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THE ARIZONA BORDER SURVEILLANCE TECHNOLOGY PLAN AND ITS IMPACT ON BORDER SECURITY

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> Assistant Commissioner, Office of Technology Innovation and Acquisition, Customs and Border Protection, U.S. Department of Homeland Security
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> **Ms. Rebecca Gambler** *[view PDF]*
> Director, Homeland Security and Justice Issues, U.S. Government Accountability Office

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TESTIMONY OF

MARK BORKOWSKI
Component Acquisition Executive
and
Assistant Commissioner,
Office of Technology Innovation and Acquisition

U.S. Customs and Border Protection
Department of Homeland Security

BEFORE

House Committee on Homeland Security,
Subcommittee on Border and Maritime Security

ON

"The Arizona Border Surveillance Technology Plan and its Impact on
Border Security"

March 12, 2014
Washington, DC

Chairwoman Miller, Ranking Member Jackson Lee, and distinguished Members of the Subcommittee, it is a pleasure to appear before you today to discuss the status of U.S. Customs and Border Protection's (CBP) border security technology programs in Arizona, and to reflect on the most recent Government Accountability Office (GAO) report about the management of those programs.

I appreciate the partnership and support we have received from Congress, this Subcommittee, and your staff, whose commitment to the security of the American people has enabled the continued deployment of key border security technologies, even in the face of significant challenges. I am confident that our collective efforts will continue to result in a better managed and more secure border.

This Subcommittee is familiar with the outcome of CBP's SBI*net* program, an earlier component of the Department of Homeland Security's (DHS) Secure Border Initiative (SBI) that was designed as a comprehensive and integrated technology program to provide persistent surveillance across the northern and southern land borders of the United States, starting with the border of Mexico. The program experienced significant schedule delays and cost overruns because it did not allow necessary flexibility to adapt to differing needs in the various regions of the border. SBI*net* eventually delivered systems to two Areas of Responsibility in Arizona that continue to operate successfully. Nevertheless, DHS cancelled SBI on January 14, 2011, because it was too costly and the idea of one, all-encompassing program was unnecessarily complex for border technology.

Since 2011, we have learned from the issues identified in from the SBI*net* approach and moved away from an all-encompassing SBI*net* concept. Instead, DHS and CBP have approached our border technology requirements in more manageable pieces tailored to specific regions on the border. Working closely with the Border Patrol to develop requirements, we created a menu of different, sophisticated technology systems, ranging from small to large, simple to complex. For Arizona, we selected systems from the menu and tailored those technology solutions based on realistic capabilities of current technologies and the operational needs of particular areas. We then created detailed acquisition plans for each of the technologies on the menu and have been in the process of buying and deploying them for the last few years. We refer to this approach as the Arizona Technology Plan (ATP).

ATP or "the Plan" is not a program as traditionally defined within the acquisition business. Instead, it is a set of programs that, taken together, will provide what we believe is the optimal set of systems for our current operational needs. One key point is that the Plan is not a so-called "system of systems." In fact, our acquisition strategy moved intentionally away from the "system of systems" concept because we had learned from our SBI*net* experience that this approach was unnecessarily complex and costly.

Another change in CBP's ATP acquisition strategy based on lessons learned from SBI*net*, is a shift from pursuing what is known as "system development" toward a concept of leveraging "non-developmental items." Put simply, system development involves the creation of a system that does not currently exist. System development is a

very disciplined and exhaustive process that requires engineering design, analysis to compare the design to requirements, comprehensive testing, and eventually deployment and operation. System development is an appropriate acquisition approach when (1) the requirements are understood with high confidence, (2) there is limited flexibility to relax the requirements, and (3) no existing system meets the requirements. However, system development is costly, challenging, and often risky — more so when the conditions that would support system development do not exist. In the case of SBI*net*, we did not have a highly confident understanding of the requirements, or a solid justification for why our requirements were inflexible.   Therefore, it was unclear whether existing systems would be adequate for our needs. Based on lessons learned from SBI*net*, we explicitly and intentionally rejected system development as our approach for the programs within the Plan.

For the programs under the ATP, we embarked on a non-developmental item (NDI) approach because after conducting extensive market research, we had high confidence that technology systems already existed that could provide most, if not all, of the capabilities we felt were required. CBP's Office of Technology Innovation and Acquisition (OTIA), which I oversee, worked collaboratively with the Border Patrol to develop the technical requirements. We also created the flexibility to trade those requirements against cost. Under this NDI strategy, we created an opportunity to do things like buy a system that met 90 percent of our interests at 50 percent of the cost, as compared to a system that might have met 100 percent of our interests but at twice the cost.

Status of Arizona Technology Plan Programs

While acquisition of the programs within the Plan is admittedly behind schedule I believe our actions have been prudent and have actually resulted in some very positive outcomes. In short, we elected to trade schedule for higher likelihood of success in the ultimate deployments of the NDI technologies and to take advantage of opportunities to reduce costs.

Using the NDI approach, most of the programs within the Plan are on contract and many have already been deployed, including: Agent Portable Surveillance Systems (APSS); Thermal Imaging Devices; Underground Sensors (UGS); and some Mobile Video Surveillance Systems (MSC). Although it is too early to declare complete success, the early indications of the ATP acquisition strategy are quite positive and, in some cases, far exceed our expectations.

For example, the most complex and costly program within the Plan is the Integrated Fixed Tower (IFT) program. This program, ostensibly, looks something like the old SBI*net* program. As such, it is often treated as if it were SBI*net* renamed. However, IFT is not SBI*net*. It is an NDI program, and it is a narrowly tailored solution to select parts of the border.

Early external assessments of the program questioned whether NDI systems for IFT existed and whether CBP's program cost estimates were too low. While the specific numbers are still sensitive, I can report that we received far more proposals from industry for the IFT contract than we anticipated and, for that matter, more than I have ever seen for this type of procurement during my roughly 30 years in this business. The proposals were quite credible, and the sheer number rebuts any doubts about NDI availability. Also, almost every program in the Plan has been contracted at less than our initial estimates —often much less. The IFT contract, for example, came in at a savings approaching 75 percent of our initial estimate. Although we will likely have routine changes in the contract over time that will add slightly to the final cost, a 75 percent cost savings leaves a lot of room for those routine changes. It is also important to note that, because these are NDI systems, we have been able to use firm fixed price contracting, which reduces the risk to the government of substantial and uncontrolled cost growth, compared to cost reimbursable contracts for system developments like SBI*net*.

We attribute these positive indications to our acquisition strategy, our thorough market research, our staff's hard work, our willingness to trade schedule for risk reduction, and our ongoing dialogue with industry. DHS and CBP acknowledged that we needed to do things differently if we wanted a better result from past acquisition failures. In a sense, our approach to the Plan was an experiment. While not without risk, we believe the plan represents the most viable option for a successful acquisition process, one that might prove to be a useful model going forward. As I indicated, we are quite encouraged by what we have seen so far.

The cost savings alone have already had a major impact for us. We have harvested those savings to do many of the things that this Subcommittee has advocated. For instance, we have worked closely with the Department of Defense (DoD) to receive or borrow their technologies. We currently have three DoD aerostats flying over the Border Patrol's Rio Grande Valley Sector as part of an extended Field Deployment Evaluation. While undergoing evaluation, the systems concurrently support real-world operations and boost technological capabilities in a high priority area of the border. We are able to fund this exercise, as well as a number of other notable efforts, because of the cost-savings incurred as a result of our Arizona Technology Plan strategy.

GAO Recommendations

CBP's border security efforts are critically important, and we appreciate GAO's engagement with CBP's technology acquisition activities from the SBI*net* days through the present. GAO has been consistently objective and has always been very open to our thoughts and opinions. It is important to consider the latest GAO report in the context of our history to date. While the recent March 2014 report, "Arizona Border Surveillance Technology Plan: Additional Actions Needed to Strengthen Management and Assess Effectiveness," continues to identify some areas of potential weakness and risk, I believe it also demonstrates a continuing improvement trend. Piece by piece, we are building the program management infrastructure that did not exist in the early days of SBI*net*. The

GAO has helped us prioritize our efforts over the years and deserves great credit for helping to point the way to better performance.

In the latest report, we concur with many of the GAO recommendations because they represent well-established best practices for any acquisition program — including the non-developmental programs that comprise the Plan. In most of these cases, we are aware of the shortcomings highlighted by the GAO. However, we also recognize that, we had to prioritize the activities that offered the least risk to our success by conducting a cost-benefit analysis. For example, although we did not complete formal independent cost estimates for our programs, we had substantial data and market research to give us high confidence in the conservatism of our life cycle cost estimates. Similarly, while it is true that not all required acquisition documentation was formally approved at set times, the documents were virtually final, well-understood, and complete enough to enable key decisions with little risk. Going forward, we will strive to perform better in these areas.

We have non-concurred with two of the GAO recommendations, mainly because they contradict the foundation of the acquisition strategy we implemented for the Plan. Each program in the Plan has an Integrated Master Schedule (IMS), as required by our policy and practice. However, the GAO recommends CBP create an IMS for the Plan, as if the Plan itself is a program or "system of systems." As discussed above, CBP intentionally designed the Plan not to be a system of systems. It has been the separation of the old SBI*net* program into nearly independent and dis-aggregated elements that has, in my view, enabled the positive trends we have seen to date. We maintain an appropriate level of integration and schedule connection among the programs in the Plan; however, the GAO recommendation runs counter to the lessons learned from SBI*net* and risks returning us to an acquisition strategy we already know to be high risk.

Similarly, the GAO calls for formal Operational Test and Evaluation (OT&E), as if the Plan were a system development. As noted above, CBP structured the Plan with NDI programs as a result of lessons learned from SBI*net*. Since we are familiar with the technologies, we are willing to trade requirements and performance for cost and other benefits. We have committed to purchasing, at firm-fixed price, a system that will perform to the specifications asserted by the contractor. Formal OT&E would create unnecessary bureaucracy, threaten the NDI nature of the program by creating a set of requirements that may demand system development activities, and compromise the nature of the Plan that has already suggested very positive results.

For example, we will manage IFT as we have done for several of the other programs in the Plan. We have worked with the Border Patrol to define the kind of operational experience and analysis Border Patrol agents believe they need to understand and assess the system performance. We have documented this agreement in the Test and Evaluation Master Plan. This meets much of the intent of formal OT&E, does it without unnecessary bureaucracy, and provides the Border Patrol with oversight, control, and data to influence decisions about future deployments and potential system upgrades.

Conclusion

In short, we concur with the GAO where the recommendations represent best practices and risk reduction for acquisitions like the Arizona Technology Plan. We do not concur where those recommendations are inconsistent with the intentional design of the programs in the Plan and where implementation of those recommendations would compromise the foundation of the Plan.

Some have characterized our acquisition approach to the Plan as innovative — especially with regard to how it leverages NDI opportunities and offers an opportunity to trade-off requirements. Innovation in acquisition means we will apply lessons learned, experiment with new things, and break new ground. We have a solid understanding of where we need to break new ground, and we look forward to working with the GAO as we continue our efforts to develop what could become a new set of best practices.

Chairwoman Miller, Ranking Member Jackson Lee, thank you for the opportunity to testify today. I look forward to your questions.

United States Government Accountability Office

Testimony

Before the Subcommittee on Border and Maritime Security, Committee on Homeland Security, House of Representatives

ARIZONA BORDER SURVEILLANCE TECHNOLOGY PLAN

Additional Actions Needed to Strengthen Management and Assess Effectiveness

Statement of Rebecca Gambler, Director, Homeland Security and Justice

Chairwoman Miller, Ranking Member Jackson Lee, and Members of the Subcommittee:

I am pleased to be here today to discuss the findings from our March 2014 report, being released today, in which we assessed the Department of Homeland Security's (DHS) U.S. Customs and Border Protection's (CBP) efforts to develop and implement the Arizona Border Surveillance Technology Plan (the Plan).[1] In recent years, nearly half of all annual apprehensions of illegal entrants along the southwest border with Mexico have occurred along the Arizona border, according to DHS data. A top priority for CBP is preventing, detecting, and apprehending illegal entrants. In November 2005, DHS announced the launch of the Secure Border Initiative (SBI), a multiyear, multibillion-dollar program aimed at securing U.S. borders and reducing illegal immigration. CBP intended for the SBI Network (SBI*net*) to include technologies such as fixed sensor towers, a common operating picture, and tactical infrastructure to create a "virtual fence" along the southwest border to enhance CBP's capability to detect, identify, classify, track, and respond to illegal breaches at and between land ports of entry.[2] At a cost of about $1 billion, in 2010, CBP deployed SBI*net* systems, referred to as Block 1 systems, along the 53 miles of Arizona's 387-mile border with Mexico that represent one of the highest-risk areas for illegal entry attempts. However, in January 2011, in response to internal and external assessments that identified concerns regarding the performance, cost, and schedule for implementing the systems, the Secretary of Homeland Security announced the cancellation of further procurements of SBI*net* systems.[3]

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[1]GAO, *Arizona Border Surveillance Technology Plan: Additional Actions Needed to Strengthen Management and Assess Effectiveness*, GAO-14-368 (Washington, D.C.: Mar. 3, 2014).

[2] The SBI*net* fixed sensor towers were intended to transmit radar and camera information into a common operating picture at workstations manned at all times by U.S. Border Patrol agents. The SBI*net* Common Operating Picture was intended to provide uniform data through a command center environment to Border Patrol agents in the field and all DHS agencies, and to be interoperable with the equipment of DHS external stakeholders, such as local law enforcement. Tactical infrastructure includes pedestrian and vehicle fences, roads, and lighting. Ports of entry are officially designated places that provide for the arrival at, or departure from, the United States.

[3]See, for example, GAO, *Secure Border Initiative: DHS Needs to Reconsider Its Proposed Investment in Key Technology Program*, GAO-10-340 (Washington, D.C.: May 5, 2010), and *Secure Border Initiative: DHS Needs to Address Significant Risks in Delivering Key Technology Investment*, GAO-08-1086 (Washington, D.C.: Sept. 22, 2008).

After the cancellation of SBI*net* in January 2011, CBP developed the Plan, which includes a mix of radars, sensors, and cameras to help provide security for the remainder of the Arizona border. Under the Plan, CBP identified seven programs to be implemented ranging in estimated costs from $3 million to about $961 million. The three highest-cost programs under the Plan are the Integrated Fixed Tower (IFT), Remote Video Surveillance System (RVSS), and Mobile Surveillance Capability (MSC), accounting for 97 percent of the Plan's estimated cost.[4] In November 2011, we reported on CBP's development of, and estimated life-cycle costs for, implementing the Plan.[5] Specifically, we reported that CBP needed more information for the Plan and its costs before proceeding with implementation, and we recommended that CBP, among other things, determine the mission benefits to be derived from the implementation of the Plan and develop and apply key attributes for metrics to assess program implementation, conduct a post implementation review and operational assessment of SBI*net*, and update the cost estimate for the Plan using best practices.[6] DHS concurred with these recommendations and has actions under way to address some of them.

My testimony today is based on and summarizes the key findings of our report on the status of the Plan, which was publicly released today.[7] Like the report, my statement will address CBP's efforts to (1) develop schedules and Life-cycle Cost Estimates for the Plan in accordance with

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[4]The IFT consists of towers with, among other things, ground surveillance radars and surveillance cameras mounted on fixed (that is, stationary) towers. The RVSS includes multiple color and infrared cameras mounted on monopoles, lattice towers, and buildings and differs from the IFT, among other things, in that the RVSS does not include radars. The MSC is a stand-alone, truck-mounted suite of radar and cameras that provides a display within the cab of the truck.

[5]GAO, *Arizona Border Surveillance Technology: More Information on Plans and Costs Is Needed before Proceeding*, GAO-12-22 (Washington, D.C.: Nov. 4, 2011). A Life-cycle Cost Estimate provides an exhaustive and structured accounting of all resources and associated cost elements required to develop, produce, deploy, and sustain a particular program.

[6]Measures and key attributes are generally defined as part of the business case in order to explain how they contribute to the mission's benefits. See Office of Management and Budget, *OMB Circular No. A-11, Part 7, Section 300, Planning, Budgeting, Acquisition, and Management of Capital Assets* (Washington, D.C.: Executive Office of the President, July 2010).

[7] GAO-14-368.

best practices, (2) follow key aspects of DHS's acquisition management framework in managing the Plan's three highest-cost programs, and (3) assess the performance of technologies deployed under SBI*net* and identify mission benefits and develop performance metrics for surveillance technologies to be deployed under the Plan. To conduct work for the March 2014 report, we analyzed DHS and CBP program schedules and Life-cycle Cost Estimates and interviewed DHS and CBP officials responsible for developing and overseeing schedules and cost estimates, including officials from CBP's Office of Technology Innovation and Acquisition (OTIA), which manages implementation of the Plan. We also analyzed DHS and CBP documents, including DHS Acquisition Management Directive 102-01 and its associated DHS Instruction Manual 102-01-001, program briefing slides, budget documents, Acquisition Decision Memorandums, and program risk sheets.[8] Finally, we analyzed performance assessment documentation and metrics used by CBP to determine the effectiveness of technologies deployed under SBI*net* and interviewed CBP officials responsible for performance measurement activities, and analyzed CBP data on apprehensions, seizures, and asset assists from fiscal year 2010 through June 2013 to determine the extent to which the data could be used to measure the contributions of SBI*net* technologies in enhancing border security.[9] We conducted this work in accordance with generally accepted government auditing standards. More detailed information on the scope and methodology of our published report can be found therein.

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[8]DHS Acquisition Management Directive 102-01, Jan. 20, 2010, and DHS Instruction Manual 102-01-001, *Acquisition Management/Instruction Guidebook*, Oct. 1, 2011.

[9] An asset assist is what happens when a technological asset, such as a SBI*net* surveillance tower, or a non-technological asset, such as a canine team, contributes to apprehensions or seizures. In our March 2014 report, apprehensions data included individuals arrested and identified as deportable aliens, consistent with Border Patrol's definition.

CBP's Program Schedules and Life-cycle Cost Estimates Reflect Some but Not All Best Practices

In our March 2014 report, we assessed OTIA's schedules as of March 2013 for the IFT, RVSS, and MSC programs and found that these program schedules addressed some, but not all, best practices for scheduling. The *Schedule Assessment Guide* identifies 10 best practices associated with effective scheduling, which are summarized into four characteristics of a reliable schedule—comprehensive, well constructed, credible, and controlled.[10] According to our overall analysis, OTIA at least partially met the four characteristics of reliable schedules for the IFT and RVSS schedules (i.e., satisfied about half of the criterion), and partially or minimally met the four characteristics for the MSC schedule, as shown in table 1. For example, we reported that the schedule for the IFT program partially met the characteristic of being credible in that CBP had performed a schedule risk analysis for the program, but the risk analysis was not based on any connection between risks and specific activities.

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[10] GAO, *GAO Schedule Assessment Guide: Best Practices for Program Schedules,* GAO-12-120G (exposure draft) (Washington, D.C.: May 2012). We developed this guide through a compilation of best practices that federal cost-estimating organizations and industry use. According to this guide, for a schedule to be comprehensive, among other things, the schedule should (1) capture all activities, as defined in the work breakdown structure, (2) reflect what resources are needed to do the work, and (3) establish the duration of all activities and have specific start and end dates. To be well-constructed, among other things, all schedule activities are sequenced in the order that they are to be implemented with the most straightforward logic possible. To be credible, the schedule should reflect the order of events necessary to achieve aggregated products or outcomes, and activities in varying levels of the schedule map to one another. Moreover, a schedule risk analysis should be conducted to predict a level of confidence in meeting the program's completion date. For a schedule to be controlled, the schedule should be updated periodically using actual progress and logic to realistically forecast dates for program activities, and a baseline schedule should be maintained to measure, monitor, and report the program's progress.

Table 1: Summary of Our Schedule Assessments for the Three Highest-Cost Programs under the Arizona Border Surveillance Technology Plan

Schedule characteristic	Integrated Fixed Towers	Remote Video Surveillance Systems	Mobile Surveillance Capability
Comprehensive	Partially met	Partially met	Partially met
Well constructed	Substantially met	Partially met	Partially met
Credible	Partially met	Partially met	Minimally met
Controlled	Partially met	Partially met	Minimally met

Source: GAO analysis of Customs and Border Protection data.

Note: Not met—CBP provided no evidence that satisfies any of the criterion. Minimally met—CBP provided evidence that satisfies a small portion of the criterion. Partially met—CBP provided evidence that satisfies about half of the criterion. Substantially met—CBP provided evidence that satisfies a large portion of the criterion. Met—CBP provided complete evidence that satisfies the entire criterion.

We recommended that CBP ensure that scheduling best practices are applied to the IFT, RVSS, and MSC schedules. DHS concurred with the recommendation and stated that OTIA plans to ensure that scheduling best practices are applied as far as practical when updating the three programs' schedules.

Further, in March 2014 we reported that CBP has not developed an Integrated Master Schedule for the Plan in accordance with best practices. Rather, OTIA has used the separate schedules for each individual program (or "project") to manage implementation of the Plan. OTIA officials stated that an Integrated Master Schedule for the overarching Plan is not needed because the Plan contains individual acquisition programs as opposed to a plan consisting of seven integrated programs. However, collectively these programs are intended to provide CBP with a combination of surveillance capabilities to be used along the Arizona border with Mexico. Moreover, while the programs themselves may be independent of one another, the Plan's resources are being shared among the programs.

OTIA officials stated that when schedules were developed for the Plan's programs, they assumed that personnel would be dedicated to work on individual programs and not be shared between programs. However, as OTIA has initiated and continued work on the Plan's programs, it has shared resources such as personnel among the programs, contributing, in part, to delays experienced by the programs. According to schedule best practices, an Integrated Master Schedule that allows managers to monitor all work activities, how long the activities will take, and how the activities are related to one another is a critical management tool for complex

systems that involve the incorporation of a number of different projects, such as the Plan.[11] Thus, we recommended that CBP develop an Integrated Master Schedule for the Plan.

DHS did not concur with this recommendation. In particular, DHS stated that maintaining an Integrated Master Schedule for the Plan undermines the DHS-approved implementation strategy for the individual programs making up the Plan and that a key element of the Plan has been the disaggregation of technology procurements. However, we continue to believe that developing an Integrated Master Schedule for the Plan is needed. As we reported in March 2014, this recommendation is not intended to imply that DHS needs to re-aggregate the Plan's seven programs into a "system of systems" or change its procurement strategy in any form. The intent of the recommendation is for DHS to insert the individual schedules for each of the Plan's programs into a single electronic Integrated Master Schedule file in order to identify any resource allocation issues among the programs' schedules. Developing and maintaining an Integrated Master Schedule for the Plan could allow OTIA insight into current or programmed allocation of resources for all programs as opposed to attempting to resolve any resource constraints for each program individually.

In addition in March 2014, we reported that OTIA's rough order of magnitude estimate for the Plan and individual Life-cycle Cost Estimates for the IFT and RVSS programs met some but not all best practices for such estimates. Cost-estimating best practices are summarized into four characteristics—well documented, comprehensive, accurate, and credible.[12] Our analysis of CBP's estimate for the Plan and estimates completed at the time of our review for the IFT and RVSS programs showed that these estimates at least partially met three of these characteristics—well documented, comprehensive, and accurate. In terms of being credible, these estimates had not been verified with independent cost estimates in accordance with best practices. We recommended that CBP verify the Life-cycle Cost Estimates for the IFT

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[11] GAO-12-120G.

[12] GAO, *GAO Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Capital Program Costs*, GAO-09-3SP (Washington, D.C.: March 2009). The methodology outlined in the *Cost Estimating and Assessment Guide* is a compilation of best practices that federal cost-estimating organizations and industry use to develop and maintain reliable cost estimates throughout the life of an acquisition program.

and RVSS programs with independent cost estimates and reconcile any differences.

DHS said it concurred with this recommendation, although we reported that DHS's planned actions will not fully address the intent of the recommendation unless assumptions underlying the cost estimates change. In particular, DHS stated that at this point it does not believe that there would be a benefit in expending funds to obtain independent cost estimates and that if the costs realized to date continue to hold, there may be no requirement or value added in conducting full-blown updates with independent cost estimates. DHS noted, though, that if this assumption changes, OTIA will complete updates and consider preparing independent cost estimates, as appropriate. We recognize the need to balance the cost and time to verify the Life-cycle Cost Estimates with the benefits to be gained from verification with independent cost estimates. However, we continue to believe that independently verifying the Life-cycle Cost Estimates for the IFT and RVSS programs and reconciling any differences, consistent with best practices, could help CBP better ensure the reliability of the estimates.

CBP Did Not Fully Complete Documents for Acquisition Decisions Consistent with the Guidance

In March 2014, we reported for the Plan's three highest-cost programs—IFT, RVSS, and MSC—DHS and CBP did not consistently approve key acquisition documents before or at the Acquisition Decision Events, in accordance with DHS's acquisition guidance. An important aspect of an Acquisition Decision Event is the review and approval of key acquisition documents critical to establishing the need for a program, its operational requirements, an acquisition baseline, and test and support plans, according to DHS guidance. On the basis of our analysis for IFT, RVSS, and MSC programs under the Plan, we reported that the DHS Acquisition Decision Authority approved the IFT program and the CBP Acquisition Decision Authority approved the RVSS and MSC programs to proceed to subsequent phases in the Acquisition Life-cycle Framework without approving all six required acquisition documents for each program. Furthermore, we reported that one document for the IFT program, five documents for the RVSS program, and two documents for the MSC program were subsequently approved after the programs received authority to proceed to the next phase. DHS plans to complete and approve those documents for the IFT, RVSS, and MSC programs that have not yet been completed and approved.

With regard to one of the required documents—the Test and Evaluation Master Plan—we reported in March 2014 that this document for the IFT

program, which was approved by DHS in November 2013, does not describe testing to evaluate the operational effectiveness and suitability of the system. Rather, the Test and Evaluation Master Plan describes CBP's plans to conduct a limited user test of the IFT. According to the Test and Evaluation Master Plan, the limited user test will be designed to determine the IFT's mission contribution. According to OTIA and the Test and Evaluation Master Plan, this testing is planned to occur during 30 days in environmental conditions present at one site—the Nogales station. CBP plans to conduct limited user testing for the IFT under the same process that is typically performed in any operational test and evaluation, according to the Test and Evaluation Master Plan. The November 2013 IFT Test and Evaluation Master Plan notes that, because the IFT acquisition strategy is to acquire non-developmental IFT systems from the marketplace (sometimes referred to as a commercial off-the-shelf system), a limited user test will provide Border Patrol with the information it needs to determine the mission contributions from the IFTs, and thus CBP does not plan to conduct more robust testing. However, this approach is not consistent with DHS's acquisition guidance, which states that even for commercial off-the-shelf systems, operational test and evaluation should occur in the environmental conditions in which a system will be used before a full production decision for the system is made and the system is subsequently deployed.

As we reported, we recognize the need to balance the cost and time to conduct testing to determine the IFT's operational effectiveness and suitability with the benefits to be gained from such testing. Although the limited user test should help provide CBP with information on the IFTs' mission contribution and how Border Patrol can use the system in its operations, the limited user test does not position CBP to obtain information on how the IFTs may perform under the various environmental conditions the system could face once deployed. Conducting limited user testing in one area in Arizona—the Nogales station—for 30 days could limit the information available to CBP on how the IFT may perform in other conditions and locations along the Arizona border with Mexico. As of November 2013, CBP intended to deploy IFTs to 50 locations in southern Arizona, which can include differences in terrain and climate throughout the year.

We recommended that CBP revise the IFT Test and Evaluation Master Plan to more fully test the IFT program, before beginning full production, in the various environmental conditions in which IFTs will be used to determine operational effectiveness and suitability. DHS did not concur with this recommendation and stated that the Test and Evaluation Master

Plan includes tailored testing and user assessments that will provide much, if not all, of the insight contemplated by the intent of the recommendation. However, as we reported in March 2014, we continue to believe that revising the Test and Evaluation Master Plan to include more robust testing to determine operational effectiveness and suitability could better position CBP to evaluate IFT capabilities before moving to full production for the system, help provide CBP with information on the extent to which the towers satisfy Border Patrol's user requirements, and help reduce potential program risks.

CBP Has Identified Mission Benefits, but Does Not Capture Complete Data on the Contributions of Its Surveillance Technologies

We reported in March 2014 that CBP has identified the mission benefits of its surveillance technologies, but does not capture complete data on the contributions of these technologies, which in combination with other relevant performance metrics or indicators, could be used to better determine the contributions of CBP's surveillance technologies and inform resource allocation decisions. CBP has identified mission benefits of surveillance technologies to be deployed under the Plan, such as improved situational awareness and agent safety.

While CBP has defined these mission benefits, the agency has not developed key attributes for performance metrics for all surveillance technologies to be deployed as part of the Plan, as we recommended in November 2011.[13] In our April 2013 update on the progress made by the agencies to address our findings on duplication and cost savings across the federal government, CBP officials stated that operations of its two SBI*net* surveillance systems identified examples of key attributes for metrics that can be useful in assessing the Plan's implementation for technologies.[14] For example, according to CBP officials, to help measure whether illegal activity has decreased, examples of key attributes include decreases in the amount of arrests, complaints by ranchers and other citizens, and destruction of public and private lands and property. While the development of key attributes for metrics for the two SBI*net* surveillance systems is a positive step, CBP has not identified attributes for metrics for all technologies to be acquired and deployed as part of the

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[13] GAO-12-22.

[14] GAO, *2013 Annual Report: Actions Needed to Reduce Fragmentation, Overlap, and Duplication and Achieve Other Financial Benefits,* GAO-13-279SP, (Washington, D.C.: Apr. 9, 2013).

Plan. Thus, to fully address the intent of our recommendation, CBP would need to develop and apply key attributes for performance metrics for each of the technologies to be deployed under the Plan to assess its progress in implementing the Plan and determine when mission benefits have been fully realized.

Furthermore, we reported in March 2014 that CBP is not capturing complete asset assist data on the contributions of its surveillance technologies to apprehensions and seizures, and these data are not being consistently recorded by Border Patrol agents and across locations. Although CBP has a field within its Enforcement Integrated Database (EID) for maintaining data on whether technological assets, such as SBI*net* surveillance towers, and non-technological assets, such as canine teams, assisted or contributed to the apprehension of illegal entrants, and seizure of drugs and other contraband, according to CBP officials, Border Patrol agents are not required to record these data.[15] This limits CBP's ability to collect, track, and analyze available data on asset assists to help monitor the contribution of surveillance technologies, including its SBI*net* system, to Border Patrol apprehensions and seizures and inform resource allocation decisions.

We reported that according to our analysis of EID asset assist data for apprehensions and seizures in the Tucson and Yuma sectors from fiscal year 2010 through June 2013, information on asset assists was generally not recorded for all apprehension and seizure events.[16] For instance, for the 166,976 apprehension events reported by the Border Patrol across the Tucson sector during fiscal year 2010 through June 2013, an asset assist was not recorded for 115,517 (or about 69 percent) of these apprehension events. In the Yuma sector, of the 8,237 apprehension events reported by Border Patrol agents during the specified time period, an asset assist was not recorded for 7,150 (or about 87 percent) of these

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[15] In addition to maintaining data on asset assists, the Border Patrol collects and maintains data on apprehensions and seizures in DHS's EID.

[16] In our March 2014 report, we defined an "apprehension or seizure event" as the occasion on which Border Patrol agents make an apprehension of an illegal entrant or a seizure of drugs or other contraband. The event is recorded in the EID and a date and unique identifying number are assigned. An event can involve the apprehension of one or multiple illegal entrants or types of items, and each individual illegal entrant apprehended or type of item seized in the event is associated with the assigned unique identifying number. Our analysis of apprehension events included instances in which an event had at least one deportable individual.

apprehension events. Since data on asset assists are not required to be reported, it is unclear whether the data were not reported because an asset was not a contributing factor in the apprehension or seizure or whether an asset was a contributing factor but was not recorded by agents.

As a result, CBP is not positioned to determine the contribution of surveillance technologies in the apprehension of illegal entrants and seizure of drugs and other contraband during the specified time frame. We reported that an Associate Chief at Border Patrol told us that while data on asset assists are not systematically recorded and tracked, Border Patrol recognizes the benefits of assessments of asset assists data, including those from surveillance technologies, such as the SBI*net* system. The Associate Chief further noted that these data in combination with other data, such as numbers of apprehensions and seizures, are used on a limited basis to help the agency make adjustments to its acquisition plans prior to deploying resources, thereby enabling the agency to make more informed deployment decisions.

We recommended that CBP require data on asset assists to be recorded and tracked within EID and that once these data are required to recorded and tracked, analyze available data on apprehensions and technological assists, in combination with other relevant performance metrics or indicators, as appropriate, to determine the contribution of surveillance technologies to CBP's border security efforts. CBP concurred with our recommendations and stated that Border Patrol is changing its data collection process to allow for improved reporting on asset assists for apprehensions and seizures and intends to make it mandatory to record whether an asset assisted in an apprehension or seizure. DHS plans to change its process by December 31, 2014.

Chairwoman Miller, Ranking Member Jackson Lee, and members of the subcommittee, this concludes my prepared statement. I would be pleased to answer any questions that you may have.

GAO Contact and Staff Acknowledgments

For questions about this statement, please contact Rebecca Gambler at (202) 512-6912 or gamblerr@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. Individuals making key contributions to this testimony and our related report are Jeanette Espinola, Assistant Director, and Michelle Woods, Analyst-in-Charge. Additional contributors include David Alexander, Frances Cook, Joseph E. Dewechter, Jennifer Echard, Yvette Gutierrez, Richard Hung, Jason Lee, Grant Mallie, Karen Richey, Doug Sloane, Nate Tranquilli, Katherine Trimble, and Jim Ungvarsky.