goddard.

In 12 of the 14 agreements, NASA contracting officials established single- rather than multiple-award agreements. Although the FAR gives contracting officials the discretion to establish single-award BPAs, they are required to show they have maximized the effectiveness of the BPA if they take that option.<sup>9</sup> According to the FAR, a single-award may be justified when work is unique or specialized in nature and only one source is capable of responding, when work is a follow-on to a previous requirement, or when an urgent and compelling need exists. However, for five of those agreements (42 percent), officials failed to prepare a written justification explaining why the single-award was in the Agency's best interest.<sup>10</sup> Without this justification, we could not determine whether contracting officials had maximized the effectiveness of the BPA.

Based on discussions with contracting officials, we concluded that officials sometimes established agreements with a single vendor because single-award agreements require less time and effort than seeking competitive bids among multiple vendors. According to the FAR, when deciding whether to use single- or multiple-awards, contracting officials should try to maximize BPA effectiveness by considering multiple factors, including the scope and complexity of the agency's requirements, the benefits of on-going competition and the need to periodically compare multiple technical approaches or prices, the

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<sup>9</sup> FAR Subpart 8.405-3, "Blanket purchase agreements (BPAs)."

<sup>10</sup> FAR Subpart 8.405-6, "Limiting sources," describes the requirements for preparing a written justification.

administrative costs of BPAs, and the technical qualifications of the schedule contractors. Therefore, we believe administrative costs should not be the only factor in making this determination.

In addition, NASA contracting officials did not request price reductions for 4 of the 14 agreements (29 percent) we sampled. According to FAR Subpart 8.405-4, "Price reductions," contracting officials must seek a price reduction when the order or BPA exceeds the simplified acquisition threshold of \$150,000. All of the GSA schedule agreements in our sample exceeded this threshold. Additionally, contracting officials may request price reductions at any time before placing an order, establishing a BPA, or in conjunction with the annual BPA review. As discussed later, the BPAs in our sample for which contracting officials sought price reductions resulted in substantial savings for NASA.

Similar to GAO, we concluded that contracting officials did not have a clear understanding of FAR requirements regarding price discounts. For example, a contracting official pointed to the reference in the FAR that GSA has determined the prices in the underlying contracts are "fair and reasonable" as justification for not seeking price discounts. However, this language does not obviate the requirement that contracting officials seek discounts when establishing GSA schedule BPAs. Rather, it refers to the fact agencies are not required to conduct additional price analyses when ordering supplies or services that do not require a statement of work.

Finally, NASA contracting officials had not performed annual reviews for 12 of the 14 sampled agreements (86 percent). According to FAR Subpart 8.4, contracting officials must conduct and document annual reviews that determine whether the schedule contract upon which the BPA was established is still in effect, the BPA still represents the best value to the Government, and quantities or amounts estimated when the BPA was established have been exceeded and additional price discounts can be obtained. NASA contracting officials missed those opportunities by not performing annual reviews.

## **NASA Missed Potential Cost Savings**

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We believe NASA may have missed potential cost savings by establishing single-award agreements, not requesting price discounts, and not conducting annual reviews. Multiple-award agreements encourage vendors to offer better prices and annual reviews provide an opportunity to assess whether the BPAs still represent the best value and identifies opportunities for seeking additional discounts. Moreover, we found that when Agency contracting officials requested discounts they often were able to achieve substantial savings. For example, in one agreement NASA received a 12 percent discount on proposed labor rates from the vendor's GSA schedule pricing. In another agreement, NASA received a 5 percent discount on the entire contract cost and a 30 percent discount on the annual escalation rate. In another example, contracting officials obtained significant savings from labor rate discounts. Specifically, in February 2009 NASA awarded a 5-year BPA to a company to provide aircraft maintenance services at Wallops Flight Facility (Wallops). As part of the original award, Wallops contracting officials requested and received labor rate discounts approximately 7 percent below GSA schedule prices. As a result, NASA saved more than \$735,000 on labor costs over the 5-year period of performance.

# GODDARD CONTRACTING OFFICIALS ISSUED ORDERS WITHOUT SUFFICIENT COMPETITION

We found Goddard’s Advanced Manufacturing Branch (Branch) needs to improve its procurement process in order to increase the number of conforming bids it receives from vendors.<sup>11</sup> Specifically, we found that out of 34 orders issued by the Branch under NASA-specific BPAs, 27 (79 percent) had no more than 2 conforming bids and 20 (59 percent) had only a single conforming bid. NASA is missing opportunities for cost savings by not ensuring it obtains multiple conforming bids before issuing orders.

## Goddard’s Advanced Manufacturing Branch

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The Advanced Manufacturing Branch operates an in-house fabrication shop to manufacture parts for Goddard’s science and engineering programs and projects. Branch capabilities include the design, construction, and assembly of spacecraft hardware, hi-fidelity mockups, and scale prototypes. When the shop lacks the capacity to complete an order, it often turns to a NASA-specific BPA to acquire the needed parts. In FYs 2011 and 2012, the Branch issued 1,648 BPA orders at a total cost of more than \$8.5 million.

Our sample included 34 orders placed by the Advanced Manufacturing Branch under NASA-specific BPAs in FYs 2011 and 2012. We found that officials issued 27 orders (79 percent) after having received no more than 2 conforming bids, and 20 orders (59 percent) after having received only a single conforming bid. In our judgment, consistently issuing orders after receiving such a limited number of conforming bids does not meet the intent of FAR Subpart 13.1 that contracting officials “promote competition to the maximum extent practicable” when obtaining supplies and services.

## Improvements Needed in Branch Procurement Process to Increase Vendor Bids

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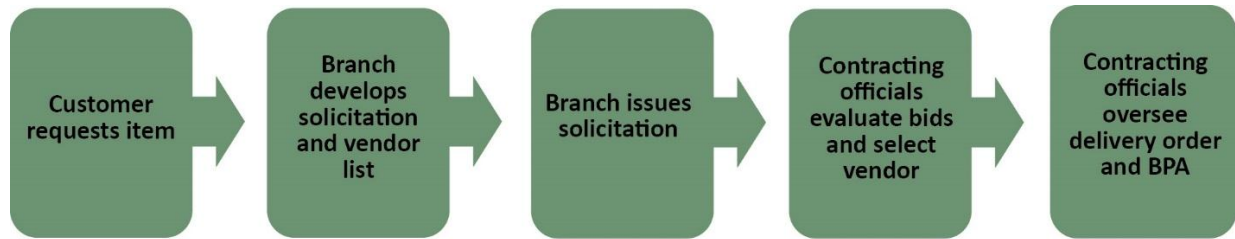
The Advanced Manufacturing Branch uses a five-step process to procure parts, supplies, and fabricated items. The process begins when a Goddard project (customer) places an order. Next, the Branch works with the customer to develop a solicitation and list of vendors and issues the solicitation to those vendors. Contracting officials then evaluate bids, select a vendor, and oversee delivery of the order and agreement.<sup>12</sup> Figure 2 illustrates the steps in the process. See Appendix B for additional details.

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<sup>11</sup> We defined a conforming bid as one that met both the technical and schedule requirements of the solicitation.

<sup>12</sup> Orders valued at \$5,000 or more are approved by the contracting officer having responsibility for the Advanced Manufacturing Branch. Orders valued at less than \$5,000 are approved by Branch personnel acting in their capacity as contracting officials.

**Figure 2: Advanced Manufacturing Branch Process for Procuring Items with BPAs**



Source: NASA Office of Inspector General analysis of Branch procedures.

We found improvements are needed in this process to increase the likelihood the Advanced Manufacturing Branch will receive a larger number of conforming bids and therefore more competition and potentially lower prices for orders.

## Customer Requests

The customer documents a request on a standard form that includes a description of the item and the requested delivery date. The customer’s requested delivery date is used by Advanced Manufacturing Branch officials to establish the required delivery date in the solicitation.

We found indications that required delivery dates in the solicitations may not provide sufficient time for vendors to submit bids or to submit bids that meet the stated delivery dates. For example, in our sampled orders vendors were requested to deliver the order within an average of 15.5 days from the date of the solicitation. We determined that Advanced Manufacturing Branch officials issued 170 solicitations for our sampled orders and that vendors either did not respond or chose not to bid on 75 of the 170 solicitations (44 percent). Additionally, we determined that 45 of 95 vendor bids (47 percent) did not conform to requirements, particularly the requested delivery date.

Advanced Manufacturing Branch officials explained that the 15.5 day average delivery occurred because customers frequently waited until close to the date they needed an item before submitting a request. Officials further explained that customers might be unaware that the Branch subtracts time from the requested delivery date for processing tasks such as receipt and inspection. To meet the customer’s requested delivery date, the Branch must give vendors less time to respond to a solicitation or to fill an order. In our judgment, better coordination and communication between customers and Branch officials regarding the ordering and delivery process could result in better response rates and a higher percentage of conforming bids.

## Solicitation of Vendors

Advanced Manufacturing Branch procedures typically require contracting officials to solicit four vendors to bid on an order. In our judgment, this practice has led to an insufficient number of vendors submitting conforming bids to ensure adequate competition.

Advanced Manufacturing Branch contracting officials explained they limit solicitations to four vendors because sending solicitations to additional vendors would increase their administrative workload. However, best practice suggests officials should solicit the number of vendors necessary to ensure they receive enough conforming bids to make an informed decision.<sup>13</sup> Because our sample revealed that soliciting four vendors has repeatedly failed to produce at least three conforming bids for the Branch, we believe the Branch should solicit more than four vendors in future solicitations.

We understand that soliciting more vendors would increase the Advanced Manufacturing Branch's workload. However, we determined the Branch could help offset this increase by taking advantage of the FAR provision that allows agencies to exclude competitive bidding procedures on purchases below \$3,000.<sup>14</sup> Our sample of 34 orders included 21 orders valued below this threshold, all of which Branch officials procured using competitive bidding procedures. For example, the Branch solicited and evaluated four vendor bids for an order in our sample valued at only \$75. In our opinion, soliciting multiple vendors on orders less than \$3,000 adds unnecessarily high administrative costs.

## Evaluation and Selection of Vendor

We found that Advanced Manufacturing Branch contracting officials generally awarded orders to the vendor that claimed it could meet the delivery date or that came close to doing so, regardless of price or the vendor's prior performance at meeting delivery dates. For example, one solicitation requested vendors deliver a finished product 2 weeks after receipt of the order. Contracting officials selected the vendor that proposed to deliver the product on that schedule at a cost of \$3,800; however, two other vendors offered to deliver the product in 3 weeks for \$1,300 and \$1,920, respectively. Although the selected vendor proposed a 2-week delivery, it actually delivered the item 4 weeks after receipt of the order. If contracting officials had selected the vendor proposing to deliver in 3 weeks for \$1,300, the Government might have saved \$2,500 and received the finished product a week sooner.

In another example, an order solicitation requested vendors deliver the finished product 4 weeks after receipt of the order. The Advanced Manufacturing Branch solicited eight vendors for bids, but none proposed to meet the delivery schedule requirement. Rather than soliciting additional vendors, the Branch selected the vendor proposing to deliver within the shortest period of time (7 weeks) at a cost of \$58,870. However, the Branch also received a bid that proposed delivering the product in 10 weeks at a cost of \$36,300. If contracting officials had selected the vendor proposing to deliver in 10 weeks, the Government may have saved \$22,570. Alternatively, contracting officials could have solicited additional vendors to increase the likelihood of receiving one or more bids meeting both the technical and schedule requirements of the solicitation.

Additionally, contacting officials did not use vendors' past delivery performance as part of the selection criteria. We found that vendors delivered 968 of 1,739 orders (56 percent) late during FYs 2011 and 2012, making past performance a significant evaluative factor. At the time the Advanced Manufacturing Branch awarded the orders in our sample, it had collected information about vendors' delivery performance. However, the Branch Contracting Officer found the information unreliable and instructed Branch employees not to consider it when selecting bids.

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<sup>13</sup> "Auditing the Purchasing Function," David McNamee, Management Control Concepts, Alamo, CA, 1993, Revised 1997.

<sup>14</sup> FAR Subpart 13.2, "Actions At or Below the Micro-Purchase Threshold," states that contracting officials may award purchases below \$3,000 without soliciting competitive quotations if contracting officials consider the price to be reasonable.

We believe the Advanced Manufacturing Branch could benefit by adopting best practices and evaluating and selecting bids using multiple selection criteria, including delivery schedule, price, and past delivery performance. This would involve four steps. First, officials establish selection criteria and weighting factors for each criterion. Second, officials rank each vendor on how they meet the selection criteria. Third, rankings are multiplied by the weighting factors for each criterion. Finally, weighted scores for each criterion are summed to provide a total score for each vendor. The resulting overall scores will rank the vendors on how well they achieve the multiple criteria as a whole.<sup>15</sup> The use of these procedures would provide the Branch with a systematic way to evaluate bids and select vendors using factors other than their stated ability to meet the delivery schedule.

## **BPA Oversight**

Contracting officials did not conduct the two types of annual reviews required by FAR Subpart 13.3 that could have made them aware of the consistently low number of bids the Advanced Manufacturing Branch was receiving and alerted them to the need for process improvements. Specifically, contracting officials did not annually review a random sample of BPA files (e.g., agreements and order files) to ensure compliance with authorized procedures. To explain why they did not conduct the required reviews, Goddard contracting officials pointed to procurement management reviews they said NASA Headquarters conducts each year. However, we found these reviews only occur every 2 years at Goddard and do not include a review of a random sample of BPA files.

The FAR also requires contracting officials to review each BPA agreement annually to ensure that it reflects changes in market conditions, sources of supply, and other pertinent factors and to update the terms of the agreement as necessary. These reviews provide officials an opportunity to select additional vendors or to modify the current pool of vendors. Goddard contracting officials we spoke with did not appear to understand the FAR requirement to perform these reviews.

## **Advanced Manufacturing Branch Officials Describe Actions Taken**

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Branch officials told us they have taken actions since award of the orders in our sample to improve the procurement process. For example, officials have requested price adjustments from vendors who delivered late and improved the collection and documentation of vendor performance data. Officials also defined performance measures so that they could consistently assess schedule performance for all vendors. We commend these actions to improve the Branch's procurement process and make recommendations for further improvement.

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<sup>15</sup> Adapted from "Auditing the Purchasing Function," David McNamee, Management Control Concepts, Alamo, CA, 1993, Revised 1997.

# CONCLUSION

Vigorous competition between vendors is the cornerstone of an effective Federal acquisition system because it saves the taxpayer money, improves contractor performance, and promotes confidence in the system's fairness. Executive Orders, statutes, and regulations, direct contracting officials to seek competition to the fullest extent possible in procurements, including when purchasing goods and services using BPAs.

We believe NASA is missing potential cost savings on GSA schedule agreements by issuing single-award agreements without preparing written justifications, not consistently requesting price discounts, and not conducting annual reviews. Moreover, the Agency is missing opportunities to obtain lower costs and taxpayer savings by issuing orders under NASA-specific BPAs at Goddard without sufficient competition. Although we could not quantify these savings, NASA can increase its opportunities for lower costs by implementing our recommendations.



# RECOMMENDATIONS, MANAGEMENT'S RESPONSE, AND OUR EVALUATION

To comply with FAR requirements and maximize NASA's opportunities for savings, we made the following recommendations:

1. The Assistant Administrator for Procurement establish guidance or procedures to ensure contracting officials
  - a. prepare written justifications for single-award BPAs as required by FAR Subpart 8.4, "Federal Supply Schedules";
  - b. routinely request vendor price discounts as required by FAR Subpart 8.405-4, "Price reductions";
  - c. generate a universe of NASA-specific agreements, select a random sample of agreements from the universe, and review those agreements and orders to verify that authorized procedures are followed as required by FAR Subpart 13.303-6, "Review procedures"; and
  - d. review each agreement annually to ensure that it reflects changes in market conditions, sources of supply, and other pertinent factors and update the agreement if necessary as required by FAR Subpart 8.405-3, "Blanket purchase agreements (BPAs)."
2. The Goddard Advanced Manufacturing Branch Head take actions to increase the number of conforming bids:
  - a. Issue a formal notice advising customers of the requirement to request fabricated items as soon as they identify a need and explaining the timeframes required to complete the procurement process.
  - b. Modify the Branch's competitive bidding procedures to require contracting officials issue solicitations to enough vendors to ensure consistent receipt of at least three conforming bids.
  - c. Evaluate the administrative costs of using competitive bidding procedures for purchases below the micro-purchase threshold of \$3,000 and consider revising the process to exclude such purchases from competitive bidding.
  - d. Evaluate the benefits and costs of adopting multiple selection criteria including delivery schedule, price, and past delivery performance. If the benefits exceed costs, revise policy to require such a process.

We provided a draft of this report to NASA management, who concurred with our recommendations and described planned corrective actions, including issuing reminders to contracting officers about the need to comply with specific FAR requirements. Because we consider management's proposed actions responsive to our recommendations, the recommendations are resolved. We will close the recommendations once the actions are completed and we have verified that the reminders are sufficient to ensure compliance. Management's full response to our report is reproduced in Appendix C. Technical comments provided by management have also been incorporated, as appropriate.

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Major contributors to this report include Raymond Tolomeo, Science and Aeronautics Research Director; Nora Thompson, Project Manager; Jobenia Odum, Management Analyst; James Pearce, Auditor; Arnold Pettis, Data Mining/Statistician; Todd Rose, Auditor; and Sarah McGrath and Ben Patterson, Report Process Managers.

If you have questions about this report or wish to comment on the quality or usefulness of this report, contact Laurence Hawkins, Audit Operations and Quality Assurance Director, at 202-358-1543 or [laurence.b.hawkins@nasa.gov](mailto:laurence.b.hawkins@nasa.gov).

A handwritten signature in black ink, appearing to read "PKMA". The letters are stylized and connected.

Paul K. Martin  
Inspector General

## APPENDIX A: SCOPE AND METHODOLOGY

We performed this audit from January through November 2014 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 conclusions based on our audit objectives.

Our overall audit objective was to assess whether NASA properly competed and economically used BPAs to support its mission. Specific sub-objectives were to determine whether (1) the Agency gave preference to establishing multiple-award GSA schedule agreements, (2) requested vendor price discounts on GSA schedule agreements, and (3) obtained sufficient competition on orders issued under NASA-specific agreements.

We limited our review to agreements awarded by Headquarters, Langley, and Goddard because those Centers were responsible for 68 percent of Agency-wide BPA obligations and 76 percent of total orders. We selected a random sample of 57 orders issued by the three Centers during FYs 2011 and 2012. However, because Centers were inconsistent in the way that they entered data into the Federal Procurement Data System-Next Generation, we were unable to determine whether a sampled order related to a GSA schedule agreement or a NASA-specific agreement until we obtained and reviewed the procurement file. Based on our file reviews, we found that 23 sampled orders related to 14 unique GSA schedule agreements. We also found that 34 orders were awarded by Goddard's Advanced Manufacturing Branch under NASA-specific agreements.

For objectives one and two, we determined whether NASA properly competed and economically used GSA schedule agreements and reviewed applicable Federal regulations including FAR Subpart 8.4, "Federal Supply Schedules." We reviewed procurement files for sampled agreements including requests for quotation, single-award justifications, award documents, and vendor agreements. We interviewed contracting officers and contract specialists. We analyzed data regarding a 5-year agreement at Wallops and computed the cost savings attributable to contracting officials having requested and obtained price discounts.

For objective three, we reviewed applicable Federal regulations including FAR Subpart 13.303, "Blanket purchase agreements (BPAs)." We reviewed supporting documentation for sampled orders including requests for quotation, vendor bids, award documents, and correspondence. We interviewed contracting officers, contracting officer representatives, and production controllers for Goddard's Advanced Manufacturing Branch. We analyzed data regarding the timeliness of vendor deliveries. We surveyed 56 of the Branch's BPA vendors and requested information about Branch procedures for competing and awarding orders.

## Use of Computer-Processed Data

We used computer-processed data to perform this audit. We obtained universe data of NASA BPAs from the Federal Procurement Data System-Next Generation. We also obtained data from Goddard's Fabrication Contractor Performance and Selection System regarding the timeliness of vendor deliveries and the total number of orders awarded in FYs 2011 and 2012. We tested the reliability of the data from both systems by confirming that data in the automated records reflected the information contained in NASA procurement files. We believe that the data we used to support our findings are reliable for our intended purposes.

## Review of Internal Controls

We reviewed internal controls to promote competition and to manage the risks of fraud. Internal controls to promote competition were either not followed or missing from the procurement process. Specifically, we found that personnel were not performing the required annual reviews. Those reviews would have disclosed the high percentage of single-award agreements and lack of written justifications. We also found that personnel were not performing required annual reviews of NASA-specific agreements, which would have disclosed the low number of conforming bids for orders issued by Goddard's Advanced Manufacturing Branch. Furthermore, we found that control improvements are needed in the Branch's procurement process. Implementing our recommendations should correct these deficiencies.

Additionally, we found that Advanced Manufacturing Branch personnel used adequate controls to manage the risk of fraud in procurements. Specifically, the Branch had controls to ensure orders were properly authorized, documented, and executed in line with their authorization. The Branch also had procedures to rotate bids among vendors, to verify that officials received deliverables, and to confirm that deliverables met specifications.

## Prior Coverage

During the last 5 years, GAO issued three reports relevant to this subject. GAO reports can be accessed at <http://www.gao.gov>.

*Federal Contracting: Noncompetitive Contracts Based on Urgency Need Additional Oversight* (GAO-14-304, March 26, 2014)

*Federal Contracting: Opportunities Exist to Increase Competition and Assess Reasons When Only One Offer Is Received* (GAO-10-833, July 26, 2010)

*Contract Management: Agencies Are Not Maximizing Opportunities for Competition or Savings under Blanket Purchase Agreements despite Significant Increase in Usage* (GAO-09-792, September 9, 2009)

# APPENDIX B: ADVANCED MANUFACTURING BRANCH COMPETITIVE BIDDING PROCESS

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The Advanced Manufacturing Branch at Goddard follows a five-step procurement process for issuing orders under a BPA.

- Step 1. Customer Requests Item.** The customer – a designated representative from a Goddard program – requests an order such as a part, model, or other fabricated item. The request is documented on a standard form and submitted to production controllers in the fabrication shop. The form includes a technical description of the item, a requested delivery date, and other relevant information about the item such as technical drawings.
- Step 2. Branch Develops Solicitation Vendor List.** The production controller and customer prepare a solicitation. The solicitation contains a description of the item’s technical requirements and the requested delivery date, which is generally stated as the number of weeks after the vendor receives the order. After preparing the solicitation, the production controller generates a list of vendors from its vendor database using a computerized program. The program is set to select vendors on a rotating basis and generate a list of the next four qualified vendors that have the type of machines and/or skills to perform the order’s technical requirements.
- Step 3. Branch Issues Solicitation.** An administrative assistant within the Branch electronically issues the solicitation to vendors and receives their bids.
- Step 4. Contracting Officials Evaluate Bids and Select Vendor.** Contracting officials within the Branch evaluate bids against the order’s requirements and select a vendor. Officials typically select vendors first on delivery schedule and second on cost.
- Step 5. Contracting Officials Oversee Order and BPA.** After receiving the purchased item, officials perform testing to ensure the item meets technical requirements. Officials record the vendor’s delivery and technical performance. During this step, contracting officials are to review the BPA and order files as required by FAR.

# APPENDIX C: MANAGEMENT COMMENTS

National Aeronautics and Space Administration  
Headquarters  
Washington, DC 20546-0001



DEC 11 2014

Reply to Attn of: Office of Procurement

TO: Assistant Inspector General for Audits  
FROM: Assistant Administrator for Procurement  
SUBJECT: Response to OIG Draft Report, "NASA's Use of Blanket Purchase Agreements"  
(A-14-002-00)

The Office of Procurement (OP) appreciates the opportunity to review the Office of Inspector General (OIG) draft report entitled, "NASA's Use of Blanket Purchase Agreements" (A-14-002-00) dated November 14, 2014.

The draft report makes two (2) multi-part recommendations intended to improve NASA's compliance with Federal Acquisition Regulation (FAR) requirements and to maximize NASA's opportunities for savings.

NASA's response to the OIG's recommendation, including planned corrective actions and estimated completion dates, follows:

1. The OIG recommends the Assistant Administrator for Procurement establish guidance or procedures to ensure contracting officials:

**Recommendation 1a:** Prepare written justifications for single-award Blanket Purchase Agreements (BPAs) as required by FAR Subpart 8.4, "Federal Supply Schedules."

**Management's Response:** NASA concurs with this recommendation. OP agrees that contracting officers should prepare a written justification for single-award BPAs as required by FAR Subpart 8.4. Although the FAR already provides guidance in this area, OP will remind contracting officers of the requirement to prepare a written justification for a single-award BPA, as required by FAR Part 8.4.

**Estimated Completion Date:** The Assistant Administrator for Procurement anticipates completion of this action within 120 days of issuance of the final audit report.

**Recommendation 1b:** Routinely request vendor price discounts as required by FAR Subpart 8.405-4, “Price reductions.”

**Management’s Response:** NASA concurs with this recommendation. OP agrees that contracting officers should routinely request vendor price discounts, as required by FAR Subpart 8.405-4. Although the FAR already provides guidance in this area, OP will remind contracting officers to routinely request vendor price discounts, as required by FAR Part 8.405-4.

**Estimated Completion Date:** The Assistant Administrator for Procurement anticipates completion of this action within 120 days of issuance of the final report.

**Recommendation 1c:** Generate a universe of NASA-specific agreements, select a random sample of agreements from the universe, and review those agreements and orders to verify that authorized procedures are followed as required by FAR Subpart 13.303-6, “Review procedures.”

**Management’s Response:** NASA concurs with this recommendation. OP agrees that a random sample of agreements should be selected and reviewed to verify that regulations and procedures are followed, as required by FAR Subpart 13.303-6. Although the Headquarters Self-Assessment Guide, dated February, 2014 already requires a bi-annual review, OP will communicate to the Centers the need to include BPA’s as a review topic for internal self-assessments to verify that regulations and procedures are followed.

**Estimated Completion Date:** The Assistant Administrator for Procurement anticipates completion of this action within 120 days of issuance of the final report.

**Recommendation 1d:** Review each agreement annually to ensure that it reflects changes in market conditions, sources of supply, and other pertinent factors and update the agreement if necessary as required by FAR Subpart 8.405-3, “Blanket Purchase Agreements (BPAs).”

**Management’s Response:** NASA concurs with this recommendation. OP agrees that NASA contracting officers should review each agreement annually to ensure that the agreement reflects changes in market conditions, sources of supply, and other pertinent factors, if necessary, as required by FAR Subpart 8.405-3. Although the FAR already provides guidance in this area, OP will remind contracting officers to review each agreement annually to ensure that it reflects changes in market conditions, sources of supply, and other pertinent factors, if applicable, as found in FAR Part 8.405-3.

**Estimated Completion Date:** The Assistant Administrator for Procurement anticipates completion of this action within 120 days of issuance of the final report.



2. The Goddard Advanced Manufacturing Branch Head take actions to increase the number of conforming bids:

**Recommendation 2a:** Issue a formal notice advising customers of the requirement to request fabricated items as soon as they identify a need and explaining the timeframes required to complete the procurement process.

**Management's Response:** NASA concurs with this recommendation. The Goddard Advanced Manufacturing Branch agrees that customers should be requesting fabricated items as soon as they identify a need, which includes the timeframe for completing the procurement process. The Branch will communicate to their customers in order to explain the timeframes required to complete the procurement process and to remind them to request fabricated items as soon as they identify a need.

**Estimated Completion Date:** The Goddard Advanced Manufacturing Branch Head anticipates completion of this action within 120 days of issuance of the final report.

**Recommendation 2b:** Modify the Branch's competitive bidding procedures to require contracting officials issue solicitations to enough vendors to ensure consistent receipt of at least three bids.

**Management's Response:** NASA concurs with comment to this recommendation. The Goddard Advanced Manufacturing Branch agrees that contracting officials should issue solicitations to a minimum of 4-vendors to ensure competition. The Branch's current process already outlines this requirement in the Outsourcing for Fabrication Services, Work Instruction number 547-WI-5100.1.4A. Moreover, contracting officials utilize an automated database to select qualified vendors for a particular task based on task requirements and previous opportunities to bid and have the capability to add to the number of vendors solicited. The Branch will remind contracting officials to issue solicitations in accordance with the Work Instruction number 547-WI-5100.1.4A.

**Estimated Completion Date:** The Goddard Advanced Manufacturing Branch anticipates completion of this action within 120 days of issuance of the final report.

**Recommendation 2c:** Evaluate the administrative costs of using competitive bidding procedures for purchases below the micro-purchase threshold of \$3,000 and consider revising the process to exclude such purchases from competitive bidding.

**Management's Response:** NASA concurs with this recommendation. The Goddard Advanced Manufacturing Branch agrees and will encourage the technical team to exclude competitive bidding below the micro-purchase threshold of \$3,000, while ensuring the requirements continue to rotate through the BPA vendors, when practicable. The Branch intends to re-evaluate this process change, in 6 months, to determine if the benefits outweigh any unrecognized costs savings by not competing these requirements and will consider revising the process to exclude such purchases from competitive bidding.



**Estimated Completion Date:** The Goddard Advanced Manufacturing Branch Head anticipates completion of this action within 180 days of issuance of the final report.

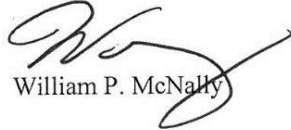
**Recommendation 2d:** Evaluate the benefits and costs of adopting multiple selection criteria including delivery schedule, price, and past delivery performance. If the benefits exceed costs, revise policy to require such a process.

**Management's Response:** NASA concurs with this recommendation. The Goddard Advanced Manufacturing Branch agrees that its automated database already has the multiple selection criteria capability built in to include delivery schedule, price, and past delivery performance. The Branch will remind contracting officials to utilize multiple selection criteria and the database current capabilities, when applicable.

**Estimated Completion Date:** The Goddard Advanced Manufacturing Branch anticipates completion of this action within 120 days of issuance of the final report.

We have reviewed the draft report for information that we believe should not be publicly released, and have not identified any issues regarding public release.

Again, thank you for the opportunity to review and comment on the subject draft report. If you have further questions or require additional information regarding this response, please contact LaVerne Randolph at 202-358-4801.



William P. McNally

cc:  
GSFC Advanced Manufacturing Branch/Mr. Blount

# APPENDIX D: REPORT DISTRIBUTION

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## National Aeronautics and Space Administration

Administrator  
Associate Administrator  
Chief of Staff  
Assistant Administrator for Procurement  
Director, Goddard Space Flight Center  
Director, Langley Research Center  
Goddard Advanced Manufacturing Branch Head

## Non-NASA Organizations and Individuals

Office of Management and Budget  
Deputy Associate Director, Energy and Science Division  
Branch Chief, Science and Space Programs Branch  
Government Accountability Office  
Director, Office of Acquisition and Sourcing Management

## Congressional Committees and Subcommittees, Chairman and Ranking Member

Senate Committee on Appropriations  
Subcommittee on Commerce, Justice, Science, and Related Agencies  
Senate Committee on Commerce, Science and Transportation  
Subcommittee on Science and Space  
Senate Committee on Homeland Security and Governmental Affairs  
House Committee on Appropriations  
Subcommittee on Commerce, Justice, Science, and Related Agencies  
House Committee on Oversight and Government Reform  
Subcommittee on Government Operations  
House Committee on Science, Space, and Technology  
Subcommittee on Oversight  
Subcommittee on Space

(Assignment No. A-14-002-00)