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Report to Congressional Committees

December 2004

HOMELAND SECURITY

Further Action Needed to Promote Successful Use of Special DHS Acquisition Authority

GAO-05-136

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GAO Accountability · Integrity · Reliability

Highlights

Highlights of GAO-05-136, a report to the Senate Committee on Governmental Affairs and the House Committee on Government Reform

Why GAO Did This Study

The Homeland Security Act of 2002 authorized the Department of Homeland Security (DHS) to establish a pilot program for the use of acquisition agreements known as "other transactions." Because they are exempt from many of the requirements that apply to government contracts, other transactions can be useful in acquiring cutting-edge technologies from entities that traditionally have declined to do business with the government.

The act requires GAO to report to Congress on the use of other transactions by DHS. To fulfill this obligation, GAO (1) determined if DHS has developed policies and established a workforce to manage other transactions effectively and (2) evaluated how effectively DHS has used its other transactions authority to attract nontraditional government contractors.

What GAO Recommends

To promote the efficient and effective use of its other transactions authority GAO recommends that DHS (1) provide guidance on including audit provisions in other transactions agreements, (2) develop a training program in the use of other transactions, and (3) capture knowledge obtained during the acquisition process for use in planning and implementing future other transactions projects.

DHS generally concurred with our recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-05-136.

To view the full product, including the scope and methodology, click on the link above. For more information, contact William T Woods at (202) 512-4841 or woodsw@gao.gov..

What GAO Found

The Department of Homeland Security has issued policy and is developing a workforce to implement its other transactions authority, but the department's policies need further development and its contracting workforce needs strengthening to promote the successful use of the authority in the future. Soon after it was established, DHS issued other transactions solicitations using some commonly accepted acquisition practices and knowledge-based acquisition principles. Subsequently, the department issued a management directive and drafted guidance for using other transactions, loosely modeled on the practices of the Department of Defense (DOD), one of several other agencies with other transactions authority and the one with the most experience with using these agreements. Unlike DOD, however, DHS has not specified in its policies or guidance when its contracting staff should consider the use of independent audits to help ensure, for example, that payments to contractors are accurate. Similarly, DHS has not established training requirements to aid staff in understanding and leveraging the benefits of other transactions. The DHS contracting workforce is limited in size and capacity, which could impede the department's ability to manage a potential increase in its other transactions workload. DHS is taking steps to enhance the capacity of its contracting workforce.

The DHS Science and Technology Directorate included nontraditional government contractors in its first two other transactions projects. The Directorate engaged in extensive outreach efforts, such as conducting briefings on its mission and research needs to industry and academic institutions and using a number of Web-based tools to publicize its solicitations. But DHS has not yet developed mechanisms to capture and assess the knowledge gained about the use of other transactions. As a result, DHS may not be able to leverage information from current projects for use in future solicitations that use other transactions.

Profile of Early DHS Other Transactions Awards

Countermeasures for Man Portable Air Defense System	Detection Systems for Chemical and Biological Countermeasures
• Prototype project to protect commercial aircraft. • Estimated total budget: $96 million. • Three phase I awards and two phase II awards as of October 25, 2004.	• Prototype project to protect against chemical and biological attacks. • Estimated budget for phase I: $6.6 million. • 17 phase I awards as of August 2, 2004.

Source: DHS.

Note: All awards included a nontraditional government contractor at either the prime or subaward level.

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Abbreviations

BAA	broad agency announcements
CAS	Cost Accounting Standards
Chem-Bio	Chemical and Biological Countermeasures
Counter-MANPADS	Countermeasures for Man Portable Air Defense System
CPO	Chief Procurement Officer
DARPA	Defense Advanced Research Projects Agency
DCAA	Defense Contract Audit Agency
DHS	Department of Homeland Security
DOD	Department of Defense
FAR	Federal Acquisition Regulation
FTE	full-time equivalent
HSARPA	Homeland Security Advanced Research Projects Agency
IP	intellectual property
IPT	Integrated Product Team
R&D	research and development
S&T	Science and Technology
SED	Systems Engineering and Development

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GAO
Accountability * Integrity * Reliability

United States Government Accountability Office
Washington, DC 20548

December 15, 2004

The Honorable Susan M. Collins
Chairman
The Honorable Joseph I. Lieberman
Ranking Minority Member
Committee on Governmental Affairs
United States Senate

The Honorable Tom Davis
Chairman
The Honorable Henry A. Waxman
Ranking Minority Member
Committee on Government Reform
House of Representatives

Protecting the nation against terrorism by researching, developing, testing, and deploying cutting-edge technologies is a key mission of the new Department of Homeland Security (DHS). The Homeland Security Act of 2002[1] gave the Secretary of Homeland Security the authority to establish a 5-year pilot program using special acquisition authority, known as "other transactions," to carry out research and development (R&D) and prototype projects.[2] Other transactions are agreements other than government contracts, grants, and cooperative agreements. Other transactions are exempt from the Federal Acquisition Regulation (FAR), the government's Cost Accounting Standards,[3] and various federal statutes, and therefore can be customized to meet an agency's project

[1] Homeland Security Act of 2002, Pub. L. No. 107-296, Nov. 25, 2002.

[2] Congress authorized the Department of Defense's (DOD) Defense Advanced Research Projects Agency to use other transactions for research projects in 1989, and in 1993, authorized DOD to use other transactions for prototype projects. In fiscal year 2003, the most recent year for which complete data are available, DOD awarded approximately 60 other transactions agreements for prototypes, and several more for research projects. Two other agencies also have other transactions authority: National Aeronautics and Space Administration and the Department of Transportation. Recently, the Services Acquisition Reform Act authorized all federal agencies to use other transactions to acquire antiterrorism technology.

[3] The Cost Accounting Standards are accounting requirements for the measurement, assignment, and allocation of costs to contracts.

requirements. Because fewer government-unique requirements apply, other transactions can be useful in attracting private-sector entities that traditionally have not done business with the government.

Section 831(b) of the Homeland Security Act requires that we report to the House Committee on Government Reform and the Senate Committee on Governmental Affairs on the use of other transactions by DHS. Based on discussions with your staff, we (1) determined whether DHS has developed policies and established a workforce to effectively manage the use of other transactions, and (2) evaluated how effectively DHS has used its other transactions authority to attract nontraditional government contractors.

Results in Brief

The Department of Homeland Security has issued policy and is developing a workforce to implement its other transactions authority, but further development of the department's policies and strengthening of its workforce are needed to promote successful use of the authority. Soon after it was established, the department issued solicitations based on its other transactions authority, using some commonly accepted acquisition practices and knowledge-based acquisition principles. The department subsequently issued a management directive and drafted guidance that together provide a framework for how other transactions authority should be implemented. These documents, which address such issues as acquisition planning and determining when other transactions might best be used, are loosely modeled after the other transactions policies of the Department of Defense (DOD), one of several other agencies with other transactions authority and the one with the most experience using these agreements. Unlike DOD, however, DHS has not specified in its policies or guidance when its contracting staff should consider the use of independent audits to help ensure, for example, that payments to contractors are accurate. The guidance also does not address training requirements for DHS contracting and program staff to ensure that they fully understand and leverage the benefits of using other transactions. Recognizing that the limited size and capacity of the contracting workforce at DHS could impede the department's ability to achieve its goal of managing the potential increase in its other transactions workload with in-house resources, DHS is taking steps to enhance the capacity of its workforce.

The Science and Technology (S&T) Directorate within DHS included nontraditional government contractors in its two other transactions projects thus far. The S&T Directorate penetrated the nontraditional

contractor market by engaging in a variety of outreach efforts, such as conducting briefings on its mission and research needs to industry and academic institutions and using a number of Web-based tools to publicize its solicitations. While the S&T Directorate moved quickly to establish its organization and initiate several acquisitions involving other transactions, it has not been effective in capturing and assessing the knowledge gained about the process of using other transactions. Without capturing such knowledge, DHS may not be able to leverage lessons learned from current projects for use in future solicitations.

To help DHS realize the full benefits of other transactions authority, we are making several recommendations to improve the department's policies and procedures. We are recommending that DHS (1) establish guidance on when it is appropriate to include audit provisions in other transactions agreements, (2) develop a training program for DHS staff in the use of other transactions to help ensure the appropriate use of this authority, and (3) capture knowledge obtained during the acquisition process for use in planning and implementing future other transactions projects.

We provided a draft of this report to DHS for review and comment. DHS agreed with our first two recommendations and noted that it is working to address them. Regarding our recommendation that DHS capture knowledge obtained during the acquisition process for use in planning and implementing future projects that could use other transactions, DHS agreed with the utility of retaining historical information about its procurement activities. However, DHS sought clarification about the types of information we recommend it retain and to what end it is to be used. We have added information on how DHS could capture and use information on practices used successfully in the past to attract nontraditional contractors. DHS also provided technical revisions to our draft report, which we incorporated as appropriate.

Scope and Methodology

To determine whether DHS has developed policies and established a workforce to use other transactions, we analyzed DHS's organization, and policy and draft guidance for using these authorities. We interviewed DHS contracting officials and representatives from the DOD agencies that DHS has used for contracting support, officials in its S&T Directorate, and contractors to whom it made initial other transactions awards. We collected and reviewed other transactions agreement documents for DHS's Countermeasures for Man-Portable Air Defense System (Counter-MANPADS) and Chemical and Biological Countermeasures (Chem-Bio) projects, the only two projects with other transactions awards as of the

time of our review. We also reviewed other S&T Directorate solicitations that could result in other transactions agreements, but which had not yet resulted in awards as of the completion of our audit work. We analyzed information obtained from our interviews and file reviews using criteria that we found are generally important to federal acquisitions, namely, planning, reviews and approvals, market knowledge, and monitoring of contractor performance. We derived these criteria from our prior reports on other transactions and knowledge-based acquisition principles, DOD's policies for other transactions, and selected parts of the FAR.

To determine how effectively DHS used its other transactions authority to attract nontraditional government contractors, we analyzed DHS's reported results from using these authorities in the Counter-MANPADS and Chem-Bio programs. We also reviewed other DHS acquisitions that could result in other transactions awards but for which DHS had not yet made awards. DHS relies on contractors to self-certify their status as a nontraditional government contractors during agreement negotiation. In analyzing the reported results from DHS's other transactions awards, we did not independently verify a contractor's reported status as a nontraditional contractor. We also compared DHS's practices to attract nontraditional government contractors against policies and practices used by DOD. In addition, we interviewed DHS contracting and project management officials, contractors that DHS made other transactions awards to, and representatives from the commercial research and development and technology communities to gain their perspectives on DHS's use of other transactions to attract nontraditional government contractors.

We performed our review from February through October 2004 in accordance with generally accepted government auditing standards.

Background

The acquisition function plays a critical role in helping federal agencies fulfill their missions. DHS is expected to spend billions of dollars annually to acquire a broad range of products, technologies, and services from private-sector entities. Other transactions authority is one of the acquisition tools—in addition to standard FAR contracts, grants, and cooperative agreements—available to DHS to help support its mission. Other transactions were created to enhance the federal government's ability to acquire cutting-edge science and technology. They help agencies accomplish this, in part, through attracting nontraditional contractors from the private sector and other areas that typically have stayed away from pursuing government contracts. There are two types of other

transactions authorities—(1) research and (2) prototype. Other transactions for research are used to perform basic, applied, or advanced research. Other transactions for prototypes are used to carry out projects to develop prototypes used to evaluate the technical or manufacturing feasibility of a particular technology, process, or system. A single S&T program could result in multiple awards using other transactions.

Because they are exempt from certain statutes, other transactions permit considerable latitude by agencies and contractors in negotiating agreement terms. For example, other transactions allow the federal government flexibility in negotiating intellectual property and data rights, which stipulate whether the government or the contractor will own the rights to technology developed under the other transactions agreement. Table 1 shows the statutes that DHS has determined are generally inapplicable to its other transactions agreements.

Table 1: DHS's List of Laws Generally Inapplicable to Its Other Transactions Agreements

Law	Description
Sections 202-204 of the Bayh-Dole Act (35 U.S.C. sections 200-212).	Prescribes the government's rights in patentable inventions made with government funds.
Competition in Contracting Act (Pub. L. No. 98-369 [1984]), as amended.	Promotes the use of competitive procurement procedures and prescribes uniform, governmentwide policies and procedures regarding contract formation, award, publication, and cost or pricing data.
Contract Disputes Act, Pub. L. No. 95-563 (1978), as amended, 41 U.S.C. 601 et seq.	Provides for the resolution of claims and disputes relating to government contracts.
Procurement Protest System, Subtitle D of Competition in Contracting Act, Pub. L. No. 98-369 (1984), 31 U.S.C. 3551 et seq.	Provides statutory basis for procurement protests by interested parties to the Comptroller General.
31 U.S.C. 1352, Limitation on the use of appropriated funds to influence certain federal contracting and financial transactions.	Prohibits the use of funds to influence or attempt to influence government officials or Members of Congress in connection with the award of contracts, grants, loans, or cooperative agreements.
Anti-Kickback Act of 1986, 41 U.S.C. 51-58.	Prohibits kickbacks in connection with government contracts and provides civil and criminal penalties.
Procurement Integrity Provisions, Section 27 of the Office of Federal Procurement Policy Act, 41 U.S.C. 423.	Imposes civil, criminal, and administrative sanctions against individuals who inappropriately disclose or obtain source selection information or contractor bid and proposal information.
Service Contract Act, 41 U.S.C. 351 et seq, Walsh Healey Act, 41 U.S.C. 35-45; Fair Labor Standards Act of 1938, 29 U.S.C. 201-219.	Provide protections for contractor employees.
Drug-Free Workplace Act of 1988, 41 U.S.C. 701-707.	Eliminates any connection between drug use or distribution and federal contracts, cooperative agreements, or grants.
Buy American Act, 41 U.S.C. 10a-d.	Provides preferences for domestic end products.

Source: DHS.

Note: According to DHS, this list of key statutes that apply to procurement contracts that are not necessarily applicable to other transactions is not intended to be definitive. DHS's other transaction policy states that contracting officers should review each statute with regard any particular arrangement using other transactions and consult their General Counsel to determine its applicability. To the extent a particular statute is funding- or program-related, or is not tied to the instrument used, it generally will apply to an other transaction. This table should not be construed as representing GAO's views concerning the applicability of statutes to other transactions agreements.

Because other transactions agreements do not have a standard structure based on regulatory guidelines, they can be challenging to create and administer. Experts on other transactions and industry officials who have used these procurement arrangements told us that other transactions agreement terms are significantly different from FAR contracts and more closely resemble procurement agreements between private-sector firms. According to DHS, the unique nature of other transactions agreements means that federal government acquisition staff who work with other transactions agreements should have experience in planning and

conducting research and development acquisitions, strong business acumen, and sound judgment to enable them to operate in a relatively unstructured business environment.

DHS views the use of other transactions as key to attracting nontraditional government contractors—typically high-technology firms that do not work with the government—that can offer solutions to meet agency needs. As defined by the Homeland Security Act,[4] a nontraditional government contractor is a business unit that has not, for at least a period of 1 year prior to the date of entering into or performing an other transactions agreement, entered into or performed

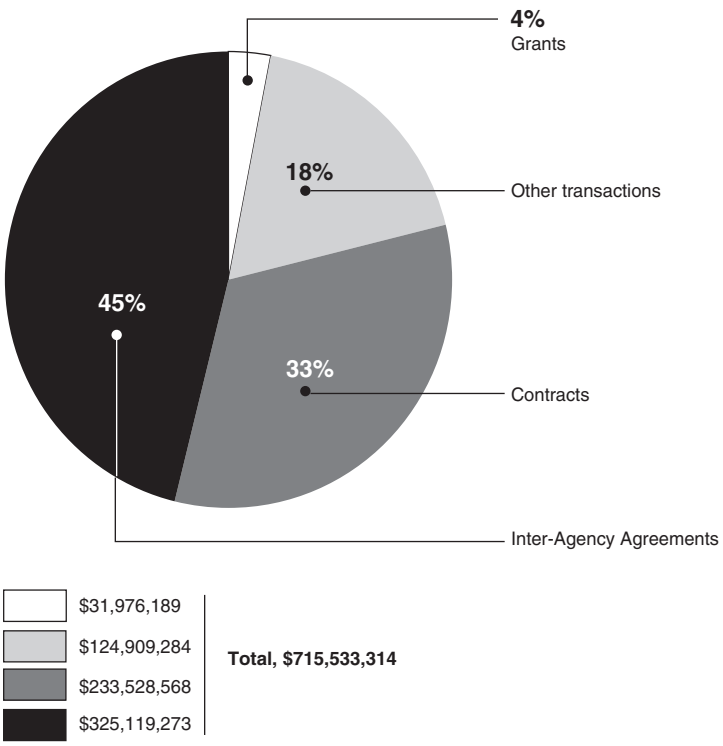
- any contract subject to full coverage under the cost accounting standards or
- any contract in excess of $500,000 to carry out prototype projects or to perform basic, applied, or advanced research projects for a federal agency that is subject to compliance with the FAR.

The S&T Directorate of DHS supports the agency's mission by serving as its primary research and development arm. According to a senior DHS Chief Procurement Office official, the S&T Directorate currently is the only DHS organization using the other transactions authority provided in the Homeland Security Act. As of September 2004, other transactions agreements accounted for about $125 million (18 percent) of the S&T Directorate's fiscal year 2004 total acquisition activity of $715.5 million.[5] The S&T Directorate's fiscal year 2004 total acquisition activity is depicted in figure 1.

[4] Section 831(d) of the Homeland Security Act of 2002, Pub. L. No. 107-296, Nov. 25, 2002, referring to section 845 of the National Defense Authorization Act for Fiscal Year 1994.

[5] DHS estimated that it spent approximately $6.6 billion on acquisitions in fiscal year 2004.

Figure 1: S&T Directorate's Fiscal Year 2004 Acquisition Activity



Source: DHS.

Note: Inter-Agency Agreements are the means by which the S&T Directorate transfers funds to national or university laboratories to conduct R&D activities.

DHS Placed Initial Priority on Project Implementation while Developing Other Transactions Policy and Acquisition Workforce

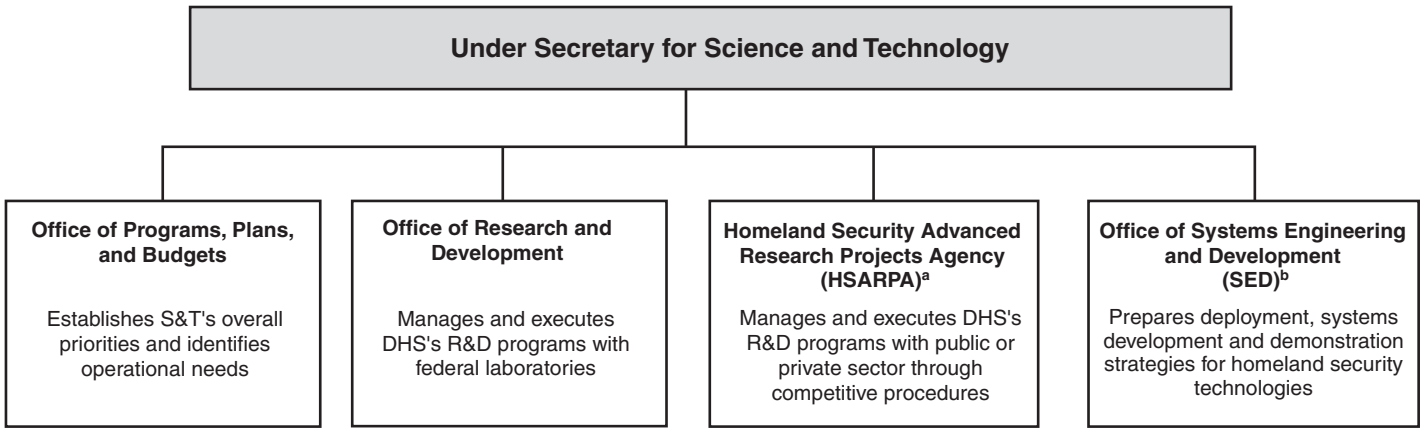
After DHS was established in 2003, the department rapidly established the S&T Directorate, which issued several solicitations using other transactions authority. These solicitations used some commonly accepted acquisition practices and knowledge-based acquisition principles. DHS issued a management directive, drafted guidance, and recruited additional program and contracting staff, which now provide a foundation for using other transactions authority; however, refinements in these policies and attention to workforce issues are needed to promote success in the department's future use of other transactions. DHS's policy guidance does not specify when audit requirements should be included in its other transactions agreements to help ensure, for example, that payments to contractors are accurate. Also, the department's guidance does not

address training requirements for its contracting and program staff to ensure that staff understand and leverage the use of other transactions. In addition, the limited size and capacity of DHS's internal contracting workforce to conduct other transactions may hamper DHS's goal to internally manage its increasing number of mission programs that could use its other transactions authority.

DHS Simultaneously Established Its Science and Technology Organization and Implemented Projects

DHS was directed by Congress and the executive branch to quickly initiate and execute R&D projects to help strengthen homeland security. The S&T Directorate at DHS was largely established to centralize the federal government's homeland security R&D efforts, a function that was not the responsibility of any of DHS's legacy agencies. Figure 2 depicts the Directorate's four offices and their functions. The S&T Directorate initiated various projects to address homeland security concerns, including two prototype projects using other transactions authority. Initiating and executing these first projects took priority over establishing the Directorate's operating procedures. The S&T Directorate's need to rapidly initiate and execute projects forced a reliance on other federal agencies' acquisition offices to award and administer its project agreements.

Figure 2: The S&T Directorate's Offices and Overview of Their Functions



Source: DHS.

[a]HSARPA is managing the Chem-Bio program.

[b]SED is managing the Counter-MANPADS program.

The S&T Directorate hired program managers and staff with R&D expertise from other government agencies and the private sector to manage its other transactions authority and other acquisitions. These initial hires included several former Defense Advanced Research Projects Agency (DARPA) officials experienced in R&D and other transactions authority acquisitions. In the absence of DHS policies and procedures for other transactions, the S&T Directorate relied on these key officials and other staff with R&D expertise in their former organizations to implement its early projects. These experienced staff helped train DHS program and contracting staff in other transactions and supervised and managed the acquisition process. For example, one official drafted a model other transactions agreement and guided program managers and contracting officers through the other transactions process. In addition to these officials, the S&T Directorate obtained portfolio and program managers from other government agencies and federal laboratories to act in key programmatic positions in their areas of expertise. Some of these portfolio and program managers serve on detail from their home agency. The S&T Directorate's workforce strategy is to have its program and technical staff serve term appointments, most of which will not be longer than 4 years, in order to promote the influx of leading-edge science and technology skills to DHS.

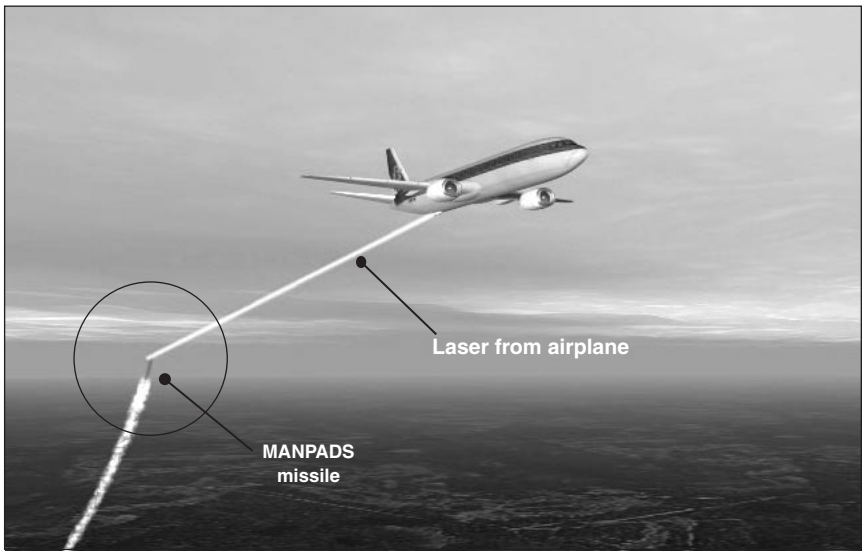
DHS's planning and budget documents identified the need to develop countermeasures and detection systems against chemical-biological (Chem-Bio) and radiological-nuclear attacks. Under one area of the Chem-Bio project, being implemented by the S&T Directorate using other transactions, DHS is developing mobile laboratories to be rapidly deployed in the field to detect and analyze chemical warfare agents and toxic industrial chemicals in the environment. Figure 3 depicts a mobile laboratory being developed for DHS.

Figure 3: Mobile Laboratory—Exterior and Interior Views

Source: Hamilton Sundstrand Corporation.

The S&T Directorate also initiated projects to address homeland security needs identified by Congress and the executive branch. One such project is aimed at protecting commercial aircraft against possible terrorist use of shoulder-fired missiles, sometimes referred to as man-portable air defense systems (MANPADS). The Counter-MANPADS other transaction project is a multiyear development and demonstration program that will produce prototype systems to be used on commercial aircraft to defend against shoulder-fired missiles. An illustration of a proposed Counter-MANPADs technology being considered by DHS is depicted in figure 4.

Figure 4: Illustration of Commercial Airplane Using Laser Technology to Deflect MANPADS Missile



Source: BAE Systems.

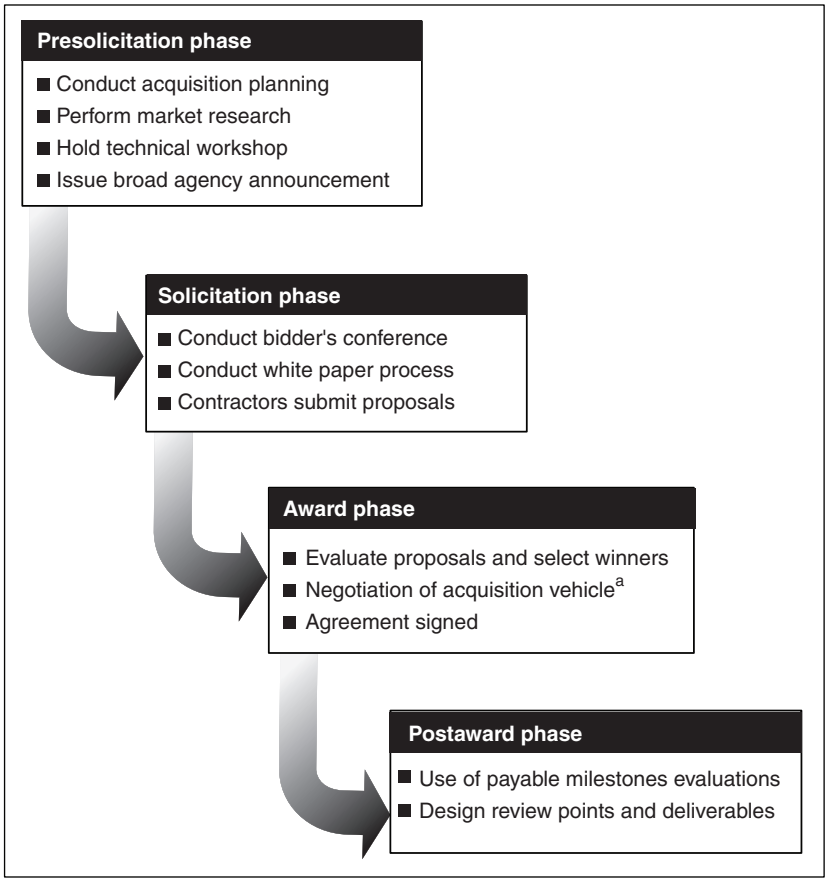
Other Transactions Projects Used a Variety of Acquisition Techniques

The S&T Directorate and Office of the Chief Procurement Officer (CPO) used Federal Acquisition Regulation principles as a framework for other transactions solicitations. The Directorate also utilized additional acquisition tools commonly used by DARPA and other agencies, such as

- broad agency announcements (BAA) to serve as general announcements of the Directorate's research interest, including general principles for selecting proposals, and soliciting the participation of all offerors capable of satisfying the S&T Directorate's needs;
- a white paper process under which firms submit to S&T brief synopses of the main concepts of a proposal introducing technology innovations or solutions; and
- payable milestone evaluations under which the S&T Directorate's managers measure the progress of its projects at key points before making payments to contractors.

The S&T Directorate modeled its acquisition process after DARPA's to solicit proposals from as many industry sources as possible to meet its research needs and hosted technical workshops and bidders conferences for its early solicitations to help convey its technical needs to industry. An overview of the S&T Directorate's generally used acquisition process for other transactions is in figure 5.

Figure 5: Overview of the S&T Directorate's Acquisition Process for Other Transactions



Source: DHS.

Note: According to DHS, not all steps apply for all of its acquisitions.

[a]For the Counter-MANPADS and Chem-Bio solicitations, other transactions for prototypes were the only acquisition vehicle solicited. After the Counter-MANPADS and Chem-Bio projects, HSARPA modified its solicitation strategy and began issuing BAA solicitations offering the choice of different acquisition vehicles (contract, grant, cooperative agreement, or other transaction) for its projects. HSARPA indicated that the BAA process will be used the most for its future projects.

The Homeland Security Advanced Research Projects Agency (HSARPA) and Office of Systems Engineering and Development (SED) hosted technical workshops prior to publishing some of their early solicitations to obtain information from the industry on what technical requirements were feasible to include in the solicitation. Following the issuance of the solicitations, HSARPA and SED held bidder's conferences to answer industry questions about the solicitations.

The S&T Directorate used a white paper review stage in its early solicitations, including solicitations for the Counter-MANPADS and Chem-Bio programs. According to DHS's Chem-Bio solicitation, the use of the white paper approach allows DHS to provide firms with feedback on their proposed technologies without the firms having to incur the expense and time of writing complete proposals. For the Chem-Bio project, HSARPA received over 500 white papers from industry. S&T officials told us they provided each contractor that submitted a white paper for this project with feedback, giving the agency's views on the merits of the proposed technology. HSARPA officials told us that the white paper process helps ensure that the office gets the best proposals and represents an inexpensive way for nontraditional firms to pursue business with DHS.

To rapidly execute its projects, including other transactions agreements, the S&T Directorate used other federal agencies to award and administer its contracts to fill DHS's contracting workforce gaps. DHS has interagency agreements with these agencies for their contracting services. For example, HSARPA is using the U.S. Army Medical Research Acquisition Activity, based in Ft. Detrick, Maryland, which performs acquisition services for the Army, to award other transactions instruments in support of its Chem-Bio project.[6] In addition, DHS is using a contractor who is an expert in other transactions and R&D procurement to help draft its other transactions policy guidance and also provide assistance to administer several of its other transactions projects.

[6]According to DHS, much of the contract award work done by the U.S. Army Medical Research Acquisition Activity for its Chem-Bio project is now being performed by DHS's Office of Procurement Operations, which is part of its Chief Procurement Office.

Process for Other Transactions Uses Some Knowledge-Based Approaches

The S&T Directorate incorporated some knowledge-based acquisition approaches throughout its acquisition process for using its other transaction authorities. We previously reported that an agency's use of a knowledge-based acquisition model is key to delivering products on time and within budget. By using a knowledge-based approach, an agency can be reasonably certain about the progress of its project at critical junctures during development, which helps to ensure that a project does not go forward before the agency is sure that the project is meeting its needs.[7] For example, some of the knowledge-based approaches being used by the S&T Directorate and CPO to manage their Counter-MANPADS and Chem-Bio other transaction projects are as follows:

- **Integrated Product Teams (IPTs).** Using IPTs to bring together in a single organization the different functions needed to ensure a project's success is a knowledge-based acquisition best practice.[8] The S&T Directorate formed IPTs that combine the expertise of representatives from each of its four offices to analyze customer requirements and make planning and budget decisions for the portfolio.

- **Contractor Payable Milestone Evaluations.** The S&T Directorate's program managers measure the progress of its projects at key points before making payments to contractors. These milestones are usually associated with contractors satisfying certain performance criteria—commonly referred to as "exit criteria."[9] Examples of SED's four payable milestones for Phase I and six payable milestones for Phase II of the Counter-MANPADS project are shown in figure 6.

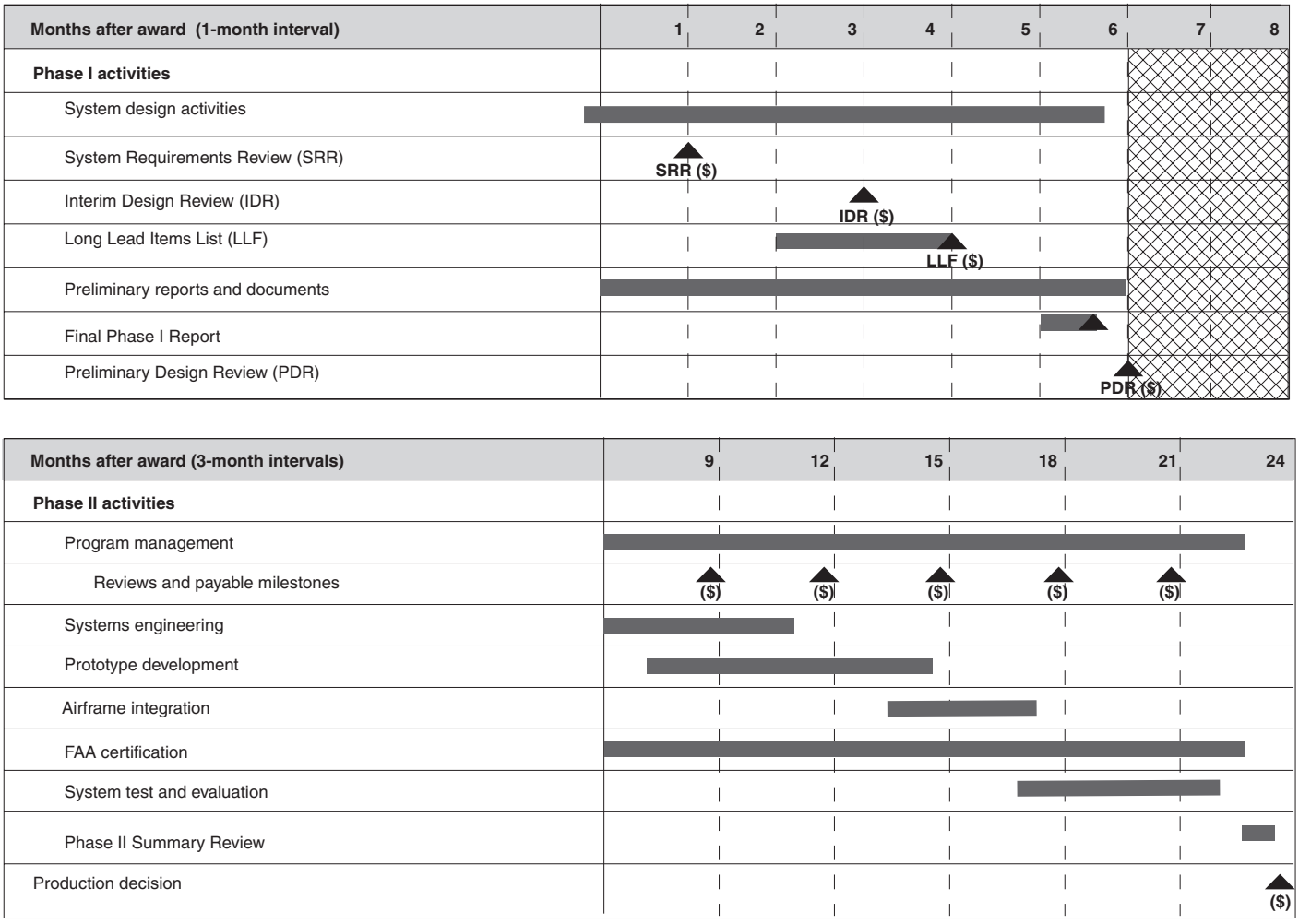
- **Design Reviews.** HSARPA and SED program managers also use design review decision points to ensure the contractor's product development is meeting program expectations and to determine if the product is ready to proceed to the next stage of development. (See figure 6 for the design review points in Phase I of the Counter-MANPADS project.)

[7] GAO, *Best Practices: Highlights of the Knowledge-Based Approach Used to Improve Weapon Acquisition*, GAO-04-392SP (Washington, D.C.: January 2004).

[8] GAO-04-392SP.

[9] Our report on DHS's Counter-MANPADS development program found that DHS needed to make its Counter-MANPADS exit criteria more knowledge-based, which would require the contractor to demonstrate that key product knowledge was obtained at a certain stage. See *The Department of Homeland Security Needs to Fully Adopt a Knowledge-Based Approach to Its Counter-MANPADS Development Program*, GAO-04-341R (Washington, D.C.: Jan. 30, 2004).

Figure 6: Counter-MANPADS Project Phase 1 and Phase 2 Payable Milestones



Source: DHS.

Note: Payment milestones depicted above are for illustration only as provided in DHS's solicitation. According to DHS, proposers were encouraged to alter the schedule to accommodate their individual program solutions and this figure does not reflect the individual milestones that were ultimately negotiated with each of the successful teams. DHS has negotiated its phase II milestones, which may deviate from representation above.

Changes in Policies and Enhancement of Acquisition Workforce Could Help Sustain Long-Term Use of Other Transactions

In 2002 we identified key success factors for DHS to effectively create its organization, including creating strong systems and controls for acquisition and related business processes.[10] The development of formal policies and procedures for DHS's authority to use other transactions is guided by statute and DOD's experiences and practices in using the other transactions authority. DOD's extensive experiences with and policies for using other transactions provide a useful framework for the effective management of projects using other transactions. For example, DOD uses a guidebook for other transactions prototype projects, which provides detailed policies and procedures in areas such as criteria for using other transactions, acquisition planning, agreement execution, and reporting requirements.[11]

DHS Is Developing Its Other Transactions Authority Policies

In 2004 DHS prepared several policy and draft guidance documents, which should help provide DHS with a structure for using its other transactions authority. In October 2004, DHS issued an other transactions management directive, which provides DHS's policy for the use of other transactions for research and for prototype projects. The policy is generally consistent with DOD's policy. The management directive prescribes the responsibilities of key officials in using other transactions, such as the DHS Under Secretary of Management and its Chief Procurement Officer. Specifically, under the management directive, the CPO is responsible for setting policy, conducting oversight, and approving the use of other transactions authority for each project. The management directive also provides general policies and requirements for the documentation of a strategy for using other transactions and provides the purposes and criteria for using research and prototype other transactions. DHS's explanation of the types of other transactions and criteria for their use, if effectively implemented, should help promote its compliance with the Homeland Security Act[12] by helping to ensure that agency officials adequately assess the utility of other acquisition vehicles—such as FAR

[10] GAO, *Homeland Security: Critical Design and Implementation Issues*, GAO-02-957T (Washington, D.C.: July 17, 2002).

[11] DOD, Under Secretary of Defense for Acquisition, Technology and Logistics, "Other Transaction" (OT) Guide for Prototype Projects, (August 2002).

[12] The Homeland Security Act requires DHS, as it carries out basic, applied, and advanced research and development projects, to first determine that the use of a contract, grant, or cooperative agreement is not feasible or appropriate prior to using an other transaction for research. Pub. L. No. 107-296, section 831(a)(1), Nov. 25, 2002.

contracts, grants, or cooperative agreements, prior to using an other transaction for research. The purposes and criteria for other transactions use as stated by DHS are shown in table 2.

Table 2: DHS's Purposes and Criteria for Using Other Transactions for Research and Prototype Projects

Type of other transaction	Purposes for use of other transaction	Criteria for use of other transaction
Research	Carry out basic, applied, or advanced research programs where the main purpose is to stimulate or support homeland security technologies. Support nonfederal participants seeking to broaden the homeland security technology knowledge base.	• To develop innovative approaches when a standard procurement contract, grant, or cooperative agreement is not appropriate or feasible. • Use the flexibility provided in the Homeland Security Act to reduce government-specific administrative requirements for acquisition or assistance instruments. • Require, to the maximum extent practicable, a 50 percent resource sharing of program costs between DHS and the contractor.
Prototype	Implement prototype projects in support of systems proposed to be developed or acquired by DHS. Help DHS achieve the commercial technology integration to reduce the cost of homeland security items and systems.	• At least one nontraditional government contractor participates to a significant extent in the project. • If not, one of the following circumstances exists: • At least 1/3 of the total project cost is to be paid by parties to the transaction other than the federal government. • DHS's CPO determines, in writing, that exceptional circumstances justify the use of a transaction that provides for innovative business arrangements or structures that would not be feasible or appropriate under a procurement contract.

Source: DHS.

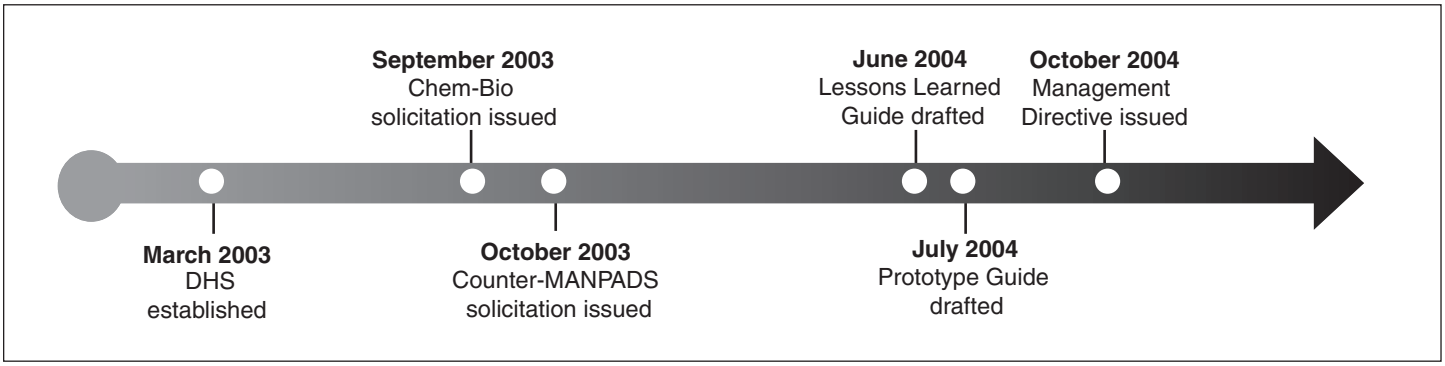
DHS is using a contractor experienced with other transactions to assist in the preparation of a guidebook for using other transactions for prototype projects. The draft guidebook, which is loosely based on the DOD guide on other transactions for prototype projects, provides a broad framework for DHS to plan and use other transactions. It covers topics such as acquisition planning, market research, acquisition strategy, and agreements analyses requirements.[13] According to a DHS official, its draft guidebook, when completed, is not to be part of the DHS official management directive system.

In addition, the contractor drafted a lessons learned report on other transactions to help DHS fully leverage the benefits and minimize any

[13]According to a DHS CPO official, DHS intends to draft a separate guidebook for other transactions for research in the future.

problems associated with using other transactions. DHS's draft lessons learned report on other transactions summarizes lessons from various sources, such as federal agencies and think tanks with other transactions experience, on topics related to those discussed in the draft guidebook. Figure 7 shows the development of DHS's other transactions policy.

Figure 7: Timeline of DHS's Development of Policies and Guidance for Using Other Transactions and Its Ongoing Other Transactions Projects



Source: GAO's analysis of DHS information.

Note: In addition to the two programs noted in this figure, the S&T Directorate issued approximately five additional solicitations from November 2003 through October 2004 that could result in multiple other transaction awards.

Other Transactions Policy Does Not Address Audit and Training Requirements

DHS's management directive and draft guidebook for other transactions does not yet specify roles, responsibilities, and requirements for agency program and contracting officials in two key areas: audit and training. Addressing these areas is important since, according to DHS officials, DHS plans to issue solicitations that could result in other transactions use at an increasing rate. S&T Directorate and CPO officials acknowledged the importance of these areas and told us they intend to address them in the future.

- **Audit requirements.** While DHS's management directive covers Comptroller General access to contractor records under certain conditions, the directive does not address audits by other entities or specify other circumstances when audits of other transactions agreements may be needed to protect the government's interest. For example, audits may be needed in certain other transactions agreements to help ensure that payments to contractors are accurate. DOD's policy for auditing

prototype other transactions projects,[14] by contrast, provides more complete guidance on audits of other transactions agreements. For example, the DOD policy states that contracting officers should include information on the frequency of audits, scope of audits, and the means by which audits are to be performed. DOD's policy also recognizes the flexibility in negotiating other transactions agreements by allowing the contracting officer, in certain circumstances, to waive the inclusion of audit provisions if it would adversely affect the execution of the agreement. DHS's management directive, in contrast, does not address these conditions. A DHS official told us that its contracting officers negotiate specific auditing provisions in other transactions agreements with contractors on a case-by-case basis.[15]

Also, the DOD other transactions prototype projects policy has provisions for its contracting officers to use the Defense Contract Audit Agency (DCAA)[16] or another independent auditor to audit other transactions agreements. Although DHS has a Memorandum of Understanding with DCAA to provide contract audit services, neither DHS's other transactions management directive nor its draft guidance contain information on the specific conditions when contracting officers should use DCAA's or another independent auditor's services.

- **Training requirements.** DHS's management directive requires other transactions contracting officers to be senior warranted contracting officers with a Level III acquisition certification[17] and who possess a level of experience, responsibility, business acumen, and judgment that enables them to operate in this relatively unstructured business environment. This staffing requirement for other transactions closely mirrors the contracting

[14] DOD, *Transactions Other Than Contracts, Grants, or Cooperative Agreements for Prototype Projects*, 68 Fed. Reg. 27452, final rule (May 20, 2003).

[15] In our prior work on DOD's use of prototype other transactions we found that DOD contracting staff included such audit provisions in almost all of the prototype other transactions agreements it awarded between fiscal years 1994 and 1998. See GAO, *Acquisition Reform: DOD's Guidance on Using Section 845 Agreements Could Be Improved*, GAO/NSIAD-00-33 (Washington, D.C.: Apr. 7, 2000).

[16] DCAA is a component of DOD that performs contract audits for DOD and provides accounting and financial advisory services regarding contracts and subcontracts to all DOD components responsible for procurement and contract administration. DCAA also provides other government agencies with contract audit services.

[17] According to DHS policy, there are three levels of contracting officers: Level 1 (entry-level), Level II (intermediate level), and Level III (senior level staff capable of performing the most sophisticated and complex contracting activities).

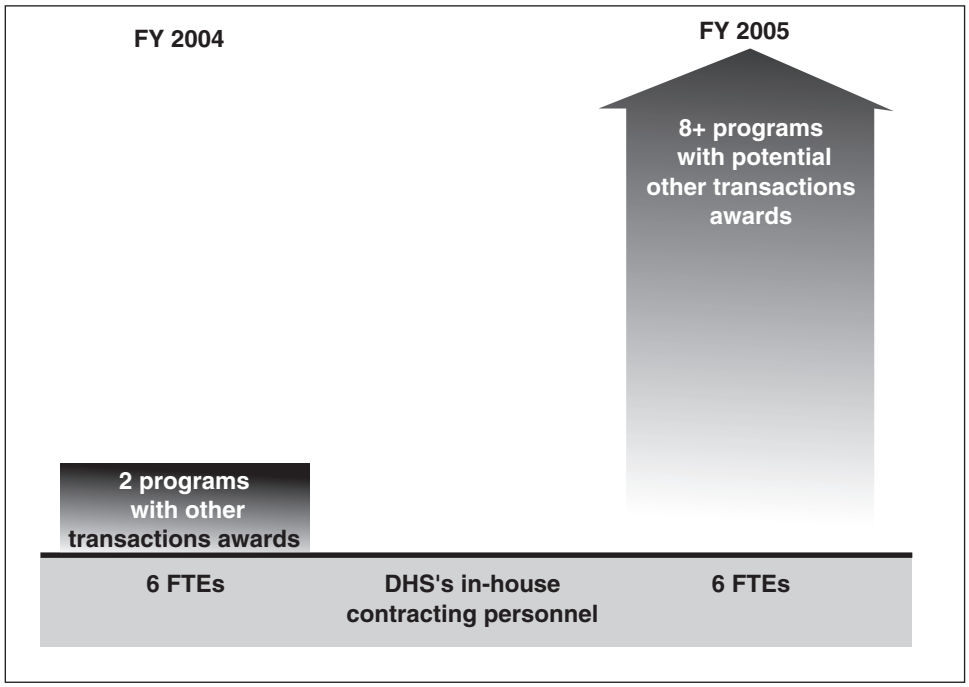
workforce staffing qualification used by DOD. DHS's management directive also requires its contracting staff to possess a special contracting officer certification, which can be achieved only after the staff have received appropriate training in other transactions. However, DHS has not yet developed a training program on other transactions for its contracting officers or its program managers expected to work on other transactions projects.

By not establishing other transactions training requirements and schedules for its contracting and program staff to complete them, DHS may not be equipping its staff to fully understand and leverage the benefits of other transactions. We have previously reported on the importance of training and reported that leading organizations usually prioritize key processes, identify staff needing training, and establish requirements to ensure that the appropriate staff are trained. Furthermore, because S&T's technical program personnel serve on details from other government agencies and have varying levels of experience with other transactions, appropriate training is key to help ensure that such staff uniformly and effectively use other transactions. DHS's draft lessons learned report on other transactions states that it is critical to train contracting officers on aspects such as (1) the flexibilities associated with other transactions to help ensure the proper and optimal use of the authority, and (2) negotiating intellectual property (IP) rights, which can vary from project to project.

Acquisition Workforce Capacity May Limit DHS's Ability To Manage A Growing Future Other Transactions Workload

The S&T Directorate plans an increasing number of mission programs that could use its other transactions authority, but DHS's current contracting workforce may not be sufficient to manage this workload. DHS has relied on a small number of key S&T program personnel, who are experienced other transactions practitioners, to develop or approve solicitations. In fiscal year 2004, two of the S&T Directorate's programs resulted in other transactions awards—Counter-MANPADS and Chem-Bio. In fiscal year 2005, the S&T Directorate could award other transaction agreements for at least eight additional programs, which could significantly increase its contracting workload because some programs could include multiple other transactions awards. (One S&T program could result in multiple awards using other transactions, contracts, grants, or cooperative agreements as the acquisition vehicle.) For example, S&T's ongoing Chem-Bio project has resulted in 17 other transactions awards as of August 2, 2004. Figure 8 depicts the S&T Directorate's project workload that could involve other transactions and the corresponding CPO in-house contracting support.

Figure 8: Illustration of S&T Directorate's Increasing Other Transactions Workload and Available In-house Contract Administration Support, Fiscal Year 2004 to Fiscal Year 2005



Source: GAO's analysis of DHS data.

Note: This figure depicts the scenario where DHS uses only its in-house contracting staff for its other transactions projects. However, DHS is currently supplementing these staff by using other federal agencies for contract award and administration support. At the end of fiscal year 2004 CPO dedicated six contracting staff—some of which are warranted contracting officers qualified in other transactions agreements—to support the S&T Directorate's acquisitions; at the start of fiscal year 2004, it had 1 full-time (staffing) equivalent (FTE) supporting S&T's acquisitions. According to CPO, these staff will help conduct S&T's acquisitions, which include other transactions. According to CPO and S&T Directorate officials, they intend to increase this staff support to 15 staff by the end of fiscal year 2005.

DHS is currently developing a plan to address contracting workforce issues. Senior DHS officials told us that their strategy is to generally have in-house contracting staff award and administer all of the S&T Directorate's other transactions and R&D projects by fiscal year 2006. Currently, CPO has dedicated six contracting staff—some of whom are warranted contracting officers dedicated to conducting other transactions—to support S&T acquisitions on a temporary basis. CPO and S&T Directorate officials told us that they intend to increase this staff support to 15 staff by the end of fiscal year 2005.

As cited in DOD policy and DHS's guidance, acquisition staff that award and administer other transactions need special skills and experience in business, market acumen, and knowledge of intellectual property issues. CPO and S&T Directorate officials told us that contracting officers with these skills and experience are difficult to find in the current acquisition workforce. In addition, they noted lengthy delays in DHS's ability to process needed security clearances for these staff, which caused some contracting officer candidates to accept positions elsewhere. DHS's challenges in developing its acquisition workforce are similar to other federal agencies' experiences in managing attrition and retirements affecting their acquisition workforces.[18]

As a result, DHS will continue to rely on other agencies for contracting support until the end of fiscal year 2006. For example, for its Chem-Bio other transactions project, the S&T Directorate is using DOD's U.S. Army Medical Research Acquisition Activity for contracting support. According to DHS's S&T Directorate and CPO officials, the offices are in the process of drafting a Memorandum of Understanding regarding the contracting personnel that CPO will dedicate to support the S&T Directorate's projects.

DHS Included Nontraditional Government Contractors in Initial Projects, but Practices May Not Fully Leverage Market Capabilities

DHS included nontraditional government contractors in its two initial other transactions projects. But DHS is not capturing knowledge learned from these acquisitions that could be used to plan and execute future projects. The S&T Directorate has conducted outreach to engage nontraditional government contractors in its early projects, including briefing industry associations, setting up a Web site to facilitate contractor teaming, and conducting project-specific workshops. However, the S&T Directorate does not systematically capture and use knowledge learned from its acquisition activities for use by program staff.

[18] We previously reported on such acquisition workforce challenges in *Acquisition Workforce: Status of Agency Efforts to Address Future Needs*, GAO-03-55 (Washington, D.C.: Dec. 18, 2002).

Other Transactions Authority Facilitated Inclusion of Nontraditional Government Contractors in Early Awards

The S&T Directorate's Counter-MANPADS and Chem-Bio projects included nontraditional government contractors in all of the initial awards at the prime and subcontractor levels. For example, in February 2004 DHS made three Phase I awards for the Counter-MANPADS project to contractor teams led by BAE Systems, Northrop Grumman, and United Airlines (a nontraditional contractor). BAE Systems and Northrop-Grumman, which are traditional contractors, included nontraditional contactors on their teams. Nontraditional government contractors serve significant roles in the Counter-MANPADS and Chem-Bio projects, such as leading the aircraft integration team incorporating the counter measure technology with commercial aircraft in the Counter-MANPADS project. Table 3 shows the composition of the Counter-MANPADS project contractor teams.

Table 3: Composition of Counter-MANPADS Project Phase 1 Contractor Teams

Prime contractor	Other principal team members
Northrop Grumman Systems Corporation	• FedEx Corporation[a] • Northwest Airlines [a]
BAE Systems	• Honeywell International's Air Transport Systems[a] • Delta Airlines Technical Operations[a]
United Airlines, Inc.[a]	• Avisys, Inc.[b] • ARINC Engineering Services

Source: DHS.

[a]Nontraditional government contractor.

[b]According to DHS, L3 Communications acquired Avisys, Inc. in June 2004.

An intent of Congress in granting other transactions authority to DHS was to attract firms that traditionally have not worked with the federal government. The use of other transactions may help attract high-tech commercial firms that have shied away from doing business with the government because of the requirements mandated by the laws and regulations that apply to traditional procurement contracts. According to DHS officials, early DHS other transactions award recipients, and industry association officials, two primary barriers to nontraditional contractors pursuing government contracts are:

- **Intellectual Property (IP) Rights.** IP rights refer to access to information or data used in the performance of work under a contract. We previously reported on contractors' reluctance to pursue government R&D funding because the FAR's IP provisions could give the government rights

to certain information and data, which could decrease their businesses' competitive advantage.[19] For example, a nontraditional contractor without prior federal R&D contracting experience under the FAR who won one of DHS's early other transactions awards told us that the flexibility to negotiate IP rights was critical to its participation because it allowed the contractor to negotiate IP rights favorable to its company.

- **Cost Accounting Standards (CAS).** CAS are the federal government's accounting requirements for the measurement, assignment, and allocation of costs to contracts. According to contractors and procurement experts outside the government that we interviewed, nontraditional firms generally do not operate accounting systems in compliance with the federal government's CAS, and developing such systems can be cost prohibitive. For example, a nontraditional contractor who won an initial DHS other transactions award told us developing a CAS-compliant accounting system would have required the establishment of a subsidiary firm to perform its accounting functions.

Extensive Outreach Used to Attract Nontraditional Contractors

DHS's Science and Technology Directorate used extensive outreach to attract nontraditional contractors to participate in its projects. It briefed industry groups, conducted project-specific workshops, and used Web sites to publicize the agency's needs. In the fall of 2003, shortly after the S&T Directorate was established, its HSARPA sponsored separate 1-day briefings to business and academia to help engage the private sector in R&D to satisfy DHS's needs. These sessions were designed to gather input on best practices to optimize the solicitation, procurement, and program execution aspects of its projects. For example, at these sessions DHS officials presented information on its

- organization and approach to program management, such as the roles and responsibilities of agency officials and managers;
- investment and research priorities;
- available solicitation methods, such as requests for proposals, broad agency announcements, and research announcements; and
- possible procurement vehicles, including FAR contracts, grants, cooperative agreements, and other transactions.

[19] GAO, *Acquisition Reform: DOD's Guidance on Using Section 845 Agreements Could Be Improved*, GAO/NSIAD-00-33 (Washington, D.C.: April 2000).

The S&T Directorate supplemented these sessions by conducting project-specific industry workshops and other outreach events. For example, in October 2003, the S&T Directorate held an industry day session for its Counter-MANPADS project. The session provided participants with background on the project, the structure of the DHS organization that would manage it, the program's goals and schedule, and an overview of other transactions for prototypes. DHS presented detailed information on the nature and requirements of other transactions agreements, firms that may qualify as a nontraditional contractor, and laws that would not apply to other transactions. In addition, the S&T Directorate gave an overview of the other transactions solicitation process to be used for the project, which covered topics such as the white paper process, oral presentations, and the proposed other transactions agreement. DHS attracted almost 200 participants to this event—approximately 85 percent of whom were from industry.

Also, in September 2003, DHS held a bidders conference for its Chem-Bio project where it described its technical requirements and the solicitation process for this project. According to an agency official, the conference gave DHS the opportunity to obtain input from the private sector on the technical aspects of its solicitation and to answer participants' questions about the solicitation. Similarly, DHS held technical workshops for projects that may result in other transactions awards, such as those intended to counter threats from truck, suicide, and public transportation bombs and to design cyber security systems.

DHS also created and used Web sites to publicize its activities and procurement needs. For example, DHS created the "DHS—Open for Business" site, which centralizes information on its contracts, grants, small business opportunities, and R&D efforts. According to DHS, this site is intended to complement governmentwide portals such as Federal Business Opportunities, known as FedBizOpps. In addition, HSARPA created a solicitation and teaming portal Web site to help attract firms (www.hsarpabaa.com). On this site, HSARPA announces its current project solicitations and offers a teaming portal where contractors can learn about possible partners to bid on DHS work. This site also contains links to other DHS programs to facilitate industry participation in its projects, such as its Small Business Innovation Research program, which DHS established in December 2003 to increase the participation of innovative and creative small businesses in its R&D programs. Also, the site has a mailing list function where contractors can register to receive electronic e-mail notices of upcoming HSARPA solicitations.

We found that industry's views vary on the effectiveness of DHS's outreach efforts. Some contractors and industry associations we interviewed said these outreach efforts are having a positive impact on the procurement process. For example, an industry association head in the technology field told us that DHS's use of Broad Agency Announcements and other flexible solicitation methods to publicize its technology and research needs may help to attract nontraditional contractors. Officials from two technology associations told us commercial firms that traditionally do not work with the federal government believe that government officials have preconceived ideas of exactly what technology they need and which contractors they want to work with. However, one of the officials stated that DHS's use of the BAA process demonstrates to industry that the agency desires to hear all the possible technology solutions that may meet its needs.

Other industry officials believed that DHS's outreach actions could be improved, for example, if DHS took additional actions to inform industry that it has other transactions authority and developed a more user-friendly process to attract broader interest in its projects. Representatives of a large industry association we interviewed were not aware that DHS possesses other transactions authority and said if this fact were more widely known, it could increase industry's interest in working with DHS. In addition, representatives of some small companies told us that the fee DHS charges to attend its outreach events[20] could pose a barrier to attending them. Also, several contractors we interviewed told us that DHS's teaming portal site is a good idea in concept but found it cumbersome to maneuver in the automated system. However, two of the nontraditional contractors we interviewed that received a DHS other transactions award used this site to help identify industry partners for their team.

[20] For the projects we reviewed, we found that DHS's fee for attending these events was usually between $100 and $150.

Lack of Systematic Assessment of Acquisition Activities Involving Other Transactions Impairs Ability to Capture and Use Knowledge

The S&T Directorate's capacity to build and sustain knowledge for use in its future acquisitions involving other transactions is in the early stages of development but the Directorate has not yet developed policies or procedures to ensure that program and portfolio managers are capturing and assessing critical information and knowledge gained from its acquisition activities, including the use of other transactions, for use in future projects.

Knowledge gained from prior other transactions acquisitions on issues ranging from seeking nontraditional government contractors to assessing project outcomes is key to planning future projects. A knowledge base of important lessons learned from outreach to private-sector firms, the acquisition process, and the design and execution of projects can facilitate the work of program and acquisition staff in planning future acquisitions using other transactions authority. DHS's draft guidebook on other transactions for prototypes acknowledges the importance of documenting knowledge gained during the acquisition process for planning future other transactions acquisitions. We have also reported on the benefits of agencies using systematic methods to collect, verify, store, and disseminate information for use by their current and future employees.[21] Our previous work has identified the importance of setting goals and identifying performance indicators that will inform federal agencies of whether they have achieved the performance they expected.[22] S&T Directorate officials acknowledge the need to create a "corporate memory" function to provide future staff with access to information and knowledge obtained from its current projects and to incorporate such knowledge into its training efforts.

The S&T Directorate's workforce-staffing strategy necessitates that it have a policy and procedure in place to capture employees' knowledge. Under its current workforce strategy, the S&T Directorate's technical staff serves regularly rotating term appointments that typically do not exceed 4 years. This approach, according to S&T Directorate officials, is designed to promote the influx of leading-edge science and technology skills to DHS.

[21] GAO, *Best Practices: Highlights of the Knowledge-Based Approach Used to Improve Weapon Acquisition*, GAO-04-392SP (Washington, D.C.: January 2004) and GAO, *NASA: Better Mechanisms Needed for Sharing Lessons Learned*, GAO-02-195 (Washington, D.C.: Jan. 30, 2002).

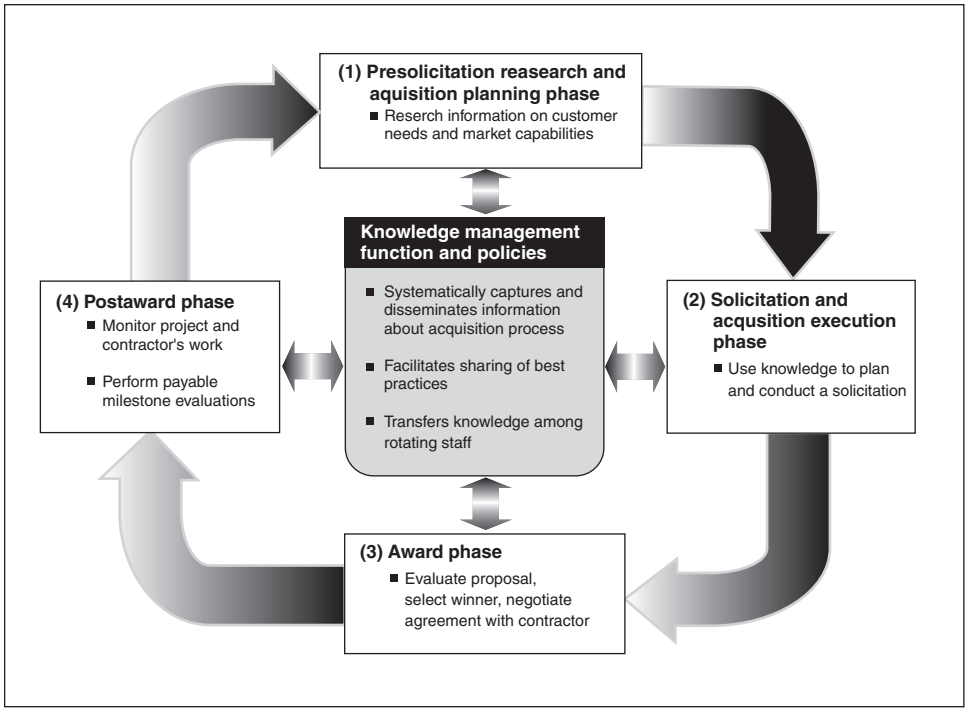
[22] GAO, *Results-Oriented Government: GPRA Has Established a Solid Foundation for Achieving Greater Results*, GAO-04-38 (Washington, D.C.; Mar. 10, 2004).

S&T Directorate officials recognize that these rotations can place a burden on its contracting staff that plan, conduct, and manage highly specialized other transactions programs by having to continually guide new technical staff on the workings of the process. However, these officials have told us that there is no policy or process yet in place to ensure that the capturing and sharing of such knowledge occur.

The S&T Directorate's current practices for capturing knowledge gained from its acquisition efforts vary. In establishing its structure the S&T Directorate drew its technical staff from a variety of organizations, each of which used different acquisition approaches. Consequently, portfolio managers and program managers we spoke with did not consistently capture knowledge acquired. In addition, the S&T Directorate's efforts to assess the effectiveness of its industry outreach activities involving the use of other transactions authority are not rigorous enough to capture information needed in planning future outreach. By not assessing its activities, S&T cannot be assured that it is reaching the broadest base of firms to provide technological solutions for the S&T Directorate's needs.

Without policies and a supporting process to capture the experiences and knowledge gained from its acquisition efforts, DHS may not capitalize on lessons learned from its early use other transactions. Given the S&T Directorate's planned rotations of its key technical staff, building and maintaining institutional knowledge are critical to ensuring that new S&T Directorate staff have the ability to quickly learn about previous other transactions acquisitions when designing future projects. For example, the S&T Directorate invests funding and staff resources to advertise its organization and projects to help attract firms but does not fully assess the effectiveness of these activities for use in planning future projects. Figure 9 depicts the S&T Directorate's acquisition process and a possible knowledge management function for collecting, storing, and sharing information.

Figure 9: Illustration of S&T Directorate's Current Acquisition Processes with Possible Knowledge Management Function



Source: GAO's analysis of DHS data.

Note: Center of figure depicts the knowledge management function needed to improve DHS's current practices.

Conclusions

Recognizing the flexibility offered by other transactions authority to tap nontraditional sources to meet its needs for new homeland security technologies, DHS moved quickly to use this authority to build its science and technology capabilities. In doing so it signaled its seriousness about using other transactions authority to advance its strategic objectives. However, to sustain its progress made to date DHS needs to take additional actions, such as completing the necessary foundation of policies and procedures, including guidance on audit provisions, and ensuring that it has an adequately trained and staffed acquisition function. Furthermore, given its strategy of using regularly rotating term appointments in staffing its S&T programs, long-term success will depend on the department's ability to harness its institutional knowledge on other transactions. DHS's ability to identify, prioritize, and access the most promising research and technologies in the future will depend, in part, on its ability to capture and make accessible critical knowledge on the agency's use of other transactions authority to ensure that it is accessing the broadest and most appropriate technologies in the marketplace. By completing its foundation for using other transactions and creating a means for capturing key knowledge and measuring performance, DHS will be better prepared to capitalize on the full potential of the private sector to provide the innovative technology it needs to secure the homeland.

Recommendations

To promote the efficient and effective use by DHS of its other transactions authority to meet its mission needs, we have three recommendations for the Secretary of Homeland Security. The Secretary should direct the Under Secretary for Management and the Under Secretary for Science and Technology to

- establish guidance on when it is appropriate to include audit provisions in other transactions agreements,
- develop a training program for DHS staff in the use of other transactions to help ensure the appropriate use of this authority, and
- capture knowledge obtained during the acquisition process for use in planning and implementing future other transactions projects.

Agency Comments and Our Evaluation

We provided a draft of this report to DHS for its review and comment. DHS provided written comments generally agreeing with the facts and conclusions expressed in the draft report. DHS agreed with our first two recommendations and noted that it is already working to address them. Regarding our recommendation that DHS capture knowledge obtained during the acquisition process for use in planning and implementing future

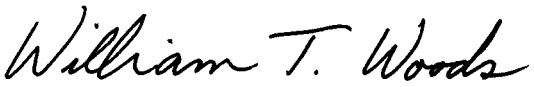
projects that could use other transactions, DHS agreed with the utility of retaining such historical information and "lessons learned" about its procurement activities, acquisition planning, execution, and program management activities. DHS stated that while no formal system for assembling such information is in place within the organization, this information is being monitored. However, DHS sought further clarity about the types of information we recommend it retain and to what end it is to be used.

Based on our review of DHS's early use of its other transactions authority, we believe that systematically capturing, analyzing, and making readily available knowledge about using this authority is needed. We recognize that the S&T Directorate's work and focus cuts across various technology areas, which are continuously evolving, making each solicitation's requirements unique. We also recognize and appreciate DHS's concern over the administrative aspects of collecting, maintaining, and monitoring this information over time. We believe, however, that DHS can build upon its current informal system of monitoring acquisition information. Specifically, we think DHS could collect and disseminate information on what has worked and not worked in areas such as outreach efforts. This information could be useful for future other transactions projects. For example, if DHS wants to ensure that its outreach attracts firms who have a recognized core competency desired by S&T, including nontraditional government contractors, it may want to use forms of outreach that have been used successfully in the past. We believe this information could be particularly important given the S&T Directorate's workforce-staffing strategies, under which its technical staff serves regularly rotating term appointments.

DHS also provided technical revisions to our draft report, which we incorporated as appropriate. The department's comments are reprinted in appendix I.

We are sending copies of this report to other interested congressional committees; the Secretaries of Homeland Security and Defense; and the Director, Office of Management and Budget. We also will make copies available to others on request. This report will be available at no charge on GAO's Web site at http://www.gao.gov.

If you have any questions about this report, please contact me at (202) 512-4841, or John K. Needham, Assistant Director, at (202) 512-5274. Other major contributors to this report were Rachel Augustine, Eric Fisher, Alison Heafitz, John Krump, Robert Swierczek, and Anthony J. Wysocki.



William T. Woods
Director, Acquisition and Sourcing Management

Appendix I: Comments from the Department of Homeland Security

U.S. Department of Homeland Security
Washington, DC 20528

Homeland Security

December 8, 2004

Mr. William T. Woods
Director, Acquisition and Sourcing Management
U.S. Government Accountability Office
Washington, DC 20548

Re: Draft Report GAO-05-136, Homeland Security: Further Action Needed to Promote Successful Use of Special DHS Acquisition Authority (GAO Job Code 120324)

Dear Mr. Woods:

Thank you for the opportunity to review and comment on the subject draft report. The Department of Homeland Security (DHS) appreciates the work done in this draft report to recognize DHS's use of its other transactions authority to acquire cutting-edge technologies in support of its mission. The Department generally agrees with the facts and conclusions expressed in the report and reads the conclusions as fair and balanced. However, we do have some technical comments for your consideration which are enclosed with this letter.

With respect to the draft report's three recommendations, while DHS recognizes the validity of the first two recommendations and is, in fact, already working to address those recommendations, there is a general concern with the final recommendation. This recommendation states DHS should "capture knowledge obtained during the acquisition process for use in planning, and implementing future projects that could use other transactions."

DHS agrees that it is useful to retain historical information regarding solicitations and awards and does keep a great deal of information regarding response to industry day announcements, solicitations, and awardees and their status. It is unclear, however, exactly what types of information GAO is recommending that the agency retain and in what manner and to what end that information is to be used. The value of "lessons learned" in acquisition planning, execution and program management is definitely appreciated within DHS and, while no formal system for assembling this information is in place within the organization, this information is being monitored. However, much of the detailed information including number of proposers, white papers, attendees at industry days and so forth is of marginal long-term value but the administrative aspects of collecting, maintaining and monitoring the information over time could be significant. DHS's Science and Technology (S&T) Directorate and Homeland Security Advanced Research Projects Agency's (HSARPA's) focus cuts across so many technology areas

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and each solicitation is unique in its requirements and interests. What happened with a somewhat similarly focused solicitation a year or two ago will likely have little relevance on a solicitation issued today. In light of this, DHS requests that GAO refine this recommendation to be more specific regarding the type of information it would envision being retained by the agency and consider carefully the agency's concern regarding the relevance of the information to its future actions and the high cost of maintaining the information.

We thank you again for the opportunity to provide comments on this draft report and look forward to working with you on future homeland security issues.

Sincerely,

Anna F. Dixon
Director, Departmental GAO/OIG Liaison
Office of the Chief Financial Officer

Enclosure

PGM

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