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SECURE BORDER INITIATIVE

Technology Deployment Delays Persist and the Impact of Border Fencing Has Not Been Assessed

Statement of Richard M. Stana, Director
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GAO

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Chairwoman Sánchez, Ranking Member Souder, and Members of the Subcommittee:

I am pleased to be here today to discuss the implementation of the Department of Homeland Security's (DHS) Secure Border Initiative (SBI) program—a multiyear, multibillion dollar program aimed at securing U.S. borders and reducing illegal immigration. Securing the nation's borders from illegal entry of aliens and contraband, including terrorists and weapons of mass destruction, continues to be a major challenge. In November 2005, DHS announced the launch of SBI to help address this challenge. The U.S. Customs and Border Protection (CBP) supports this initiative by providing agents and officers to patrol the borders, secure the ports of entry, and enforce immigration laws.[1] In addition, CBP's SBI program is responsible for developing a comprehensive border protection system using technology, known as SBI*net*, and tactical infrastructure— fencing, roads, and lighting—along the southwest border to deter smugglers and aliens attempting illegal entry.[2] Since fiscal year 2005, SBI has received funding amounting to over $3.7 billion. Approximately $1.1 billion has been allocated to SBI*net* and $2.4 billion to tactical infrastructure.[3]

SBI*net* surveillance technologies are to include sensors, cameras, and radars. The command, control, communications, and intelligence (C3I) technologies are to include software and hardware to produce a Common Operating Picture (COP)—a uniform presentation of activities within specific areas along the border. SBI*net* technology is to be initially deployed in two geographic areas —designated as Tucson-1 and Ajo-1— within the Tucson sector.[4] In September 2006, CBP awarded a prime

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[1]At a port of entry location, CBP officers secure the flow of people and cargo into and out of the country, while facilitating legitimate travel and trade.

[2]The SBI Program Executive Office, referred to in this testimony as the SBI program office, has overall responsibility for overseeing all SBI activities for acquisition and implementation, including establishing and meeting program goals, objectives, and schedules for overseeing contractor performance,and for coordinating among DHS agencies. However, as of March 2009, the tactical infrastructure program office was realigned and is now managed on a day-to-day basis by CBP's Office of Finance Facilities Management and Engineering division.

[3]Remaining funds were allocated to program management and environmental requirements.

[4]The U.S. Border Patrol has 20 sectors in which it is responsible for detecting, interdicting, and apprehending those who engage in illegal activity across U.S. borders between official ports of entry.

contract for SBI*net* development to the Boeing Company for 3 years, with three additional 1-year options. As of July 8, 2009, CBP had awarded 13 task orders to Boeing for a total amount of approximately $1.1 billion.[5]

In addition to deploying technology across the southwest border, DHS planned to deploy 370 miles of single-layer pedestrian fencing and 300 miles of vehicle fencing by December 31, 2008. Pedestrian fencing is designed to prevent people on foot from crossing the border and vehicle fencing consists of physical barriers meant to stop the entry of vehicles. In September 2008, DHS revised its goal, committing instead to having 661 miles either built, under construction, or under contract by December 31, 2008, but did not set a goal for the number of miles it planned to build by December 31, 2008. Although some tactical infrastructure exists in all the southwest border sectors, most of what has been built through the SBI program is located in the San Diego, Yuma, Tucson, El Paso, and Rio Grande Valley sectors.

My testimony is based on a report we are publicly releasing today[6] that is the fourth in a series of interim reports on SBI implementation.[7] My testimony will discuss the following key issues in our report: (1) the extent to which CBP has implemented the SBI*net* technology program and the impact of any delays that have occurred, and (2) the extent to which CBP has deployed the SBI tactical infrastructure program and assessed its results. Our full report also provides a status of SBI program office staffing and the progress the office reports in achieving its human capital goals. I will conclude with some observations regarding our recommendation and DHS's response.

For our report, we reviewed program schedules, status reports, and previous GAO work and interviewed DHS and CBP officials, including

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[5]See appendix II of our September 2009 report—GAO, *Secure Border Initiative: Technology Deployment Delays Persist and the Impact of Border Fencing Has Not Been Assessed*, GAO-09-896 (Washington, D.C.: Sept. 9. 2009)—for a summary of the task orders awarded to Boeing for SBI projects.

[6]GAO-09-896.

[7]GAO, *Secure Border Initiative: Observations on Selected Aspects of SBInet Program Implementation*, GAO-08-131T (Washington, D.C.: Oct. 24, 2007); *Secure Border Initiative: Observations on the Importance of Applying Lessons Learned to Future Projects*, GAO-08-508T (Washington, D.C.: Feb. 27, 2008); and *Secure Border Initiative: Observations on Deployment Challenges*, GAO-08-1141T (Washington, D.C.: Sept. 10, 2008); GAO-09-896.

representatives of the SBI program office and the tactical infrastructure program office; the Border Patrol (a component of CBP); and the Department of Interior (DOI). We visited three SBI sites where SBI*net* technology (Project 28) and/or fencing had been deployed at the time of our review.[8] We determined that funding, staffing, and fencing mileage data provided by CBP were sufficiently reliable for the purposes of our report. More detailed information on our scope and methodology appears in our September 2009 report. Our work was performed in accordance with generally accepted government auditing standards.

SBI*net* Continues to Experience Delays, and Border Patrol Continues to Rely on Existing Technology That Has Limitations That Newer Technology Is Planned to Overcome
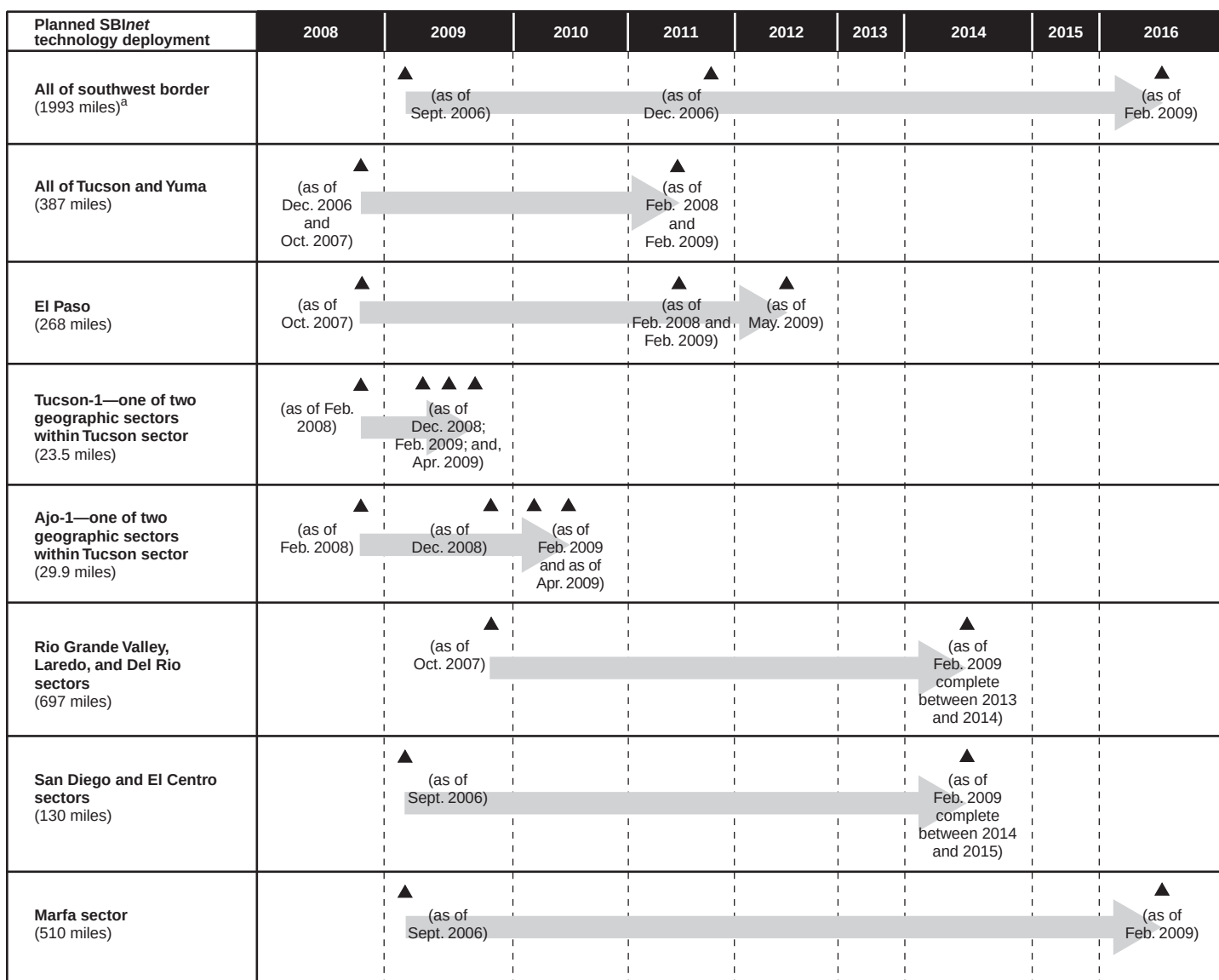
SBI*net* technology capabilities have not yet been deployed and delays require the Border Patrol to rely on existing technology for securing the border, rather than using newer technology planned to overcome the existing technology's limitations. As of September 2006, SBI*net* technology deployment for the southwest border was planned to be complete in fiscal year 2009. When last reported in February 2009, the completion date had slipped to 2016. In addition, by February 2009, the schedule for Tucson-1 and Ajo-1 had slipped from the end of calendar year 2008, and final acceptance of Tucson-1 was expected in November 2009 and Ajo-1 in March 2010. As of April 2009, Tuscon-1 was scheduled for final acceptance by December 2009 and Ajo-1 had slipped to June 2010.[9] (See fig. 1 for schedule changes over time).

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[8]Project 28 was an effort to provide a technology system with the capabilities to control 28 miles of the border in Arizona.

[9]The SBI program office defines final acceptance as the SBI program office taking ownership of the *SBInet* technology system from the contractor and comes before handing the technology over to Border Patrol.

Figure 1: Depiction of Changes in the SBI*net* Deployment Schedule from September 2006 through May 2009

Planned SBI*net* technology deployment	2008	2009	2010	2011	2012	2013	2014	2015	2016
All of southwest border (1993 miles)[a]		▲ (as of Sept. 2006)		▲ (as of Dec. 2006)					▲ (as of Feb. 2009)
All of Tucson and Yuma (387 miles)	▲ (as of Dec. 2006 and Oct. 2007)			▲ (as of Feb. 2008 and Feb. 2009)					
El Paso (268 miles)	▲ (as of Oct. 2007)			▲ (as of Feb. 2008 and Feb. 2009)	▲ (as of May. 2009)				
Tucson-1—one of two geographic sectors within Tucson sector (23.5 miles)	▲ (as of Feb. 2008)	▲ ▲ ▲ (as of Dec. 2008; Feb. 2009; and, Apr. 2009)							
Ajo-1—one of two geographic sectors within Tucson sector (29.9 miles)	▲ (as of Feb. 2008)	▲ (as of Dec. 2008)	▲ ▲ (as of Feb. 2009 and as of Apr. 2009)						
Rio Grande Valley, Laredo, and Del Rio sectors (697 miles)		▲ (as of Oct. 2007)					▲ (as of Feb. 2009 complete between 2013 and 2014)		
San Diego and El Centro sectors (130 miles)		▲ (as of Sept. 2006)					▲ (as of Feb. 2009 complete between 2014 and 2015)		
Marfa sector (510 miles)		▲ (as of Sept. 2006)							▲ (as of Feb. 2009)

▲ Estimated completion date

Source: CBP's SBI program office and Border Patrol.

[a]Miles represent the area of responsibility of the sector(s).

Flaws found in testing and concerns about the impact of placing towers and access roads in environmentally sensitive locations caused delays. By February 2009, preliminary results of testing revealed problems that may

limit the usefulness of the system for Border Patrol agents, including the instability of the camera under adverse weather conditions, mechanical problems with the radar at the tower, and issues with the sensitivity of the radar. As of May 2009, the SBI program office reported that they were still working with Boeing to address some issues such as difficulties aligning the radar.

As a result of the delays, Border Patrol agents continue to use existing technology that has limitations, such as performance shortfalls and maintenance issues. For example, on the southwest border, the Border Patrol relies on existing equipment such as cameras mounted on towers that have intermittent problems, including signal loss. The Border Patrol has procured and delivered some new technology to fill gaps or augment existing equipment. However, incorporating SBI*net* technology as soon as it is operationally available should better position CBP to identify and implement operational changes needed for securing the border.

Tactical Infrastructure Deployments Are Almost Complete, but Their Impact on Border Security Has Not Been Measured

Tactical infrastructure deployments are almost complete, but their impact on border security has not been measured. As of June 2009, CBP had completed 633 of the 661 miles of fencing it committed to deploy along the southwest border (see table 1). However, delays continue mainly because of challenges in acquiring the necessary property rights from landowners. While fencing costs increased over the course of construction, because all construction contracts have been awarded, costs are less likely to change. CBP plans to use $110 million in fiscal year 2009 funds to build 10 more miles of fencing, and fiscal year 2010 and 2011 funds for supporting infrastructure. The life-cycle cost study prepared by a contractor for CBP shows that total 20-year life-cycle costs are estimated at about $6.5 billion for all tactical infrastructure—including pre-SBI infrastructure as well as that planned for fiscal years 2009, 2010, and 2011—and consisting of deployment and operations and future maintenance costs for the fence, roads, and lighting, among other things.

Table 1: Tactical Infrastructure Deployment Progress as of June 26, 2009

Infrastructure type	Miles in place before SBI[a]	Miles deployed through SBI as of 6/26/09	Total miles in place as of 6/26/09	Target	Miles remaining to meet target
Pedestrian fencing	67	264	331	358	27
Vehicle fencing	76	226	302	303	1
Total fencing	**143**	**490**	**633**	**661**	**28**

Source: GAO analysis of SBI data.

[a]Seventy-eight miles of pedestrian fencing and 57 miles of vehicle fencing were in place before the SBI program began. However, since SBI began construction, some miles of fencing have been removed, replaced or retrofitted resulting in mileage totals that are different from those we have reported in earlier reports.

CBP reported that tactical infrastructure, coupled with additional trained agents, had increased the miles of the southwest border under control, but despite a $2.4 billion investment, it cannot account separately for the impact of tactical infrastructure. CBP measures miles of tactical infrastructure constructed and has completed analyses intended to show where fencing is more appropriate than other alternatives, such as more personnel, but these analyses were based primarily on the judgment of senior Border Patrol agents. Leading practices suggest that a program evaluation would complement those efforts.[10] Until CBP determines the contribution of tactical infrastructure to border security, it is not positioned to address the impact of this investment. In our report, we recommended that to improve the quality of information available to allocate resources and determine tactical infrastructure's contribution to effective control of the border, the Commissioner of CBP conduct a cost-effective evaluation of the impact of tactical infrastructure on effective control of the border.

DHS concurred with our recommendation and described actions recently completed, under way, and planned that the agency said will address our recommendation. For example, DHS commented that it is considering using independent researchers to conduct evaluations and considering using modeling and simulation technology to gauge the effects of resource deployments. We believe that such efforts would be consistent with our

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[10] In program evaluation, scientific research methods are used to establish a causal connection between program activities and outcomes and to isolate the program's contributions to them. GAO, *Program Evaluation: Studies Helped Agencies Measure or Explain Program Performance*, GAO/GGD-00-204 (Washington, D.C.: Sept. 2000).

recommendation, further complement performance management initiatives, and be useful to inform resource decision making.

This concludes my prepared testimony. I would be pleased to respond to any questions that members of the subcommittee may have.

Contacts and Acknowledgments

For further information regarding this testimony, please contact Richard M. Stana at (202) 512-8777 or stanar@gao.gov. In addition, contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. Individuals who made key contributions to this testimony are Assistant Director Susan Quinlan, Sylvia Bascopé, and Katherine Davis.