

Committee on Homeland Security

Rep. Michael T. McCaul, Chairman
Subcommittee on Oversight, Investigations, and
Management



Initiatives Needed to Correct
Weaknesses in the Department of
Homeland Security's Acquisition and
Contracting Practices

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INTRODUCTION

DHS Manages Over \$150 Billion in Acquisitions

The Department of Homeland Security (DHS) and its component agencies manage a portfolio of major acquisition programs that represent more than \$150 billion in total lifecycle costs—the total costs of acquiring capabilities.¹ Some of these programs existed prior to the creation of DHS and were managed by one of the 22 legacy agencies that formed the Department. However, the Undersecretary for Management, who is also the Department's Chief Acquisition Officer, now bears the responsibility for ensuring DHS's acquisition programs are managed in an efficient and effective manner. The Government Accountability Office (GAO) states that acquisition programs require firm and clear requirements, knowledge-based acquisition strategies, and realistic cost estimates to ensure success.²

Congress Found Oversight Weaknesses

The Committee on Homeland Security of the U.S. House of Representatives (the Committee) examined DHS's acquisition and contracting practices. In general, as more thoroughly provided in this report, the Committee finds the Department does not use the necessary tools to ensure rigorous oversight of its acquisition programs including those managed by its component agencies. Specifically, the manner in which DHS manages its acquisition investments has been flawed. According to GAO, the Department has not always reviewed its major investments at key phases in the acquisition lifecycle, employed reliable cost and schedule estimating practices, or used effective requirements development and test management practices.³ The Committee concludes that these shortcomings have wasted taxpayer dollars and have had a serious impact on our ability to protect the homeland. Consequently, poorly managed programs have resulted in capabilities that are delivered late, cost more, and do less than expected.

Examples

DHS's key border security technology program—the Secure Border Initiative Network (*SBI-Net*)—clearly demonstrates how poor acquisition management leads to wasted taxpayer dollars and lost operational capabilities. In this case, DHS did not adequately define requirements, thoroughly test the technology, or properly oversee its contractors. In January 2011, Secretary Janet Napolitano

¹For the purposes of this report, the term "capability" refers to the various solutions and products, such as surveillance systems or detection equipment, intended to support mission needs of DHS. The Department obtains these capabilities through contracts and acquisition programs.

²See GAO, *Defense Acquisitions: Assessments of Selected Weapon Programs*, GAO-12-400SP (Washington, D.C.: Mar. 29, 2012) on GAO's knowledge-based acquisition best practices.

³See GAO, *Department of Homeland Security: Assessments of Selected Complex Acquisitions*, GAO-10-588SP (Washington, D.C.: June 30, 2010).

was forced to freeze program funding for *SBI-Net* and end the program as originally conceived. Poor management and oversight resulted in nearly \$1 billion in wasted taxpayer dollars and costly delays to the deployment of technologies necessary to help secure the Southwest border.

In addition, the DHS Inspector General reported in November 2011 that Customs and Border Protection (CBP) spent about \$310 million since 2008 to purchase and store steel in support of fencing for the Southwest border.⁴ However, CBP wasted about \$70 million because it purchased more steel than was needed, paid interest on late payments, and approved a higher-priced subcontractor.

Will History Repeat Itself?

The Department is now pursuing a new initiative— the Arizona Border Surveillance Technology Plan— that utilizes some of the same technologies as *SBI-Net*. However, GAO has questioned DHS's plan because it cannot justify the types of technologies required, how many units they need, what they will ultimately cost, or where to put them.⁵ Unless DHS improves its requirements, oversight, and performance metrics for this effort, taxpayer dollars may yet again be put at risk.

⁴See DHS Inspector General, *U.S. Customs and Border Protection's Management of the Purchase and Storage of Steel in Support of the Secure Border Initiative*, OIG-12-05 (Washington, D.C.: Nov. 7, 2011).

⁵See GAO, *2012 Annual Report: Opportunities to Reduce Duplication, Overlap, and Fragmentation, Achieve Savings, and Enhance Revenue*, GAO-12-342SP (Washington, D.C.: Feb. 28, 2012).

Example of Technology Contained in Arizona Border Surveillance Technology Plan



Pictured above is the integrated fixed tower system. This system consists of fixed towers, sensors (cameras and radar), a data communications network, facilities upgrades, information displays and an information management system. Initially developed as part of *SBI-Net*, numerous questions remain regarding the deployment of these technologies.
Source: GAO.

Purpose of Report

This report provides findings related to DHS acquisition and contracting issues identified during numerous oversight activities conducted by the Committee on Homeland Security of the U.S. House of Representatives during the 112th Congress. The purpose of the report is to:

- examine key findings from expert federal and private sector witnesses,
- summarize relevant legislation proposed by the Committee, and
- identify solutions to the deficiencies identified by these findings to improve DHS's management of its acquisition programs, streamline the contracting process, and save taxpayer dollars.

ACQUISITION LIFECYCLE: DHS PROCESS AND GAO BEST PRACTICES

DHS Process

In November 2008, DHS issued Management Directive 102-01, which was an interim version that superseded its previous policy related to acquisition management. The final version was later issued in January 2010.⁶ However, the final version does not differ substantively from the initial interim directive. The 2010 directive includes more detailed guidance than the previous 2006 management directive for acquisition programs to use in preparing key documentation to support component and departmental decision making. For example, the directive establishes four acquisition life-cycle phases:

- (1) identify a capability need;
- (2) analyze and select the means to provide that capability;
- (3) obtain the capability; and
- (4) produce, deploy and support the capability.

The directive requires an Investment Review Board (IRB) review of each major acquisition program at least three times during key acquisition decision points in the program's life cycle.⁷ IRB reviews provide an opportunity to determine a program's readiness to proceed to the next phase in the acquisition life cycle. Unfortunately, GAO found in June 2010 that DHS often allows acquisition programs to move forward without Departmental approval of essential planning documents.⁸ Specifically, more than half of the 15 DHS acquisition programs GAO reviewed awarded contracts without Departmental or component approval for key planning documents needed to set operational requirements among other things. For example, in January 2012, GAO reported that the Transportation Security Administration (TSA) did not fully follow DHS acquisition policies when acquiring Advanced Imaging Technology (AIT)- commonly referred to as full body scanners that identify objects or anomalies on the outside of the body- which resulted in DHS approving deployment of AIT machines without fully knowing TSA's revised specifications. According to GAO, TSA also failed to

⁶DHS also issued additional supplemental acquisition guidance in October 2011.

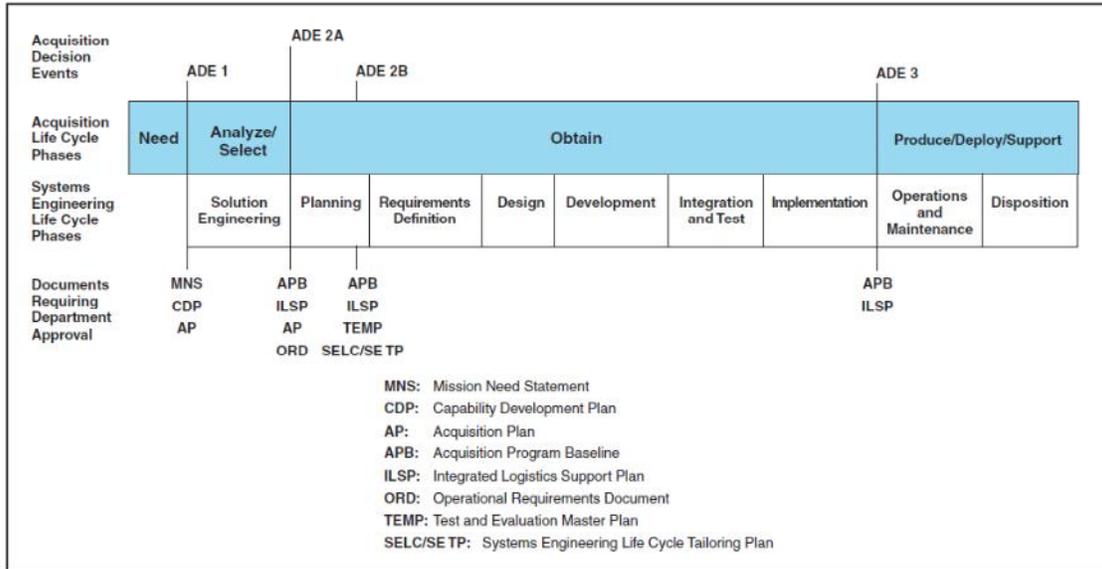
⁷ Major acquisition programs include acquisition programs that are level 1- those with lifecycle costs totaling over \$1 billion- and level 2- those with lifecycle costs totaling over \$300 million. An acquisition program may be raised to a higher acquisition level by the Investment Review Board if: (a) its importance to DHS's strategic and performance plans is disproportionate to its size; (b) it has high executive visibility; (c) it impacts more than one DHS Component; (d) it has significant program or policy implications; or (e) the Deputy Secretary, Chief Acquisition Officer, or the Acquisition Decision Authority recommends an increase to a higher acquisition level.

⁸See GAO-10-588SP.

receive approval from DHS on how it would test AIT machines before deployment began.⁹

The figure below provides additional information on the acquisition life cycle, systems engineering life cycle, and key acquisition documents in DHS. As the figure indicates, many of DHS's acquisition decision events occur during the early planning stages of an acquisition.

Acquisition Life Cycle and Key DHS Acquisition Documents



Source: DHS Acquisition Instruction/Guidebook 102-01-001, interim, version 1.9, Nov. 7, 2008.

Note: DHS's final acquisition directive also includes Acquisition Decision Event 2C for low-rate initial production, which takes place during the Obtain phase of the acquisition lifecycle. Source: GAO.

GAO Best Practices

GAO's work on acquisition best practices found that positive acquisition outcomes require the use of a knowledge-based approach to product development that demonstrates high levels of knowledge before significant commitments are made.¹⁰ In essence, the higher the level of knowledge attained, the lower the risk to a program. Leading commercial firms and successful programs pursue an acquisition approach that is anchored in knowledge, whereby high levels of product knowledge are demonstrated by critical points in the acquisition process. Critical levels of knowledge need to be demonstrated at three key points during the acquisition cycle: development start, critical design

⁹See GAO, *DHS and TSA Face Challenges Overseeing Acquisition of Screening Technologies*, GAO-12-644T (Washington, D.C.: May 9, 2012).

¹⁰See GAO-12-400SP.

review, and production start. Information should be gathered at these three critical points over the course of a program:

- **Knowledge point 1: Resources and requirements match.** A match must be made between the customer's (in this case, DHS's) needs and the developer's available resources— technology, engineering knowledge, time, and funding— before a program begins.
- **Knowledge point 2: Product design is stable.** The product design must be stable and must meet performance requirements before system development
- **Knowledge point 3: Manufacturing processes are mature.** The product must be producible within cost, schedule, and quality targets and demonstrated to be reliable before production begins.

These knowledge points are applicable to a wide range of DHS programs. For example, operational programs, such as border surveillance technology programs and airport screening equipment, should have technologies that reliably work in their normal operational environment, a stable design, and capability that is proven and tested. Information technology programs should also have reliable hardware/software that performs as will be expected once fully implemented.

A knowledge-based acquisition approach is a cumulative process in which certain knowledge is acquired by key decision points before proceeding. Demonstrating technology maturity is a prerequisite for moving forward into system development, during which the focus should be on design and integration. Maturity of a specific technology is related to the environment in which a technology can reliably perform. For instance, technologies that are reliable in an operational environment, such as the Southwest border, are considered more mature than those that are simply reliable in laboratory settings. A stable and mature design is also a prerequisite for moving forward into production, when the focus should be on efficient manufacturing. A product with a design that requires changes will likely result in a capability that is late and more expensive than originally expected.

MISSED OPPORTUNITIES IN DHS CONTRACTING PRACTICES

DHS's process for acquiring capabilities has a direct impact on its ability to carry out its critical mission of protecting the homeland. Strategic sourcing, standardized equipment purchases, and the identification of common mission requirements could provide DHS with opportunities to maximize scarce budgetary resources and reduce duplication of effort across component agencies.

Strategic Sourcing

According to a 2005 memorandum from the Office of Management and Budget:

Strategic sourcing is the collaborative and structured process of critically analyzing an organization's spending and then using this information to make a business decision about acquiring commodities and services more effectively and efficiently. This process helps agencies optimize performance, minimize price, increase achievement of socio-economic acquisition goals, evaluate total life cycle management costs, improve vendor access to business opportunities, and otherwise increase the value of each dollar spent.

According to DHS's Inspector General, the Department established a Strategic Sourcing Program Office and applied strategic sourcing strategies for many common use items, such as firearms, ammunition, and office supplies. While components were encouraged to use the Strategic Sourcing Program Office, the Inspector General found they were not required to use it and generally did not coordinate and communicate when acquiring certain capabilities, such as detection equipment.¹¹

In response to the Inspector General report, DHS established a detection-equipment Executive Steering Committee to develop a strategic sourcing effort for detection equipment. When developing a component-wide contract or an acquisition initiative, components are now supposed to involve the Strategic Sourcing Program Office, in part to determine if the requirement lends itself to the establishment of a department-wide contract. DHS also conducts spend analysis to assess historical spending patterns and identify potential opportunities to consolidate requirements and procurements in the future. However, it remains unclear to what extent the Department fully leverages strategic sourcing opportunities to save taxpayer dollars.

¹¹See DHS Inspector General, Testimony of Mr. Charles Edwards Before the Subcommittee on Oversight, Investigations, and Management, Committee on Homeland Security, US House of Representatives on "Homeland Security Contracting: Does the Department Effectively Leverage Emerging Technologies?" July 15, 2011.

Standard Equipment Purchases

Since components view certain capabilities as unique to their missions, they often do not identify common mission requirements among other components. As a result, the Department fails to take advantage of opportunities to consolidate purchases and instead may stovepipe purchases within components. This stovepiped approach also leads to components not standardizing purchases and acquiring multiple models of the same capability. For example, the DHS Inspector General reported in July 2011 that the United States Citizenship and Immigration Services (USCIS) has 24 different models of small x-ray equipment and that Customs and Border Protection (CBP) has 21 different models of small x-ray equipment. In addition, CBP and USCIS each have 14 different models of walk-through metal detectors. TSA, which uses and maintains the largest inventory of detection equipment in the Department, uses seven different models of small x-ray equipment and three models of walk-through metal detectors. When components acquire multiple models of equipment to meet similar missions, DHS incurs higher procurement and acquisition lifecycle costs.

Common Mission Requirements

In an effort to establish commonality across the components, DHS established a Joint Requirements Council (JRC) in September 2003 as a senior-level requirements review board to identify and provide oversight for cross-component opportunities and common requirements among DHS organizational elements for non-information technology investments. From fiscal years 2004 through 2006, the Council met to review programs, such as TSA Secure Flight and CBP Consolidated Registered Traveler. In 2006, the JRC dissolved. DHS has since sought to utilize commodity councils to help facilitate strategic sourcing across components, among other things. For example, in 2003, DHS established a council related to weapons and ammunition. The council developed requirements for firearms, ammunition, and body armor with input from relevant components. Nevertheless, without an overarching process or procedures to identify commonalities and leverage existing acquisition efforts, DHS may be missing opportunities to utilize resources effectively. Although DHS previously indicated its intent to renew its requirements council, the Department has yet to re-establish a requirements council and as of June 2012 had no timeframe for doing so.

Identify Clear Requirements

In addition to acquiring capabilities effectively, the urgency of DHS's mission often requires capabilities that are achieved in a timely manner. Outreach with the private sector through requests for information, industry days, and other venues allow DHS to examine and understand technology that already exists. Commercial off-the-shelf technologies can play an important role in meeting capability gaps that require immediate solutions. However, DHS must clearly

articulate its requirements for these technologies and communicate the limitations of existing solutions.

TSA's explosives trace portal program (commonly known as the "puffers") demonstrates the need for clear requirements to address urgent needs. In the aftermath of threats such as the attempted bombing of American Airlines Flight 63 in December 2001 with a shoe bomb, TSA deployed explosives trace portals to detect traces of explosives on passengers at airport checkpoints. Despite tests in 2004 and 2005 that revealed poor performance in an airport environment, TSA officials chose to move forward with deployment of the portals anyway. TSA also lacked assurance that the portals would work effectively in airports within estimated costs. The machines were also more expensive to install and maintain than expected. In June 2006, TSA halted deployment of the explosives trace portals because of performance problems and high installation costs. This example demonstrates a failure to leverage testing results and produce reasonable cost estimates, as well as unachievable expectations, which failed to meet homeland security needs. Since this program's failure, TSA has attempted to better assess the efficacy of new technologies before making large acquisitions.

COMMITTEE OVERSIGHT HEARINGS & LEGISLATION

The Committee on Homeland Security held several hearings in the first session of the 112th Congress related to Department acquisitions. All of these hearings supported the same basic theme: ensure that the Department is engaging in acquisitions that will secure America, and that this is being carried out in an efficient and cost-effective manner.

Summaries of these hearings are provided below, and are accompanied by a review of relevant legislation.

1. EMERGING TECHNOLOGIES

“Homeland Security Contracting: Does the Department Effectively Leverage Emerging Technologies?”

The first hearing in this series on DHS acquisitions, titled “Homeland Security Contracting: Does the Department Effectively Leverage Emerging Technologies?,” was held by the Subcommittee on Oversight, Investigations, and Management on July 15, 2011. The hearing was led by Chairman Michael McCaul (R-TX) and Ranking Member William Keating (D-MA).

This hearing examined whether DHS effectively leverages existing and emerging technologies, or, alternatively, if the Department needlessly spends taxpayer money to develop technologies that are already in use by other agencies or in the private sector.

The genesis of this hearing was largely based on GAO and DHS OIG reports recently published on the issue of DHS fraud and abuse. Specifically:

- A March 2011 DHS Inspector General audit cited the Department wasted taxpayer dollars by failing to coordinate and consolidate purchases of metal detectors, explosive detection systems, and radiation detectors for screening people, baggage and cargo.¹²
- A similar report in April 2011 revealed that commercial off-the-shelf equipment or existing contracts could have fulfilled the identified needs in 59 percent of DHS acquisition programs.¹³

¹² DHS Inspector General, *DHS Department-wide Management of Detection Equipment*, OIG-11-47 (Washington, D.C.: Mar. 1, 2011).

¹³ DHS Inspector General, *DHS Oversight of Component Acquisition Programs*, OIG-11-71 (Washington, D.C.: Apr. 11, 2011).

Furthermore, the GAO has identified technology and acquisition of capabilities at DHS as an area of high risk, i.e., having a greater vulnerability to waste, fraud, abuse and mismanagement.¹⁴

During the hearing, Chairman McCaul stated: "As an oversight committee, our job is to help reduce the cost of government. With our nation's record debt approaching \$15 trillion, we need this now more than ever before." Chairman McCaul also identified DHS as one agency with great potential to reduce cost to taxpayers, specifically with respect to its acquisitions of technology.

In order to determine how DHS can more efficiently leverage emerging technologies and prevent fraud and waste, testimony on this issue was received from experts from both the federal government and private industry.

During the hearing, James Williams of TechAmerica, testified that, "from our perspective, it appears that too frequently DHS components do not know what the larger department is doing, which leads to redundant efforts, slows the pace of technology adoption and can be wasteful of precious funding."¹⁵

DHS testified that its staff is too small to respond in a timely fashion to private sector inquiries, which Chairman McCaul found to be inadequate.

At the conclusion of the hearing, a number of findings were established:

- DHS needs to integrate and streamline a department-wide procedure for acquisitions and strategic sourcing to achieve efficiencies and meet its One DHS goal.
- DHS needs to standardize its reporting requirements and centralize its data collection to provide for the most complete databases for performance evaluation.
- DHS components need to develop a plan of milestone reporting and create more robust missions needs evaluation for leveraging already existing technology, including technology developed for the Department of Defense and other government agencies.

Finally, the hearing concluded that that DHS needs a stronger and more robust Acquisitions Review Board. These conclusions are supported by the GAO High Risk List.

¹⁴For more information on GAO's High-Risk related work, see <http://www.gao.gov/highrisk/>.

¹⁵See TechAmerica, Testimony of Mr. James Williams Before the Subcommittee on Oversight, Investigations, and Management, Committee on Homeland Security, US House of Representatives on "Homeland Security Contracting: Does the Department Effectively Leverage Emerging Technologies?" July 15, 2011.

2. TECHNOLOGY AND JOB GROWTH

“TSA Reform: Exploring Innovations in Technology Procurement to Stimulate Job Growth”

Transportation security technology procurement challenges were explored in a three-part series of hearings convened on September 22, 2011; October 12, 2011; and November 3, 2011. Entitled *“TSA Reform: Exploring Innovations in Technology Procurement to Stimulate Job Growth,”* these hearings were held by the Subcommittee on Transportation Security led by Chairman Mike Rogers (R-AL) and Ranking Member Sheila Jackson Lee (D-TX).

This hearing series provided an opportunity to examine innovative solutions to technology procurement challenges at TSA, an agency that expends significant funds each year on developing, purchasing, and maintaining screening technology. TSA is by far the largest purchaser of detection equipment for the Department, with \$2.2 billion in inventories in 2010, representing 66 percent of the Department’s detection equipment assets.¹⁶

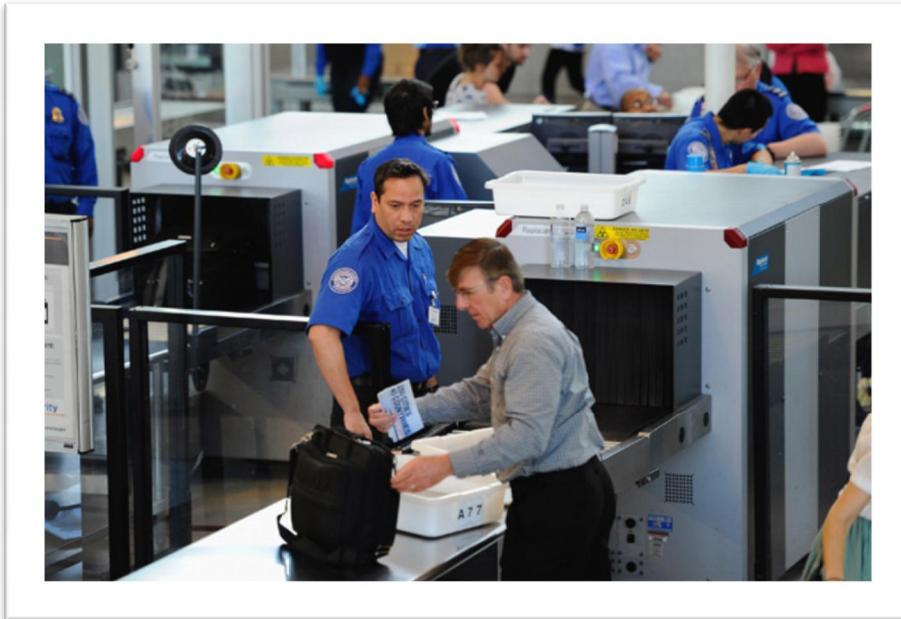
Following prior Committee work and reports from the GAO and DHS OIG, it became clear that challenges to efficient and effective technology procurement at TSA were substantial. The GAO, for example, found that TSA lacks the necessary transparency with industry to effectively communicate information to vendors regarding development of explosives detection system technologies.¹⁷ Committee oversight has also determined that the Science and Technology (S&T) Directorate still requires further integration with TSA (and other DHS components) research and development initiatives; such integration would help eliminate duplicative efforts and wasteful procurements. The DHS OIG has also found that DHS needs to reform procurement processes for strategic sourcing to ensure cost effectiveness.¹⁸ The hearings, therefore, sought to determine how greater procurement efficiency could solve some of these issues and lead to savings of taxpayer dollars, stimulation of private sector job growth, and increased security for the traveling public.

¹⁶ See OIG-11-47.

¹⁷ GAO, *TSA Has Enhanced its Explosives Detection Requirements for Checked Baggage, but Additional Screening Actions Are Needed*, GAO 11-740 (Washington, D.C.: July 2011).

¹⁸ See OIG-11-47.

TSA Screening Equipment



Above, TSA agents screen passengers at Los Angeles International Airport in Los Angeles, Calif. Source: Kevork Djansezian/Getty Images.

The spectrum of witnesses who testified allowed for a well-rounded discussion on TSA's challenges in transportation security technology acquisitions. Part I of the series brought in former DHS officials and the GAO. Part II afforded Members an opportunity to discuss innovative options with industry witnesses. For Part III, the Committee received testimony from current officials from DHS, TSA, S&T, and the DHS OIG.

Key findings, discussed in greater detail below, include:

- TSA must provide greater transparency with industry;
- The Department and TSA must undertake measures toward procurement reform; and
- TSA and S&T should increase collaboration.

Transparency

Private sector witnesses were adamant about their perceived need for greater TSA transparency with industry. Early and open communication with the private sector was the key message from the industry panel, and has been pervasive throughout staff and Member discussions with industry representatives. The current restrictive format of industry days, their infrequency, and the dearth of information provided to potential vendors, they argue, are all insufficient to offer fruitful dialogue. One-on-one meetings, where allowable under current policy and regulations, are encouraged to allow more open exchange of information between TSA and meeting attendees.

The Committee is pleased to see TSA taking part in conversations with new industry collaborations, which will hopefully serve to enhance dialogue outside the bounds of formal industry days. Witnesses discussed a variety of additional ways that TSA could foster greater openness with industry, such as provision of multi-year budget plans. While TSA does provide a roadmap to vendors, many feel it is too vague to be useful for business planning. TSA must develop a strategic approach to multi-year planning efforts, as many companies would likely be willing to expend their own capital in order to advance the state of technology if they understood there would be a definitive market in which to compete. Such a strategic approach would also enable the Department of Energy National Laboratories to enhance their partnerships with TSA for technology development and testing.

An additional means of allowing industry an improved understanding of TSA's needs and expectations would be through reform of the security clearance process. While the Committee acknowledges the need for certain information to remain classified or designated as security sensitive, the Committee believes that TSA/DHS should review its criteria and processes for granting clearances to private sector entities, in terms of access to facilities, personnel, and project requirements, and subsequently develop ways to eliminate unfair advantages to incumbent contractors and larger businesses. The Committee is encouraged to note recent positive developments on this front by the Transportation Security Laboratory.

Procurement Reform

The hearings emphasized the need for procurement reform at TSA, an agency perceived by some to be unnecessarily bureaucratic when it comes to testing and procuring technologies. This can be particularly problematic for small businesses with less experience with federal contracting and/or fewer resources with which to navigate the acquisitions process.

TSA has realigned its offices under a new organizational structure, but it remains to be seen if this will allow for improved coordination and responsibility under a single official. Vendors have stated that they could greatly benefit from a single technical point of contact (the contracting officer typically does not have the subject matter expertise to answer technical questions that may arise), and from meetings with the procurement team.

Perhaps most important is for TSA to improve its process for establishing technical requirements, often the most difficult phase of an acquisition. To this end, the Department must re-establish the formerly disbanded Joint Requirements Council, which the Committee believes will help enable strategic decision-making on setting requirements, such that vendors can better assist TSA and other components in meeting their mission needs. Enhanced communication with operators and potential vendors early in the process, such

as through improved industry days as described above or via Requests for Information that explicitly state operational needs and technical requirements, will be one of the most effective means of achieving the mutual goals of TSA and the private sector.

Finally, Secretary Napolitano's Department-wide Efficiency Review uncovered potential inefficiencies that could be mitigated by consolidating purchases and implementing strategic sourcing, which the Committee supports.

Collaboration with S&T

The hearings revealed that DHS components, including TSA, do not consistently utilize the Department's own subject-matter experts resident within the S&T Directorate. The Committee believes that any ongoing research in which S&T is investing should be customer driven, and that S&T must be an integral part at every stage of acquisition deliberations by Departmental review boards for major technology investments.

Section 705 of the Committee-passed Department of Homeland Security Authorization Act for Fiscal Year 2012+(H.R. 3116) requires the Under Secretary for S&T to provide science-based, analytic capabilities across the Department to examine major technology acquisition programs, define technological requirements, and support evaluation of alternatives. This legislation further requires the Under Secretary to develop a process to assess technology readiness to help determine whether technologies are sufficiently mature to proceed through the acquisition process in order to avoid repeating some of the costly failures in the past few years related to acquisition of flawed or insufficiently mature technology. Best practices for such activities should be sought from other established acquisition policies, such as the Department of Defense DoD 5000+directive.

In summary, the Committee is pleased to see some recent improvements to TSA's development and procurement processes, but believes that a number of further solutions exist that could generate cost savings for the federal government and stimulate job growth within the private sector. Specifically, TSA and DHS should:

- Fully engage the private sector in the research and development of new security technologies; and
- Continue to streamline their internal processes for procurement, particularly with regard to working with other components procuring similar technologies within the Department, coordinating with the S&T Directorate, and establishing detailed and realistic requirements.

These actions will help to prioritize and save taxpayer dollars and foster the creation of new private sector jobs, while still ensuring the safe and secure flow of passengers and commerce.

After the hearings, Chairman Rogers stated, "I believe TSA drastically needs to improve its technology development and procurement process. TSA's failure to develop a sound procurement process could lead to questionable security protocols and a colossal waste of taxpayer dollars." Chairman Rogers continued, "I believe private industry plays a critical role in our overall security. There is not enough involvement with TSA in security technology development today. In addition, the process for setting technology standards is badly in need of reform and faith in the Department's Science and Technology Directorate is waning. I am concerned about what the consequences of these ongoing failures could be."

The Subcommittee is continuing its efforts, including through legislative proposals, to address TSA's procurement shortcomings. H.R. 3011, the Transportation Security Administration Authorization Act of 2011, includes provisions on promulgation of requirements for baggage screening technology, greater communication with industry, and development of a ten-year strategic plan regarding explosives detection technology for checked baggage.

3. DoD TECHNOLOGY AND SECURING THE BORDER

"Protecting the Homeland: How can DHS use DOD technology to secure the Border?"

The next hearing was held on November 15, 2011 by the Subcommittee on Border and Maritime Security, led by Chairwoman Candice Miller (R-MI) and Ranking Member Henry Cuellar (D-TX), in response to the drawdown of forces in Iraq and Afghanistan. It afforded Members an opportunity to examine how DHS could utilize proven technologies from the Department of Defense.

During the hearing, Chairwoman Miller stated, "In an era of diminishing budgets, the Department of Homeland Security must look to the Department of Defense to utilize existing technology that may be applied to our nation's border security. Billions of taxpayer dollars have been spent since 9/11 on defense research and development. That investment should also be used to secure the nation here at home. Defense technology has already been used successfully in a handful of cases, such as the Predator B Unmanned Aerial System which is now used extensively on both the northern and southern borders. In addition, as the nation draws down in Iraq and Afghanistan, surveillance equipment used successfully in theater may provide valuable tools to assist Border Patrol agents in gaining and maintaining operational control of the border."

Unmanned Aerial Vehicles



Above, a Predator B unmanned aircraft taxis at the Naval Air Station in Corpus Christi, Texas.
Source: Eric Gay/AP.

The Subcommittee received testimony from several experts and echoed the findings of Chairwoman Miller:

- First, DHS should continue to leverage and build on existing mechanisms for transferring existing DOD technology, which may have applications for homeland security. This conclusion was supported by DHS OIG Reports.
- Second, component-led acquisitions have, in certain instances, resulted in inefficient purchases of technology and equipment that may be purchased by all components. DHS should utilize principles of strategic sourcing when applicable. This conclusion was supported by GAO's work on duplication, fragmentation, and overlap.¹⁹
- Third, DHS may benefit from a more formalized agreement which establishes a centralized point of contact with whom DHS can interface at DOD in order to leverage existing technologies and research and development.

¹⁹ See <http://www.gao.gov/duplication>.

4. SIGNIFICANT LEGISLATION

The Committee also passed legislation, H.R. 3116, the Department of Homeland Security Authorization Act for Fiscal Year 2012, which addresses many of the issues and concerns raised in the hearings. In particular, relevant provisions address workforce planning, acquisition review boards, strategic sourcing, and a capabilities and requirements council. In addition, the bill addresses the need for S&T Directorate integration with Department-wide research and development, as discussed above.

Amendments to sections 203 and 204 were put forth by Subcommittee Chairman McCaul related to strategic sourcing and leveraging existing defense technologies on the Southwest border.

The Capabilities and Requirements Council section would require the Department to re-establish the Council (formerly the JRC) to serve as an advisory body to the Acquisition Review Board, recommend investments for the Secretary, and seek to harmonize investment strategies across the Department.

The Department of Homeland Security Acquisition and Procurement Review section would require the Secretary to perform a quarterly review of the Department's proposed acquisitions and procurements to strengthen oversight and improve resource management.

The Acquisition Professional Career Program provision authorizes the Department to establish a career program that provides training for acquisition professionals and requires them to rotate through various components of the Department in order to integrate the Department's procurement functions. This gets at one of the primary recommendations from Elaine Duke, former Chief Procurement Officer and Undersecretary for Management at DHS, during the Transportation Security Subcommittee's hearing titled "TSA Reform: Exploring Innovations in Technology Procurement to Stimulate Job Growth." The Subcommittee on Transportation Security also passed H.R. 3011, the Transportation Security Administration Authorization Act of 2011, as discussed above.

CONCLUSIONS AND SOLUTIONS

Ten years after the Department's creation, DHS continues to have a long way to go to achieve the spectrum of acquisitions capabilities it needs to protect the Homeland in an efficient and effective manner. Too many examples, such as CBP's *SBI-Net* and TSA's explosive trace portals, continue to occur in which capabilities were more expensive, fielded late, and delivered without fully meeting original expectations.

In some cases, DHS has attempted to take steps to improve oversight of acquisition programs. For example, its management directive related to acquisitions requires senior-level reviews at key milestones in an acquisition program's development, and reflects best practices. The Department has also created a strategic sourcing program to better leverage consistent sourcing approaches across the Department's components. These are positive steps, yet the Department must make a firm commitment to ensure that acquisition programs lead to effective outcomes. Without leadership and effective implementation, well-designed directives and initiatives alone cannot result in success.

Based on the findings of the Committee's oversight activities during the 112th Congress, the Committee offers the following five solutions to help ensure sound acquisition programs in the future:

- Formalize a Department-wide process to prevent duplicative procurement by leveraging existing technologies that can meet needs within DHS and throughout the Federal government.
- Require all DHS components to more effectively use strategic sourcing to improve cost savings.
- Create a strategy for improving the quality and capabilities of the DHS acquisition workforce.
- Develop and strengthen a long-term, transparent, and codified acquisitions process that integrates the S&T Directorate, the end user, and the technology developer, to ensure all acquisitions are made with the goals and requirements necessary to deliver a timely and quality product that meaningfully buys down risk.
- Continuously assess the risk of using contractors for services as a part of the acquisition-planning process, and develop a culture of multi-year strategic planning for long-term development contracts to reduce that risk.

Due to the Committee's continued concerns, the Subcommittee on Oversight, Investigations, and Management has also requested the GAO to further investigate the effectiveness of DHS's acquisition policies and its procurement oversight program. These reviews were ongoing as of the issuance of this report, with final results scheduled for release later in 2012.