

**PROJECT 28: LESSONS LEARNED AND THE FUTURE  
OF SBINET**

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**HEARING**

BEFORE THE

SUBCOMMITTEE ON BORDER, MARITIME,  
AND GLOBAL COUNTERTERRORISM

AND THE

SUBCOMMITTEE ON MANAGEMENT,  
INVESTIGATIONS, AND OVERSIGHT

OF THE

COMMITTEE ON HOMELAND SECURITY  
HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

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## **PROJECT 28: LESSONS LEARNED AND THE FUTURE OF SBINET**

**Wednesday, February 27, 2008**

U.S. HOUSE OF REPRESENTATIVES,  
COMMITTEE ON HOMELAND SECURITY,  
SUBCOMMITTEE ON BORDER, MARITIME, AND GLOBAL  
COUNTERTERRORISM, AND SUBCOMMITTEE ON MANAGEMENT,  
INVESTIGATIONS, AND OVERSIGHT,  
*Washington, DC.*

The subcommittees met, pursuant to call, at 10:09 a.m., in Room 311, Cannon House Office Building, Hon. Loretta Sanchez [chairwoman of the subcommittee] presiding.

Present: Representatives Thompson, Sanchez, Carney, Lofgren, Jackson Lee, Cuellar, Clarke, Perlmutter, Pascrell, Jr., Souder, and Rogers.

Ms. SANCHEZ [presiding.] The subcommittee will come to order.

The Subcommittee on Border, Maritime, and Global Counterterrorism and the Subcommittee on Management, Investigations, and Oversight are meeting today to receive testimony on "Project 28: Lessons Learned and the Future of SBInet."

Good morning to you all.

Today, we are holding the third hearing in a series of hearings that we have had to examine the Department of Homeland Security's secure border initiative and, specifically, Project 28.

Thank you to our witnesses once again for you being here today.

Your testimony and responses to our questions are critical parts of the oversight of our subcommittees, which we continue to perform on the secure border initiative and Project 28.

As you all know, we have many questions about the operations and the success to date to SBInet and the program.

I am particularly concerned about SBInet program's ongoing struggle with transparency. We need the Department and Customs and Border Protection to be open and forthcoming about the plans, the goals and the progress of this critical program, because, as you know, Americans are asking what are we doing at the border, and they have a right to know and we on this committee have a right to know.

We have a right to know the truth. What are the problems? What are the successes?

In June, we received testimony that SBInet's Project 28 was on time for delivery 6 days before the date it was supposed to be operational. But as you know, just a day later, we received a letter in this committee that said it was not going to be ready.

Now, after the Department has accepted Project 28 8 months late, we are hearing that it was never intended to be operational, despite many assertions, especially before this committee, by the Department and by Boeing in the early stages of Project 28.

So I have been very disappointed by the lack of transparency, and I hope that this will improve in the future stages of SBI-net so that, in fact, we can feel comfortable in talking to Americans about what is going on at the border and how we are protecting them.

I would like to thank my Ranking Member, Mr. Souder, for his interest in this project.

I would also like to thank Chairman Carney and Ranking Member Rogers for their interest in the program today.

I look forward to a productive hearing today, providing us an overlook of what the Department intends to do now that it has accepted this piece of SBI-net.

Thank you.

I now recognize Mr. Souder for some comments.

Mr. SOUDER. Thank you, Chairwoman Sanchez and Chairman Carney, for holding this joint subcommittee hearing.

This is our third hearing on Project 28 and SBI-net during the 110th Congress, and it builds on the work from the last Congress, from the legacy border technology programs and fencing requirements.

I have made no point to hide my frustration at the long delays and technology problems witnessed in Project 28. I will not repeat myself at this time, other than to express the importance of testing software and hardware before deployment in the field and the need to incorporate lessons learned from DOD force protection overseas, when they have already encountered many of the same challenges, including radar clutter, sand and high winds.

I do think that it is extremely important for the committee to see Project 28, especially now that it has been accepted by the Department, being used operationally by the Border Patrol last week. Republican Members submitted a travel requesting asking that a bipartisan site visit be scheduled for Project 28, and I ask unanimous consent that it be included in the hearing record.

I am pleased that Chairwoman Sanchez agrees with this, and we hopefully can get this coordinated in the not-too-distant future.

Today, I look forward to receiving an update on the status of Project 28, improvements that have been made to allow DHS to formally accept the project last Thursday, and the timeline for moving forward with additional technology and fencing in order to gain operational control over the border.

Ultimately, we need both physical barriers to slow illegal entry, and then we need electronics to identify and track criminals seeking to circumvent the barriers.

Additional Border Patrol agents, 18,000 by the end of 2008 and 20,000 by the end of 2009, are essential for response and deterrent capabilities, but we need to support them with infrastructure and technology.

We are now 6½ years past the terrorist attacks in 2001, and we still have a long way to go before the border is secure. With the exception of P-28, the Department needs to present a scheduled for

adding both infrastructure and technology along the southwest border and present plans for the northern border.

Last week, I was in Texas for the entire week, and it is obvious that, I believe, in some places, the physical border proposals need to be expanded, but we cannot put physical barriers on most of this border. The fact is sometimes you might have a fence, but you will have 20 miles of mesquite trees behind it.

If you had a fence and they get over, you are going to lose them anyway.

So we have to get plans in place for how we are going to extend not only the physical barriers, but the electronic barriers, and what the pattern is and what the costs are going to be so we can realistically analyze how we are going to tackle this.

We have huge open areas. The route that we took from Laredo to El Paso, even as a bird flew, is the equivalent of driving from Indianapolis to Denver.

It isn't just a straight border. It is a curvaceous border. Thirteen percent of the border is in Big Bend National Park and another part in Lake Amistad, which has 180 bass tournaments. They have all these bass fishermen out there in the vastness of the plains.

We have some checkpoint stations and then we need to have the mobile stations beyond those, because people try to move around those checkpoints. But ultimately, you have to have sufficient electronics not only precisely at the border, but as they are moving through.

We can't afford the kind of delays we had on Project 28 as we move forward in trying to do this, because they are going to find the holes in our system, and the holes right now are hundreds of miles, not just here and there, a little spot where you can move.

The continued challenges and delays in placing technology and infrastructure along the border highlight the need for this committee to continue to be involved and conduct oversight.

I think this is also an area that places a spotlight on the need for an authorization bill to allow Congress to insert some firm milestones, performance measures, and requirements.

I ask both Chairs to work with us on a bipartisan bill to address these and other issues facing the Department.

Given the importance of the topic and the number of questions that I have, I am going to end my statement with the request and welcome the witnesses.

I look forward to your testimony.

I yield back the balance of my time.

Ms. SANCHEZ. Now the Chair recognizes the Chairman of the Management, Investigations and Oversight Subcommittee, the gentleman from Pennsylvania, for an opening statement.

Mr. CARNEY. Thank you, Madam Chairwoman.

Before I get down to business here, I would like to state my disappointment with DHS for getting their testimony to us so late in the day yesterday.

I understand there is some confusion over at DHS about the witnesses, but that is still no excuse for the testimony being so late.

That said, I would like to thank Chairwoman Sanchez, as our respective subcommittee staffs have worked jointly to investigate Project 28.

I look forward to our continuing work on the issue.

Project 28 and the larger SBInet program were supposed to be a model of how the Federal Government is leveraging technology to secure our borders.

But Project 28, in my mind, has achieved a dubious distinction as a trifecta of bad Government: bad Government contracting, poor contractor performance, and poor final product.

I know some of our witnesses have testified before one or both of these subcommittees in the past and I appreciate your willingness to return. Some would say you are true gluttons for punishment, but I am thankful for your continued cooperation as we continue to examine where mistakes were made and what can be done to prevent them from happening in the future.

As the pieces of SBInet are developed and ultimately put into use, we must remember the hard-learned lessons of P-28. I am still wondering why Secretary Chertoff allowed the Department to take final acceptance of P-28 last week.

From everything that I have heard over the last several weeks, while P-28 could be headed in the right direction, it is far from acceptable.

Yet, the Department is finally acknowledging P-28's problems, when they briefed me in private, and I am disappointed that their public statements are so disconnected with reality.

Over the weekend, I expressed my concern about P-28's acceptance. A DHS spokeswoman responded by attacking me and clinging to the fantasy that all is well with P-28, saying "Those who choose to criticize without seeing the technology firsthand are merely bystanders of the product and have no idea how hard our Border Patrol is working to keep America safe. We would not have accepted it if it didn't work."

Well, first, I have seen P-28 in person and walked along the Sasabe border. Second, I know how hard the Border Patrol is working to keep America safe. Not just because of the time I spent with them last month. I have spent a lot of time studying this project, the issues surrounding Border Patrol and their staffing, and I know how hard they work.

Third, no less an authority than Acting Deputy Secretary Schneider has quite candidly told me that P-28 does not do what DHS expected it to do.

The Department's press flacks may want to do a little research, both about which Members have been to P-28 and what their bosses think of the project itself, before making such statements.

When I was in the Tucson sector, sitting in the ops center and watching the COP with the Border Patrol, P-28 wasn't working as promised. It was about 7 months past the actual due date, and it still wasn't working. Now we are 9 months past due, and it is still not working properly.

I am glad that Boeing has decided to spend their own money to try and iron out some of the myriad problems the system has experienced. But I am still not convinced we have gotten what we were supposed to get.

Maybe, as DHS likes to say, my expectations weren't managed well enough, and I suppose that is not Boeing's fault or their responsibility. But had P-28 been developed in an ideal world, Boe-

ing wouldn't have to have to play such a large role in writing their own contract specs.

Border Patrol would have had input into the design of the system, and DHS wouldn't have accepted the system until it worked like the Border Patrol wanted it to.

I appreciate the forthrightness that I have heard from Acting Deputy Secretary Schneider and Mr. Krone over the past few weeks, and I hope and expect we will see the same candor during our questioning this morning.

Also, I would like to give you all a heads-up that Chairman Thompson has directed us to keep a close tab on SBInet as it develops. So you can expect to hear from us very soon again.

I thank you for appearing before us today and I look forward to the questions.

Thank you, Madam.

[The statement of Chairman Carney follows:]

PREPARED STATEMENT OF CHAIRMAN CHRISTOPHER P. CARNEY

FEBRUARY 27, 2008

Before I get down to business, I'd like to state my disappointment with DHS for getting their testimony to us so late in the day yesterday. I understand there was some confusion over at DHS about witnesses, but there's still no excuse for the testimony being so late.

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I'm glad that Boeing has decided to spend their own money to try to iron out some of the myriad problems the system has experienced, but I'm still not convinced we've gotten what we were supposed to get. Maybe, as DHS likes to say, my expectations weren't managed well enough, and I supposed that's not Boeing's fault or responsibility.

But had P-28 been developed in an ideal world, Boeing wouldn't have played such a large role writing their own contract specs, Border Patrol would have had input in the design of the system, and DHS wouldn't have accepted the system until it worked to the Border Patrol's liking.

I appreciate the forthrightness that I have heard from Acting Deputy Secretary Schneider and Mr. Krone over the last few weeks and I hope and expect we'll see the same candor during our questioning this morning.

Also, I'd like to give you all a heads-up that Chairman Thompson has directed us to keep close tabs on SBInet, so you can expect to hear from us again very soon.

Thank you again for appearing before us today.

Ms. SANCHEZ. Other Members of the subcommittees are reminded that under the committee rules, opening statements may be submitted for the record.

[The statements of Chairman Thompson and Ranking Member Rogers follow:]

PREPARED STATEMENT OF CHAIRMAN BENNIE G. THOMPSON

FEBRUARY 27, 2008

February 2 was a few weeks ago, but from where I sit today is the real Groundhog Day.

We are talking about a border technology project that failed to live up to its billing. The Department is here to tell us that they've learned from their mistakes, and that everything is great going forward.

Border Patrol is going to tell us that they need technology that actually works in order to help them perform their crucial mission. And GAO is here giving us the "ground truth" about systems that don't work the way they were supposed to. The letters have changed from ISIS to ASI to SBInet, but the narrative is the same.

I've spoken recently about how we need to chart a course for the American people towards freedom from fear. But the course you're on keeps reversing back on itself.

This cannot go on. I understand that Boeing is already at work on a \$64 million task order that is supposed to cure what ails Project 28. You have to convince me why we should trust you this time.

You have to convince me why this time is different. And you should be forewarned: your task today is a difficult one, because you carry with you the baggage of the failed border technology projects of the past.

Frankly, I've already penciled in the next one of these hearings for about 6 months from now. Hopefully some of the things you say today—and more importantly, the things you do in the coming months—will cause me to go back and erase that calendar entry. But I have to say that I think it's more likely that instead of erasing it, I'll be writing it in ink.

I have said this many times before, but it is important so I will say it again: We need to secure our borders, and to do this we need technology to assist our hard-working Border Patrol agents. Gentleman, I cannot be more clear: If you can't get it right, we will look elsewhere for people who can.

PREPARED STATEMENT OF RANKING MEMBER MIKE ROGERS

FEBRUARY 27, 2008

Thank you, Mr. Chairman and Madam Chairwoman for holding this hearing.

This joint subcommittee hearing continues our oversight of the technology component of the Secure Border Initiative, referred to as SBInet.

Let me first thank our witnesses for taking the time to be with us today.

In the 109th Congress, we conducted a review of SBInet's predecessor, the Integrated Surveillance Intelligence System—or ISIS.

What we found was a camera and sensor system that was plagued by mismanagement, operational problems, and financial waste.

At that time, we put the Department on notice that mistakes of the past should not be repeated in SBInet.

In November 2006, the Management Subcommittee held the first congressional hearing on SBInet and the newly awarded contract.

Over 15 months have passed since that hearing, and the Government only last week accepted a Project for only 28 miles of so-called virtual fencing along the southwest border.

However, that system is not ready for deployment along other stretches of the border without significant modifications and improvements.

That system has also been the subject of extensive delays and cost overruns.

It is critical for our national security that DHS secure the borders now—not years from now.

We must make sure the folks at DHS have learned from their mistakes of the past.

We must also make sure that DHS has a plan in place to implement SBInet quickly, efficiently, and cost-effectively along our Nation's border.

I look forward to hearing from the witnesses about the current status of Project 28 and the future of SBInet as a whole.

I thank the Chair, and yield back.

Ms. SANCHEZ. So now I welcome our panel of witnesses. Our first witness, Mr. Jayson P. Ahern assumed responsibility as deputy commissioner of U.S. Customs and Border Protection on August 5, 2007.

As the chief operating officer of Customs and Border Protection, he oversees daily operations of a 45,000 employee workforce and manages and operating budget of more than \$10 billion.

Prior to being named deputy commissioner, Mr. Ahern served as the assistant commissioner for CBP's office of field operations.

Welcome.

Our second witness, Mr. David Aguilar, became chief of the U.S. Border Patrol on July 1, 2004. Before his appointment, he was the chief patrol agent of Border Patrol's Tucson sector, where Project 28 is currently located. Chief Aguilar began his Border Patrol service in June 1978 in Laredo, Texas.

Welcome.

Our third witness, Mr. Gregory Giddens, is the director of the secure border initiative at the Department of Homeland Security. Mr. Giddens began his civil service career at Warner Robins Air Logistics Center and subsequently served in various capacities with the Air Force, Army, and at the Pentagon.

He was selected for his current position in October 2005.

Our fourth witness, Mr. Richard Stana, is the director of homeland and justice issues at the Government Accountability Office and during his 31-year career with GAO, he has directed reviews on a variety of complex military and domestic issues in headquarters, field, and overseas offices.

Most recently, he has directed GAO's work relating to law enforcement, drug control, immigration, customs, corrections, court administration, and election systems.

Welcome, again.

Our fifth witness, Mr. Roger Krone, is president of Network and Space Systems, a business of Boeing Integrated Defense Systems, which is responsible for the SBInet program. Prior to this assignment, he was vice president and general manager of Army systems for Boeing Integrated Defense Systems, vice president of strategic programs at Boeing's corporate headquarters in Chicago.

Without objection, the witnesses' full statements will be inserted into the record.

I do want to note that they were late in coming forward, most of them yesterday, and I would hope that, in the future, we would get them ahead of time so that we can review them and make the process a more iterative process between all of us.

I now will ask the witnesses to summarize those statements for 5 minutes, beginning with Deputy Commissioner Ahern.

Welcome to all you gentlemen who have been before this committee before.

For 5 minutes or less.

**STATEMENT OF JAYSON P. AHERN, DEPUTY COMMISSIONER, CUSTOMS AND BORDER PROTECTION, DEPARTMENT OF HOMELAND SECURITY, ACCOMPANIED BY DAVID V. AGUILAR, U.S. BORDER PATROL, CUSTOMS AND BORDER PROTECTION, DEPARTMENT OF HOMELAND SECURITY, AND GREGORY GIDDENS, EXECUTIVE DIRECTOR, SECURE BORDER INITIATIVE, CUSTOMS AND BORDER PROTECTION, DEPARTMENT OF HOMELAND SECURITY**

Mr. AHERN. Madam Chairwoman, thank you very much for the opportunity to testify today.

Chairman Carney, Ranking Member Souder and other Members of the panel here today. As stated, my name is Jay Ahern, and I have served in Federal law enforcement with U.S. Customs and Border Protection and previously in U.S. Customs for 31 years and now serve as the deputy commissioner of Customs and Border Protection.

Appearing with me today is David Aguilar, chief of the Border Patrol, and Greg Giddens, executive director for the SBI program.

I will provide one oral summary for the three of us this morning, so we have an opportunity to get more into the detail of your questions later.

Certainly, it is an honor to appear before you today to discuss our comprehensive border enforcement efforts, and I know that the committee wishes to discuss P-28 and future SBI net plans primarily today, and I will turn to those topics in a moment.

But I would be remiss if I did not begin today by putting these topics into the overall context of CBP's multifaceted efforts to secure our Nation's borders.

P-28, SBI net, and the promise of integrated surveillance and tracking capabilities is an important piece of our much longer ongoing efforts. But it is only a piece and not even one of the most important ones, I would submit.

Unfortunately, this piece has generated the disproportionate amount of attention compared to its actual scope and its significance.

As we look forward to deploying better tools to our frontline personnel and the very real achievements of the frontline men and women, I hope this opportunity today provides a better opportunity to put into context and also a better understanding and allow us to move forward in our progression to continue to secure the country's border.

CBP's approach to securing the border relies on a balance of elements essential to our success. Those elements are our personnel

and force multiplier tools, such as infrastructure, as well as technology.

Our frontline personnel are the Nation's most important assets in securing the country's borders and CBP is rapidly increasing the sizes of the Border Patrol, the largest expansion ever. Our goal is to double the agents over the 2001 number by the end of this calendar year.

The mission success of CBP's agents and offices, however, is undoubtedly enhanced by their access to the tools that they need to most effectively and efficiently carry out their duties.

Technology is certainly one of those tools, but, again, not the only one. For instance, between the ports of entry, we have already built over 300 miles of pedestrian and vehicle fence along the southern border and are on target to meet our goal of 670 miles by the end of this calendar year.

Within the technology element, it is important to recognize that P-28 and the development of the future integrated SBInet system are only a piece of our efforts and CBP has been deploying and continues to deploy technology tools to our frontline personnel.

We have not been waiting for or dependent upon solely the results of P-28 to do so.

For our officers operating at ports of entry, we have tools for advanced targeting systems, radiation portal monitors, large-scale X-ray systems. For Border Patrol and air and marine agents working to control our borders between the ports of entry, we have constructed the fence to at least deter or delay illegal border crossings.

We have unattended ground sensors to alert agents to potential illegal cross-border movement, truck-mounted mobile surveillance systems, remote video surveillance systems, unmanned aerial systems, to which we now have four, as well as fixed and rotary wing aircraft to detect, classify, track and respond to illegal border crossing.

Although highly beneficial, use of some of these tools today is more resource-intensive than they may need to be.

It was with the technological improvements in the area of integration and efficiency, as well as the design and display of a common operating picture, that the SBInet concept was undertaken.

We believe this approach, in the long run, will make our frontline personnel much more effective as we deal in providing them with an additional capability.

Now, turning to the topic of P-28 and the future deployment of the SBInet solution, I would like to first, briefly, take a step back.

As part of the competitive SBInet solicitation and original call to industry proposals, firms were asked to propose an initial test which could be one or more parts of their overall concept of operations for border security.

Project 28 was Boeing's initial prototype demonstration and was designed to be proof of its overall concept, something we could test, we could evaluate and we could learn from, and be the initial building block of the system's future technology foundation.

After the Project 28 prototype was underway and during acceptance testing, we identified technical deficiencies. Some of these were so egregious that the Government delayed acceptance of P-28.

After Boeing fixed the majority of these deficiencies and the Government conditionally accepted it on December 7, 2007, it was allowing the Border Patrol, at that point, to be able to begin operational testing and to further identify specific remaining deficiencies based on the actual use of our frontline personnel.

P-28 has accomplished the objectives and on February 21, 2008, we did take final acceptance of the program. Unfortunately, the initial proof of concept and the overall SBI-net system became confused with one another and some of you have had a chance to see P-28 in its actual deployment.

Today, P-28 is a system that provides operational technology in an area that did not have these types of resources and has increased our effectiveness in this area as a result.

It has acted as a force multiplier in a location where we had a limited footprint or eyes on the border. It also is allowing our operators to begin to adapt their operations to this new tool.

We will now take the many lessons learned and focus on the transformation of the future SBI-net solution.

In my written statement—and I do apologize for that getting here late—we will capitalize and go into more detail on the lessons learned, as well as the next steps.

We have the confidence that a version of this type of solution can be used in other selected border locations, where it makes sense. With other tools and techniques, we believe this solution can contribute to CBP's efforts in securing our country's borders.

The pieces of the technology solution will continue to evolve, as, also, will this development through a spiral process. But it is important to recognize that a Project 28-like system will not be deployed along every mile of the border.

Different segments of the border require different approaches and a project like P-28 would not be cost-effective nor necessary everywhere along the border.

For many locations, existing tools will be sufficient, given the current nature and the level of the threat. In other areas, we may need even more advanced technological tools to control the risk. It is not a one-size-fits-all approach and never was.

As I close, I would like to go ahead and just show two very brief video clips and if I could direct the attention of the Members to the screens we have here and begin to run that first clip.

The first clip is actually from February 14, this year. It shows a group of illegal aliens making their way toward the border. It was actually 100 aliens looking to go ahead and make their way to the border. Thirty-eight individuals were actually arrested as they were present in the United States. The remainder returned back into Mexico or never actually entered into the United States.

An indication of the types of technology that now are deployed providing that picture to our agents in the field.

The second clip is actually something that I spoke of briefly in the testimony. We actually are looking for the UAV systems, the UASs, as we actually queue this up. The technology is working for demonstration.

This is our UASs, our unmanned aerial systems. We took deployment of our fourth UAS this week. This will give us additional ca-

pabilities. Again, this will give us the air picture. As you can see, the stream of aliens actually making their way to the border.

I would actually just provide an example that occurred last evening. We had four sensor hits that actually occurred. You can see here our Blackhawk responding.

So that the combination of the personnel on the ground, the aviation aspects of this operation, as well as the UAVs queuing in the agents to the incursion.

Last night, we had four incursions that were sensor hits. Three of them actually turned out to be aliens coming across the border. One was 40, a group of 40, another group of 29, and a group of 16.

The fourth one happened to be a deer. But, actually, by getting eyes on it, we saw it was a deer and, obviously, didn't need to deploy. But these are the capabilities that are being brought to the border.

This is not solely a P-28 solution. This is another part of our strategy to secure the borders. It will be integrated over time, but, again, we have not just been waiting solely for the P-28 solution to come forward.

So I just wanted to demonstrate a couple of the capabilities we have today.

I will close by thanking you for the opportunity to come here to provide testimony. We look forward to answering the questions as we proceed today.

[The statement of Mr. Ahern follows:]

PREPARED STATEMENT OF JAYSON P. AHERN

FEBRUARY 27, 2008

Chairwoman Sanchez, Chairman Carney, Ranking Members Souder and Rogers, and distinguished subcommittee Members, my name is Jayson Ahern. I have served in Federal law enforcement within U.S. Customs and Border Protection (CBP) and legacy U.S. Customs for 31 years and am now the Deputy Commissioner of CBP. With me here today is David Aguilar, Chief of the U.S. Border Patrol, and Greg Giddens, the Executive Director of SBI.

It is an honor to have the opportunity to appear before you today. My testimony this morning focuses on our border enforcement efforts and how the men and women of CBP on the front lines accomplish the goal of achieving control of our borders at and between the official ports of entry. I know the committee wishes to primarily discuss Project 28 (P-28) and future SBI net plans today, and I will turn to those topics in a moment. But I would be remiss if I did not begin by putting those topics in the overall context of CBP's multifaceted efforts to secure our Nation's borders. P-28, SBI net and the promise of integrated surveillance and tracking capabilities is an important piece of our ongoing efforts, but it is only a piece and not even the most important one. Unfortunately this is a piece which has generated a disproportionate amount of attention compared to its actual scope and significance. I am concerned that the singular public focus on this "tree" has at times caused some to lose sight of the whole "forest" of our efforts in securing the border and the very real achievements of the men and women of CBP.

The creation of CBP within the Department of Homeland Security (DHS) nearly 5 years ago—establishing for the first time a single, unified border agency for the United States—was a profound achievement. Our responsibilities today are complex and challenging. CBP is the largest uniformed law enforcement agency in the country. We have over 20,000 CBP Officers and Agriculture Specialists at U.S. ports of entry around the Nation—air, land, and sea ports. We deploy over 15,000 Border Patrol agents and 745 Air and Marine Interdiction agents across the country to prevent the illegal entry of persons and goods between our official ports of entry.

CBP is responsible for protecting more than 4,000 miles of border with Canada, 1,900 miles of border with Mexico and operating 326 official ports of entry. Our mission includes preventing terrorists and terrorist weapons from entering the United States, while also facilitating the flow of legitimate trade and travel. CBP is also

responsible for: Interdicting the flow of illegal aliens, drugs and contraband; protecting our agricultural and economic interests from harmful pests and diseases; protecting American businesses from theft of their intellectual property, violations of textile agreements, import safety violations and monopolistic practices; regulating and facilitating international trade; collecting import duties and enforcing United States trade laws. Each day CBP inspects more than 1.1 million travelers, including 340,000 vehicles and over 85,000 shipments of goods approved for entry; processes more than 70,000 truck, rail and sea containers; collects more than \$88 million in fees, duties, and tariffs; seizes more than 5,500 pounds in illegal narcotics; and intercepts more than 4,400 agricultural items and pests at ports of entry. CBP also intercepts over 84 fraudulent documents a day and refuses entry to 416 inadmissible aliens, which translates to nearly 31,000 fraudulent documents and more than 152,000 inadmissible aliens each year. During fiscal year 2007 alone, CBP Officers at our land, sea, and air ports of entry arrested 25,693 individuals, including murderers, sexual predators, drug smugglers, and individuals with links to terror. Between the Ports of Entry, Border Patrol agents apprehended 876,704 persons (858,638 on the southwest border) attempting to enter the United States illegally, including human smugglers, drug traffickers, and illegal aliens.

CBP's approach to border security strikes a balance among the elements that contribute to our success. Those elements include personnel and force multiplier tools such as infrastructure, the use of intelligence, technology tools, and air assets. As of February 2, 2008, CBP had 15,439 Border Patrol agents on board, and plans to have over 18,000 agents by the end of calendar year 2008. CBP also continues to increase its workforce at the ports of entry, hiring 2,156 new CBP Officers and 340 agriculture specialists, for a net increase of 648 officers and 151 specialists in fiscal year 2007.

Our frontline personnel are the Nation's most important asset in securing the borders. However, the mission success of CBP's agents and officers is undoubtedly enhanced by their access to the tools they need to most effectively and efficiently carry out their duties. CBP has been deploying and continues to deploy these technology tools for our frontline personnel and we have not been waiting for or dependent upon the results of P-28 to do so. For CBP Officers operating at U.S. Ports of Entry, these tools include Advanced Targeting Systems to identify potentially dangerous arriving travelers and cargo; Radiation Portal Monitors and Cargo X-ray systems to screen arriving cargo for hazardous or prohibited materials; and hand-held radiation detection devices to screen arriving travelers, baggage, and conveyances for nuclear materials. For Border Patrol Agents working to control our borders between the ports of entry, they currently use tools such as:

- Fencing to deter or delay illegal border crossings;
- Unattended Ground Sensors (UGS) to alert agents to potentially illegal cross-border movement in remote areas and at non-24-hour northern border ports of entry during non-operating hours; and
- Truck-mounted mobile surveillance systems (MSS), Remote Video Surveillance Systems (RVSS), Unmanned Aerial Systems (UASs), and fixed- and rotary-wing aircraft to detect, classify, track and respond to illegal border crossings.

Although beneficial, use of some of these tools today is resource-intensive. For example, deployment and operation of the MSS requires a Border Patrol Agent to drive the MSS-equipped truck out to the deployment location; monitor activity on the radar and relay that information to dispatchers or agents. Likewise UGSs and RVSSs could be more useful and operated with fewer personnel if they were linked with each other such that a camera was automatically directed to a location where a UGS was tripped off. It is with these types of technological improvements in the area of integration, as well as design and display of a Common Operating Picture, that SBInet was undertaken. P-28 was the first proof of concept of this integrated, linked approach which we believe in the long run will make our frontline personnel more efficient and effective by delivering an integrated package of sensor technology with an enhanced user interface.

Through SBInet, CBP will field an effective, integrated mix of proven technology (radars, communication devices, cameras, sensors, and other equipment), infrastructure (vehicle and pedestrian fence, lighting, and all-weather roads), and response platforms. This mix, combined with existing resources, will assist Border Patrol agents, CBP officers, and Air and Marine interdiction agents to more efficiently deter, detect, and apprehend illegal entries into the United States.

As part of the competitive SBInet solicitation and original call to industry for proposals, firms were asked to propose an initial task which could be one or more modules of their overall concept of operations for border security. Each offeror's proposed task order was evaluated for its technical approach and achievability, and the extent to which it demonstrated the feasibility of the proposed overall solution. Boeing

proposed to deploy mobile long-range sensors, communications, command and control equipment, and a Common Operating Picture (COP) in the Tucson Sector area of responsibility. CBP chose Boeing's overall SBInet solution, and subsequently awarded the offeror's proposed task, P-28, in October 2006.

P-28, Boeing's initial prototype demonstration along a 28-mile stretch of border in Arizona, was designed to be a proof of concept and the first building block for the system's technology foundation. As a prototype, the system was intended to: (1) Demonstrate the feasibility of Boeing's SBInet solution; and, (2) establish baseline performance characteristics against the SBInet performance targets.

The P-28 task order included deployment of 9 mobile sensor towers, including radar, cameras, satellite terminals, and wireless access points; communication kits installed in agent vehicles; Rapid Response Vehicles; satellite phones for agent use; unattended ground sensors; mobile command, control, and communications units; software to operate the system and provide the COP; training to operate the system; and 32 data requirements, including system documentation and reports.

After the P-28 module was designed, installed, and the Boeing testing program was underway, technical deficiencies were identified. Some of these were so egregious that the Government delayed acceptance of P-28 from the original target of early summer 2007. After Boeing fixed the majority of the deficiencies, the Government conditionally accepted P-28 on December 7, 2007, so the Border Patrol could begin using the system to determine opportunities for improvements, as well as learn how it would enhance their operational capabilities. During this time, Boeing worked to resolve the remaining system performance issues until only one issue, an infra-red camera (FLIR) flicker anomaly, remained. The FLIR flicker anomaly remained a key driver for final acceptance from an operational perspective and was considered to be critical to system performance. Boeing identified the root cause of the issue and upgraded the grounding systems on the towers in late January. Final testing of this solution indicated the problem was resolved. Of the 53 open items from conditional acceptance, all were closed except four with minimal operational impact that were waived in exchange for financial consideration. Consequently, CBP accepted P-28 on February 21, 2008. In consideration of the schedule delays and waived open items, Boeing has credited the Government \$2.2 million in logistics, maintenance and support for the P-28 system.

In its current state, P-28 provides Border Patrol agents with improved situational awareness of operations in the field. Agents in the command center now receive additional alerts and notifications of potential illegal activity by using integrated cameras and radar. Agents deployed in the field using vehicle mounted mobile data terminals have an improved picture of the section of border they are enforcing. This includes where their fellow agents are, potential suspects, and terrain features. The system provides an initial capability that will be used by our operators to explore and refine future concepts of operations and operational requirements, evaluate how the technology can be effectively placed into the field and utilized by Border Patrol agents and operators, and continue to identify risk and focus areas for future SBInet deployments.

The installed P-28 system is being evaluated by an independent operational test group to determine the system's operational and suitability characteristics and its ability to meet CBP mission characteristics. This information, along with the lessons already learned, will be used to help guide the development of the next version of the SBInet COP.

Through the development of Project 28, CBP has learned several valuable technical, acquisition, and operational lessons, and has already incorporated these lessons learned into our planning for future SBInet deployments. For example:

- Commercial off-the-shelf components, even proven technologies, cannot be integrated "right out of the box" in the field without interface design, thorough testing, and integration in the laboratory. SBInet is fully testing and integrating the first operational configuration of the SBInet solution in a Systems Integration Lab before testing in the field.
- The interfaces between the sensors and the COP are as important as the technical characteristics of the sensors themselves. The follow-on sensors selected for SBInet will have common standard controls and interfaces.
- The Project 28 towers had significant limitations due to the use of satellite data links and the inherent problems with latency and bandwidth. The follow-on operational configuration will use microwave data links in lieu of satellite data links.
- The P-28 COP software was based on a commercial civil system used for the dispatch of public safety assets. This proved to be inadequate for the command and control of a sensor net and the distribution of a near real-time situational picture.

On December 7, 2007, CBP authorized Boeing, under the COP Task Order, to begin development of the new software, which we refer to as COP Version 0.5. Unlike the P-28 COP, COP Version 0.5 is based on a Government-owned and -tested real-time battle management command and control system. Our plan is to implement this software and fully lab-test it. It will then be integrated with new sensors and hardware that have been competitively sourced from multiple vendors to give us an open architecture for hardware. The integrated hardware and software will be tested in the laboratory, and then deployed in two locations in the Tucson Sector. Based on the results of those two deployments, and once we determine that the system is operationally effective and suitable, we will continue to field the SBInet solution to more locations that can most benefit from this new tool.

Once the P-28 effort was underway with much public interest in its development, it came to mean different things to different people. Unfortunately, those interpretations diverged from what P-28 was intended to be and what the Government contracted for, specifically a task order segment of work that would demonstrate the technical approach and achievability, feasibility of the proposed overall SBInet solution. This objective has been achieved.

We have the confidence that a version of this P-28 type of solution can be used where it makes sense in other selected border locations and, with other tools and techniques, can contribute to CBP's efforts in securing our borders. The pieces of that technology solution will also continue to evolve as planned through an iterative "spiral" development process. But it is important to recognize that a P-28-like system will not be deployed along every mile of the border. Different segments of the border require different approaches and a P-28-like system would neither be cost-effective, nor necessary everywhere. For many locations, existing tools will be more than sufficient given the current nature and level of the threat; in others, even more advanced technological tools will be needed.

Moving forward, CBP will complete construction of the 370 miles of pedestrian fencing and 300 miles of vehicle fencing that local Border Patrol Chiefs determined were necessary to enhance border security. Right now, we have almost 170 miles of primary pedestrian fencing and 135 miles of vehicle fence in place. Plans are to complete construction of the full 670 miles of fencing by the end of this calendar year.

As for future deployment of technology solutions, we've completed technology requirements assessments of the Yuma, Tucson, and El Paso Border Patrol Sectors and will look to fill those needs first as they are presently the highest threat areas. But expanding the integrated tower-based system is not all we are doing in the interim for technology between our ports of entry. For example, CBP currently has 4 Mobile Surveillance Systems (MSS) in operation and plans to deploy an additional 36 MSS this year to the southwest border to serve as primary detection platforms. While some MSS will eventually be replaced by a more cost-effective, integrated radar/camera tower under SBInet, the highly mobile MSS units can be used to "fill gaps" of surveillance coverage, temporarily replace a sensor tower down for maintenance, or rapidly deploy to a "hot" area needing extra coverage. CBP also currently has deployed along U.S. borders, over 7,500 Unattended Ground Sensors that provide continuous, low-cost, and covert awareness of cross-border activity. CBP is acquiring 2,500 additional UGS this fiscal year with 1,500 of those planned for deployment on the northern border and 1,000 on the southwest border.

Additional and existing fixed- and rotary-wing aircraft will continue to be used to provide surveillance, interdiction, and response capabilities to bolster our efforts to secure our air and land borders between the ports of entry. Also, CBP has recently taken delivery of our fourth Predator Unmanned Aerial System (UAS), which provides unique highly mobile detection and tracking capabilities and is contributing daily to apprehensions of illegal traffic.

While much of the initial focus of SBInet deployments has been on the southwest border, CBP has also taken steps to address vulnerabilities on the northern border. In early 2007, with congressional direction, CBP redirected a portion of the SBInet focus to the northern border, specifically in the Detroit, Michigan, area. We have initiated the Northern Border Demonstration project utilizing at least \$20 million from fiscal year 2007 funds to begin addressing northern border vulnerabilities using a different mix of technologies and testing the integration of air and maritime assets.

In fiscal year 2008, CBP will assign an additional 190 CBP officers, open its fifth northern border air branch, and deploy a UAS to the northern border. Over \$100 million has been appropriated in fiscal year 2008 for the construction of ports of entry on the northern border. By the end of fiscal year 2009, CBP intends to have 1,500 Border Patrol agents deployed on the northern border, a 30 percent increase over current staffing and a 500 percent increase over fiscal year 2001 staffing levels.

CBP continues to engage with other law enforcement entities and participate in partnerships with our Canadian counterparts through initiatives such as Project North Star, the Integrated Border Enforcement Teams (IBETS), joint operations with Joint Task Force—North (JTF-N), Border Enforcement Security Teams (BEST), and Border Security Evaluation Teams (BSET).

CBP's frontline officers and agents will continue to protect America from the terrorist threat while also accomplishing our traditional missions in immigration, customs, and agriculture. These initiatives discussed today are only a portion of CBP's efforts to secure our homeland, and we will continue to provide our men and women on the front lines with the necessary tools to help them gain effective control of our Nation's borders. I would like to thank Chairwoman Sanchez, Chairman Carney, Ranking Member Souder, and Ranking Member Rogers, and the Members of the committee, for the opportunity to present this testimony today, and for your continued support of DHS and CBP. We will be happy to respond to any questions that you may have at this time.

Ms. SANCHEZ. Thank you, Mr. Ahern.

I would now like to recognize Mr. Stana for 5 minutes.

**STATEMENT OF RICHARD M. STANA, DIRECTOR, HOMELAND SECURITY AND JUSTICE, GOVERNMENT ACCOUNTABILITY OFFICE**

Mr. STANA. Thank you very much, Chairwoman Sanchez, Mr. Souder, Chairman Carney, Mr. Rogers, and Members of the subcommittees.

Shortly after the launch of the secure border initiative, the committee asked us to review the SBI program and to provide periodic updates on the status of our efforts and our interim findings.

My testimony today provides our second formal update. As you know, SBI is a multi-year, multi-billion dollar program, aimed at stemming illegal entry into the country, mainly between ports of entry.

Since fiscal year 2007, Congress has appropriated about \$2.5 billion for SBI and DHS has requested an additional \$775 million for next fiscal year.

I would like to take the next few minutes to highlight our observations in several areas.

Technology deployment. After working with Boeing to resolve system problems, last Friday, DHS announced its final acceptance of Project 28, a \$20.6 million project to secure 28 miles along the southwest border.

SBI officials told us that Project 28 met contract requirements for testing a concept of operations and creating a capability. But Project 28 did not fully meet their expectations and most of its equipment and technology will be replaced.

According to Border Patrol agents, while Project 28 is not an optimal system to support their operations, it has provided them with better cameras and radars than they had previously.

SBI officials are now gathering lessons learned to inform future border security technology deployment. For example, on Project 28, Boeing did not perform tests to ensure the radars, cameras and other components were integrated correctly before being deployed to the field and, as a result, incompatibilities between individual components were not discovered in time to be corrected before the planned deployment deadline.

In the future, Boeing plans to test component integration beforehand and deployment will not occur until the technology meets specific performance specifications.

As a second example, the requirements for how the Project 28 system was to operate were designed and developed by Boeing, with minimal input from the intended operators of the system, including border patrol agents.

SBI officials have recognized the need to involve intended operators when defining requirements for technology projects.

Going forward, the schedule for future technology deployments to the southwest border has been extended. SBI officials now estimate that the first planned deployments of technology, including those to replace most Project 28 capabilities, will occur in two areas of the Tucson sector by the end of this calendar year.

The remaining deployments of the first phase of technology development planned for the Border Patrol's Tucson, Yuma and El Paso sectors are expected to be completed by the end of calendar year 2011.

Fencing and vehicle barriers. Deployment of tactical infrastructure projects along the southwest border is on schedule, as 168 miles of pedestrian fence and 135 miles of vehicle fence have been constructed so far.

But meeting SBI's goal to have 370 miles of pedestrian fence and 300 miles of vehicle fence in place by the end of this calendar year will be challenging, because of various factors, including difficulties in acquiring rights to borderlands.

Furthermore, SBI officials are unable to estimate the total cost of pedestrian and vehicle fencing, because of various factors that are not yet known, such as the type of terrain where the fencing is to be constructed, the materials to be used, and the cost to acquire the land.

As SBI moves forward with tactical infrastructure construction, it is making modifications based on lessons learned from previous fencing efforts.

For example, for future fencing projects, it plans to buy construction items, such as steel, in bulk, to U.S.-approved fence designs, and to contract out for the maintenance and repair of the tactical infrastructure.

Project management. The SBI program office established a staffing goal of 470 employees for fiscal year 2008 and as of February 1, it reported having 142 Government staff and 163 contractor support staff, for a total of 305 employees.

SBI officials told us that they believe they will be able to meet staffing goals of 470 staff by the end of this fiscal year.

In December 2007, the SBI program office published its first version of its strategic human capital plan and is now in the early implementation phase.

The plan outlines seven main goals for the office and activities to accomplish those goals, and these align with Federal Government best practices for human capital plans.

In closing, Project 28 resulted in a product that did not fully meet the user needs and the project's design will not be used as the basis for future SBI technology development. Lessons learned are being identified and their application to future technology projects is important to help ensure that they deliver an operational capability that better meets user needs.

The experience with Project 28 underscores Congress' need to stay closely attuned to SBI implementation activities, to make sure that the performance, schedule and cost estimates are achieved and that the Nation's border security needs are fully addressed.

I would be happy to answer questions that Members of the subcommittees may have.

[The statement of Mr. Stana follows:]

PREPARED STATEMENT OF RICHARD M. STANA

FEBRUARY 27, 2008

GAO HIGHLIGHTS

Highlights of GAO-08-508T, a testimony before the Subcommittee on Management, Investigations, and Oversight, and Border, Maritime and Global Counterterrorism, Committee on Homeland Security, House of Representatives.

*Why GAO Did This Study*

In November 2005, the Department of Homeland Security (DHS) established the Secure Border Initiative (SBI), a multi-year, multibillion-dollar program to secure U.S. borders. One element of SBI is the U.S. Customs and Border Protection's (CBP) SBI program, which is responsible for developing a comprehensive border protection system through a mix of security infrastructure (e.g., fencing) and surveillance and communication technologies (e.g., radars, sensors, cameras, and satellite phones).

GAO was asked to monitor DHS progress in implementing CBP's SBI program. This testimony provides GAO's observations on: (1) Technology implementation; (2) the extent to which Border Patrol agents have been trained and are using SBI technology; (3) infrastructure implementation; and (4) how the CBP SBI program office has defined its human capital goals and the progress it has made to achieve these goals. GAO's observations are based on analysis of DHS documentation, such as program schedules, contracts, status, and reports. GAO also conducted interviews with DHS officials and contractors, and visits to sites in the southwest border where SBI deployment is under way. GAO performed the work from November 2007 through February 2008. DHS generally agreed with GAO's findings.

SECURE BORDER INITIATIVE: OBSERVATIONS ON THE IMPORTANCE OF APPLYING LESSONS LEARNED TO FUTURE PROJECTS

*What GAO Found*

On February 22, 2008, DHS announced final acceptance of Project 28, a \$20.6 million project to secure 28 miles along the southwest border, and is now gathering lessons learned to use in future technology development. The scope of the project, as described in the task order DHS issued to Boeing—the prime contractor DHS selected to acquire, deploy, and sustain systems of technology across the U.S. borders—was to provide a system with the capabilities required to control 28 miles of border in Arizona. CBP officials responsible for the program said that although Project 28 will not be replicated, they have learned lessons from their experience that they plan to integrate into future technology development. CBP has extended its timeline and approach for future projects and does not expect all of the first phase of its next technology project to be completed before the end of calendar year 2011.

Border Patrol agents began using Project 28 technologies in December 2007, and as of January 2008, 312 agents in the area had received updated training. According to Border Patrol agents, while Project 28 is not an optimal system to support their operations, it has provided greater technological capabilities than did their previous equipment. Not all of the Border Patrol agents in the Tucson sector have been trained on Project 28 because the system will be replaced with newer technologies.

Deployment of fencing along the southwest border is on schedule, but meeting CBP's goal to have 370 miles of pedestrian fence and 300 miles of vehicle fence in place by December 31, 2008, will be challenging and total costs are not yet known. As of February 21, 2008, the SBI program office reported that it had constructed 168 miles of pedestrian fence and 135 miles of vehicle fence. CBP officials reported that meeting deadlines has been difficult because of various factors including difficulties in acquiring rights to border lands. Moreover, CBP officials are unable to estimate the total cost of pedestrian and vehicle fencing because they do not yet know the type of terrain where the fencing is to be constructed, the materials to

be used, and the cost to acquire the land. As CBP moves forward with construction, it is making modifications based on lessons learned from previous efforts. For example, CBP plans to buy construction items, such as steel, in bulk; use approved fence designs; and contract out the maintenance and repair.

CBP's SBI program office established a staffing goal of 470 employees for fiscal year 2008, made progress toward meeting this goal and published its human capital plan in December 2007; however, it is in the early stages of implementing the plan. As of February 1, 2008, the office reported having a total of 305 employees. SBI program officials said that they believe they will be able to meet their staffing goal of 470 staff by the end of the fiscal year. In December 2007, the SBI office published the first version of its Strategic Human Capital Management Plan and is now in the early implementation phase. The plan outlines seven main goals for the office and activities to accomplish those goals, which align with Federal Government best practices.

Chairwoman Sanchez, Mr. Souder, Chairman Carney, Mr. Rogers and Members of the subcommittees: I am pleased to be here today to discuss observations on selected aspects of the Secure Border Initiative (SBI) program implementation.

Securing the Nation's borders from illegal entry of aliens and contraband, including terrorists and weapons of mass destruction, continues to be a major concern. Much of the United States' 6,000 miles of international borders with Canada and Mexico remains vulnerable to illegal entry. Although the Department of Homeland Security (DHS) apprehends hundreds of thousands of people entering the country illegally each year, several hundreds of thousands of individuals also enter the United States illegally and undetected. In November 2005, DHS announced the launch of SBI, a multi-year, multibillion-dollar program aimed at securing U.S. borders and reducing illegal immigration. Elements of SBI will be carried out by several organizations within DHS. One component is the U.S. Customs and Border Protection's (CBP) SBI program office<sup>1</sup> which is responsible for developing a comprehensive border protection system using people, technology, known as SBInet, and tactical infrastructure—fencing, roads, and lighting.

You requested that we monitor CBP's SBI program and provide periodic updates on the status of the program. My testimony today is the second in a series of interim reports<sup>2</sup> on SBI implementation and focuses on the following issues:

- SBInet technology implementation;
- the extent to which Border Patrol agents have been trained and are using SBInet technology;
- SBI tactical infrastructure implementation; and
- how the SBI program office has defined its human capital goals and the progress it has made to achieve these goals.

To address these issues, we analyzed DHS documents, including program schedules and status reports, and work force data. We determined that the data were sufficiently reliable for purposes of this testimony. We interviewed DHS and CBP headquarters and field officials, including representatives of the SBI program office, Border Patrol, CBP Air and Marine, CBP Office of Field Operations, and the DHS Science and Technology Directorate. We also visited the Tucson Border Patrol sector<sup>3</sup>—a site where SBInet technology and fencing deployment was under way at the time of our review. We performed our work from November 2007 through February 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the work to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our objectives.

We also have work under way to review other components of the SBI program. Specifically, we are conducting work for this committee to assess the development and deployment of SBInet's command, control, and communications systems and surveillance and detection systems and expect to issue a report later this year. In addition, we are reviewing SBInet as part of a broader look at DHS's use of performance-based services acquisition, an acquisition method structured around the results to be achieved instead of the manner by which the service should be per-

<sup>1</sup>The CBP SBI Program Executive Office, referred to in this testimony as the SBI program office, is responsible 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.

<sup>2</sup>See GAO, *Secure Border Initiative: Observations on Selected Aspects of SBInet Program Implementation*, GAO-08-131T (Washington, DC: October 2007) for the first report.

<sup>3</sup>The U.S. Border Patrol has 20 sectors responsible for detecting, interdicting, and apprehending those who attempt illegal entry or smuggle people—including terrorists or contraband, including weapons of mass destruction—across U.S. borders between official ports of entry.

formed. We expect to issue a report on this effort in spring 2008. Finally, as mandated in the Consolidated Appropriations Act, 2008,<sup>4</sup> we are examining DHS's fiscal year 2008 expenditure plan for the SBI program and also expect to report to Congress in spring 2008.

#### SUMMARY

On February 22, 2008, DHS announced its final acceptance of Project 28, a \$20.6 million project to secure 28 miles along the southwest border, and is now gathering lessons learned to inform future border security technology development. The scope of the project, as described in the task order between DHS and Boeing—the prime contractor DHS selected to acquire, deploy, and sustain the SBInet system across the U.S. borders—was to provide a system with the detection, identification, and classification capabilities required to control the border, at a minimum, along 28 miles in the Tucson sector. After working with Boeing to resolve problems identified with Project 28, DHS formally accepted the system, noting that it met contract requirements. Officials from the SBInet program office said that although Project 28 did not fully meet their expectations, they are continuing to develop SBInet with a revised approach and have identified areas for improvement based on their experience with Project 28. For example, both SBInet and Border Patrol officials reported that Project 28 was initially designed and developed by Boeing with limited input from the Border Patrol, whose agents are now operating Project 28 in the Tucson sector; however, they said that future SBInet development will include increased input from the intended operators. The schedule for future deployments of technology to the southwest border that are planned to replace most Project 28 capabilities has been extended and officials estimated that the first planned deployment of technology will occur in other areas of the Tucson sector by the end of calendar year 2008. The remaining deployments of the first phase of technology development planned for the Border Patrol's Tucson, Yuma, and El Paso sectors are expected to be completed by the end of calendar year 2011.

Border Patrol agents in the Project 28 location have been using the system as they conduct their border security activities since December 2007, and as of January 2008, 312 agents in the Project 28 location had received updated training. According to Border Patrol agents, while Project 28 is not an optimal system to support their operations, it has provided them with greater technological capabilities—such as improved cameras and radars—than the legacy equipment that preceded Project 28. Not all of the Border Patrol agents in the Project 28 location have been trained to use the system's equipment and capabilities, as it is expected to be replaced with updated technologies developed for SBInet.

Deployment of tactical infrastructure projects along the southwest border is on schedule, but meeting the SBI program office's goal to have 370 miles of pedestrian fence and 300 miles of vehicle fence in place by December 31, 2008, will be challenging and the total cost is not yet known. As of February 21, 2008, the SBI program office reported that it had constructed 168 miles of pedestrian fence and 135 miles of vehicle fence. Although the deployment is on schedule, SBI program office officials reported that keeping on schedule will be challenging because of various factors, including difficulties in acquiring rights to border lands. Furthermore, SBI program office officials are unable to estimate the total cost of pedestrian and vehicle fencing because of various factors that are not yet known, such as the type of terrain where the fencing is to be constructed, the materials to be used, the cost to acquire the land. Furthermore, as the SBI program office moves forward with tactical infrastructure construction, it is making modifications based on lessons learned from previous fencing efforts. For example, for future fencing projects, the SBI program office plans to buy construction items, such as steel, in bulk; use approved fence designs; and contract out the maintenance and repair of the tactical infrastructure.

The SBI program office established a staffing goal of 470 employees for fiscal year 2008, made progress toward meeting this goal, and published its human capital plan in December 2007; however, the SBI program office is in the early stages of implementing this plan. As of February 1, 2008, SBI program office reported having 142 government staff and 163 contractor support staff for a total of 305 employees. SBI program office officials told us that they believe they will be able to meet their staffing goal of 470 staff by the end of September 2008. In December 2007, the SBI program office published the first version of its Strategic Human Capital Management Plan and is now in its early implementation phase. The plan outlines seven main

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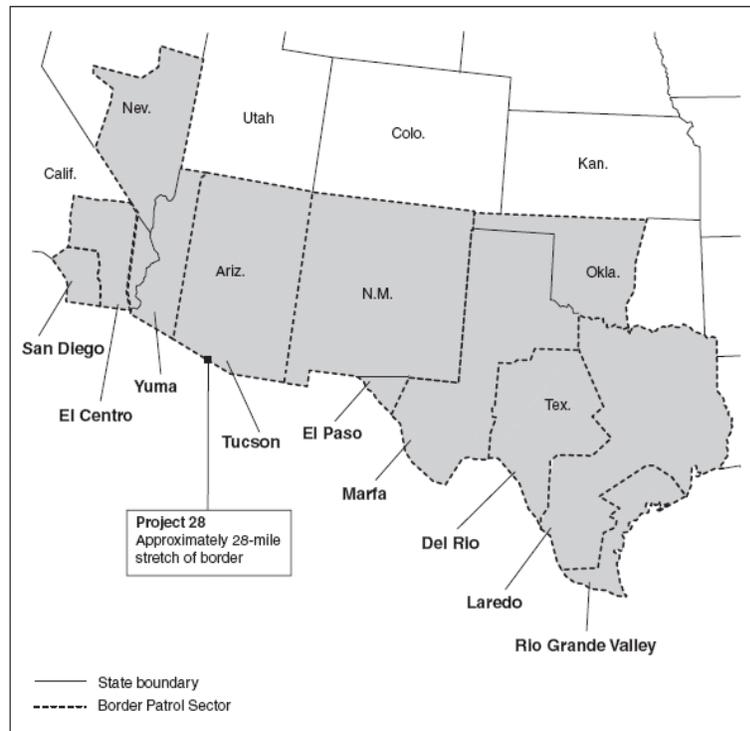
<sup>4</sup>Pub. L. No. 110–161, 121 Stat. 1844, 2047–2049.

goals for the office and activities to accomplish those goals, which align with Federal Government best practices.

#### BACKGROUND

CBP's SBI program is responsible for identifying and deploying an appropriate mix of technology, known as SBInet (e.g., sensors, cameras, radars, communications systems, and mounted laptop computers for agent vehicles); tactical infrastructure (e.g., pedestrian and vehicle fencing, roads, and lighting); and personnel (e.g., program staff and Border Patrol agents) that are intended to enable CBP agents and officers to gain effective control<sup>5</sup> of U.S. borders. SBInet technology is also intended to include the development and deployment of a common operating picture (COP) that provides uniform data through a command center environment to Border Patrol agents in the field and all DHS agencies and to be interoperable with stakeholders external to DHS, such as local law enforcement. The current focus of SBI is on the southwest border areas between the ports of entry that CBP has designated as having the highest need for enhanced border security because of serious vulnerabilities. The SBI program office and its offices of tactical infrastructure and SBInet are responsible for overall program implementation and oversight. Figure 1 is a map of the southwest border and the Border Patrol sectors.

**Figure 1: Map of Border Patrol Sectors along the Southwest Border**



Source: GAO analysis of CBP data.

In September 2006, CBP awarded a prime contract to the Boeing Company for 3 years, with three additional 1-year options. As the prime contractor, Boeing is responsible for acquiring, deploying, and sustaining selected SBI technology and tac-

<sup>5</sup> DHS defines effective control of U.S. borders as the ability to consistently: (1) Detect illegal entries into the United States; (2) identify and classify these entries to determine the level of threat involved; (3) efficiently and effectively respond to these entries; and (4) bring events to a satisfactory law enforcement resolution.

tical infrastructure projects. In this way, Boeing has extensive involvement in the SBI program requirements development, design, production, integration, testing, and maintenance and support of SBI projects. Moreover, Boeing is responsible for selecting and managing a team of subcontractors that provide individual components for Boeing to integrate into the SBInet system. The SBInet contract is largely performance-based—that is, CBP has set requirements for the project and Boeing and CBP coordinate and collaborate to develop solutions to meet these requirements—and designed to maximize the use of commercial off-the-shelf technology.<sup>6</sup> CBP's SBI program office oversees the Boeing-led SBI contractor team.

CBP is executing part of SBI's activities through a series of task orders to Boeing for individual projects. As of February 15, 2008, CBP had awarded eight task orders to Boeing. Table 1 is a summary of the task orders awarded to Boeing for SBI projects.

TABLE 1.—TASK ORDERS AWARDED TO BOEING FOR SBI PROJECTS AS OF FEBRUARY 15, 2008

[Dollars in millions]

Task Order Description	Date Awarded	Task Order Obligation
<i>Program Management.</i> —Related to mission engineering, facilities and infrastructure, systems engineering, test and evaluation, and program management services to develop and deploy the SBInet system.	09/21/2006 .....	\$135.9
<i>Project 28.</i> —Boeing's pilot project and initial implementation of SBInet technology for 28 miles of the border in the Tucson sector.	10/20/2006 .....	\$20.6
<i>Fence Lab.</i> —Related to the testing of potential pedestrian and vehicle fence and barrier solutions.	02/16/2007 .....	\$0.7
<i>Barry M. Goldwater Range.</i> —Related to the construction of 32 miles of fencing in the Yuma sector; also known as Project 37.	01/12/2007 .....	\$122.2
<i>Design.</i> —Related to the SBInet deployment design solution including design and locations for the SBInet technology solution in the Yuma, Tucson, and El Paso sectors.	08/01/2007 .....	\$69.0
<i>Project 28 Contractor Maintenance and Logistics Support.</i> —Provides Project 28 with the required maintenance and logistics support to operate the system.	12/07/2007 .....	\$8.0
<i>Command, Control, Communications and Intelligence (C3I) and Common Operating Picture.</i> —Related to the development of the next version of the SBInet operating software to design, develop, and demonstrate a functional SBInet C3I/COP system.	12/07/2007 .....	\$64.5
<i>Supply and Supply Chain Management.</i> —The development and implementation of a supply and supply chain management system solution to execute tactical infrastructure projects.	01/07/2008 .....	\$733.3

Source: GAO analysis of CBP data.

In addition to deploying technology across the southwest border, the SBI program office plans 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 is physical barriers meant to stop the entry of vehicles. The SBI program office, through the tactical infrastructure program, is using the U.S. Army Corps of Engineers (USACE) to contract for fencing and supporting infrastructure (such as lights and roads), complete required

<sup>6</sup> Commercial off-the-shelf is a term for products that are available for sale, lease, or license to the general public.

environmental assessments, and acquire necessary real estate.<sup>7</sup> In addition, in January 2008, CBP issued Boeing a supply and supply chain management task order for the purchase of construction items, such as steel.

In December 2006, DHS estimated that the total cost for completing the deployment along the southwest border will be \$7.6 billion from fiscal years 2007 through 2011. DHS has not yet reported the estimated life cycle cost for the SBI program, which is the total cost to the government for a program over its full life, consisting of research and development, operations, maintenance, and disposal costs.<sup>8</sup> Since fiscal year 2007, Congress has appropriated about \$2.5 billion for SBI. DHS has requested an additional \$775 million for SBI for fiscal year 2009.

FIRST SBINET TECHNOLOGY DEPLOYMENT IS COMPLETE, BUT LESSONS HAVE BEEN LEARNED

DHS announced its final acceptance of Project 28 from Boeing on February 22, 2008, completing its first efforts at implementing SBInet, and is now gathering lessons learned from the project that it plans to use for future technology development. The scope of the project, as described in the task order between Boeing and DHS, was to provide a system with the detection, identification, and classification capabilities required to control the border, at a minimum, along 28 miles within the Tucson sector. To do so, Boeing was to provide, among other things, mobile towers equipped with radar, cameras, and other features, a COP that communicates comprehensive situational awareness, and secure-mounted laptop computers retrofitted in vehicles to provide agents in the field with COP information. As we previously reported,<sup>9</sup> Boeing delivered and deployed the individual technology components of Project 28—such as the towers, cameras and radars—on schedule.<sup>10</sup> See figures 2 and 3 below for photographs of SBInet technology along the southwest border.

Figure 2: Project 28 Mobile Sensor Tower Deployed in Tucson Sector



Source: GAO.

<sup>7</sup>The SBI program office contracted with Boeing to construct 32 miles of fencing in the Barry M. Goldwater Range. Deployment of this fencing has been completed, and the SBI program office plans to use USACE to contract for all remaining pedestrian fencing and vehicle barriers to be deployed through December 2008.

<sup>8</sup>See GAO, *Cost Assessment Guide: Best Practices for Estimating and Managing Program Costs—Exposure Draft*, GAO-07-1134SP (Washington, DC, July 2007).

<sup>9</sup>GAO-08-131T.

<sup>10</sup>Project 28 components include nine mobile radar/sensor towers; four unattended ground sensors, 70 small handheld satellite phones that allow for agents to communicate throughout the Tucson sector, and 50 CBP agent vehicles with secure-mounted laptop computers and communications capabilities.

**Figure 3: At Left, Mounted Laptop Installed in Border Patrol Vehicle; at Right, Project 28 Command and Control Center**



Source: GAO.

However, Boeing's inability to integrate these components with the COP software delayed the implementation of Project 28 over 5 months after the planned June 13, 2007, milestone when Border Patrol agents were to begin using Project 28 technology to support their activities. Specifically, SBI program office officials said that the software that Boeing selected for the COP was intended to be used as a law enforcement dispatch system and was not designed to process and distribute the type of information being collected by the cameras, radars, and sensors. However, SBI officials told us that Boeing selected the system based on initial conversations with Border Patrol officials, but when deployed to the field, Boeing found limitations with the system. As we reported in October 2007, among other technical problems reported were that it was taking too long for radar information to display in command centers and newly deployed radars were being activated by rain or other environmental factors, making the system unusable.<sup>11</sup> According to officials from the SBI program office, Boeing worked to correct these problems from July through November 2007. As one example of improvement, Border Patrol officials reported that Boeing added an auto focus mechanism on the cameras located on the nine towers.<sup>12</sup> However, SBInet and Border Patrol identified issues that remain unresolved. For example, the Border Patrol reported that as of February 2008 problems remained with the resolution of the camera image at distances over 5 kilometers, while expectations were that the cameras would work at about twice that distance.

From June 26 through November 19, 2007, Boeing submitted three corrective action plans, documents that defined Boeing's technical approach for correcting the problems associated with Project 28 and the steps that needed to occur for DHS to conditionally accept the system. As we reported in October, DHS officially notified Boeing in August 2007 that it would not accept Project 28 until certain problems were corrected. DHS conditionally accepted Project 28 on December 7, 2007, but included a requirement for Boeing to analyze the quality of the project's video signals, radar data, and the timing of all components by January 11, 2008. Upon conditional acceptance, the Government began operating Project 28, and SBI program office and Border Patrol officials told us that plans were under way to conduct additional testing of the system capabilities—including operational testing, which is used to determine that the system performs in the environment in which it is to operate. This testing was not scheduled to take place until after final acceptance of Project 28. According to SBI program office and Border Patrol officials, the results of this testing will not be used to make changes to Project 28, but will instead be used to guide future SBInet development. In addition, DHS announced its final acceptance of Project 28 on February 22, 2008 noting that Boeing met its contractual requirements. However, according to SBI program officials, the outcomes of future SBInet development will define the equipment that will replace most of Project 28 system components. Both SBI program office and Border Patrol officials stated that al-

<sup>11</sup> GAO-08-131T.

<sup>12</sup> As part of Project 28, Boeing erected nine towers equipped with radar, cameras, communications systems, and unattended ground sensors linked to a command and control center.

though Project 28 did not fully meet their expectations, they are gathering lessons learned and are ready to move forward with developing SBI net technologies that will better meet their needs. Table 2 summarizes key events for Project 28.

TABLE 2.—KEY EVENTS FOR PROJECT 28

Event	Date
DHS awarded the Project 28 task order to Boeing .....	October 2006.
Boeing deployed the individual technology components of Project 28 on time, but missed its initial deadline to deliver the fully integrated system to the Government.	June 2007.
Boeing submitted first corrective action plan .....	June 2007.
CBP officials officially notified Boeing that CBP would not accept Project 28 until certain problems were corrected.	August 2007.
Boeing submitted second corrective action plan .....	September 2007.
Boeing submitted third corrective action plan .....	November 2007.
DHS conditionally accepted the Project 28 system delivered by Boeing.	December 2007.
DHS announced its final acceptance of Project 28 .....	February 2008.

Source: GAO presentation of SBI net data.

The SBI program office reported that it is moving forward with SBI net development beyond Project 28; however, it has revised its approach and timeline for doing so. As noted earlier in this statement, in addition to the \$20.6 million task order awarded for Project 28, Boeing has also received other task orders as part of its overall contract with CBP. For example, in August 2007 DHS awarded a \$69 million task order to Boeing to design the technical, engineering, and management services it would perform to plan and deploy SBI net system components within the Border Patrol's Tucson, Yuma, and El Paso sectors. In addition, the SBI program office reported that on December 7, 2007, DHS awarded a 14-month task order worth approximately \$64.5 million to Boeing to design, develop, and test, among other things, an upgraded COP software system for CBP command centers and agent vehicles, known as COP version 0.5. According to the SBI program office, planned SBI net development, such as the work being conducted by Boeing under these task orders, will eventually replace and improve upon Project 28. These officials stated that in light of the difficulties that DHS encountered during Boeing's deployment of Project 28, the Secretary requested and CBP has proposed a revised strategy that is more deliberative. As two SBI net program managers put it, they want to develop SBI net "right, not fast". We reported in October 2007 that SBI program office officials expected to complete all of the first phase of technology projects by the end of calendar year 2008.<sup>13</sup> However, in February 2008, the SBI program office estimated that the first planned deployment of technology—including components linked to the updated COP—will occur in two geographic areas within the Tucson sector by the end of calendar year 2008, with the remainder of the deployments to the Tucson, Yuma, and El Paso sectors completed by the end of calendar year 2011. Officials from the SBI program office said that the Project 28 location is one of the two areas where the planned first deployments will occur. An official from the SBI program office noted that this schedule reflects DHS's revised approach to developing SBI net technology and that meeting this timeline depends, in part, on the availability of funding. At this time, the SBI program office is still in the process of defining life cycle costs for SBI net development.

SBI program office and Border Patrol officials told us they have learned lessons during the development of Project 28 that will influence future SBI net development, including the technology that is planned to be deployed along the southwest border. For example, testing to ensure the components—such as radar and cameras—were integrated correctly before being deployed to the field at the Tucson sector did not occur given the constraints of the original 8-month timeline of the firm-fixed-price task order with Boeing, according to officials from the SBI program office.<sup>14</sup> As a

<sup>13</sup> GAO-08-131T.

<sup>14</sup> A firm-fixed-price contract provides for a price that is not subject to any adjustment on the basis of the contractor's cost experience in performing the contract. This contract type places maximum risk upon the contractor and full responsibility for all costs and resulting profit or loss. The period of performance for the original Project 28 contract spanned 8 months, from October 13, 2006 through June 12, 2007.

result, incompatibilities between individual components were not discovered in time to be corrected by the planned Project 28 deployment deadline. To address this issue moving forward with SBIInet development, Boeing has established a network of laboratories to test how well the integration of the system works, and according to the SBI program office, deployment will not occur until the technology meets specific performance specifications.

Another lesson learned involved how the Project 28 system requirements were developed by Boeing. SBI program office and Border Patrol officials told us that the requirements for how the Project 28 system was to operate were designed and developed by Boeing with minimal input from the intended operators of the system, including Border Patrol agents. Instead, Boeing based the requirements for how Project 28 was to be designed and developed on information in the contract task order. The lack of user involvement resulted in a system that does not fully address or satisfy user needs. In February 2008, SBI program officials reported that Project 28 was designed to be a demonstration project, rather than a fully operating system, and there was not enough time built into the contract to obtain feedback from all of the intended users of the system during its design and development. While Border Patrol agents in the Tucson sector agreed with Boeing's conceptual design of Project 28, they said the final system might have been more useful if they and others had been given an opportunity to provide feedback throughout the process. For example, Border Patrol agents told us they would have found the laptops mounted into agent vehicles safer and easier to use if they were larger and manipulated by a touch screen rather than with a pencil-shaped stylus, as using a stylus to manipulate the screen while driving is impractical. In addition, the laptops were not mounted securely enough to prevent significant rattling when driving on rough terrain, making the laptops difficult to use and prone to needing repair.

While user feedback was limited for Project 28, SBI program office officials have recognized the need to involve the intended operators when defining requirements and have efforts underway to do so for future SBIInet development. For example, officials from the Border Patrol, CBP Air and Marine, and the CBP Office of Field Operations reported that representatives from their offices were involved in the development of requirements for SBIInet technology as early as October 2006 and on an ongoing basis since then. Specifically, SBI program officials stated that Border Patrol users participated in requirements workshops with Boeing held in October 2006 at CBP headquarters and then at various field locations from December 2006 through June 2007, from which the SBIInet operational requirements were derived (a process separate from Project 28). According to the SBI program office, users from other CBP offices such as the Office of Field Operations and Air and Marine have been involved in meetings as the SBI program office updates these requirements in preparation for the next development efforts. Additionally, SBI program officials stated that Boeing held meetings in January and February 2008 specifically designed to integrate user input to the development of the COP version 0.5.

LOCAL BORDER PATROL USERS REPORT THAT PROJECT 28 IS NOT AN OPTIMAL SYSTEM,  
BUT THOSE TRAINED ON THE SYSTEM WILL OPERATE IT UNTIL IT IS REPLACED

Since DHS conditionally accepted the task order from Boeing on December 7, 2007, those Border Patrol agents in the Tucson sector that have received updated training on Project 28 have been using the technologies as they conduct their border security activities. Border Patrol agents reported that they would have liked to have been involved sooner with the design and development of Project 28, since they are the ones who operate the system. Border Patrol officials stated that it is not an optimal system. Border Patrol agents from the Tucson sector provided examples of Project 28 capabilities that do not adequately support Border Patrol operations because of their design. As noted earlier in this statement, Border Patrol agents have had difficulties using the laptops mounted into agent vehicles to provide them with COP information. However, according to Border Patrol agents, Project 28 has provided them with improved capabilities over their previous equipment, which included items such as cameras and unattended ground sensors that were only linked to nearby Border Patrol units, not into a centralized command and control center. In addition, Border Patrol officials we spoke with at the Tucson sector noted that Project 28 has helped its agents become more familiar with the types of technological capabilities they are integrating into their operations now and in the future. As we reported in October 2007, the Border Patrol's Tucson sector was developing a plan to integrate SBIInet into its operating procedures.<sup>15</sup> However, in February

<sup>15</sup> GAO-08-131T.

2008 a senior official from the Border Patrol’s Tucson sector told us that the plan is still in draft form because of the delays in the deployment of Project 28.

In October 2007 we reported that the 22 trainers and 333 operators who were initially trained on the Project 28 system were to be retrained with revised curriculum because of deployment delays and changes to the COP software.<sup>16</sup> As of January 2008, 312 Border Patrol operators and 18 trainers had been retrained on Project 28.<sup>17</sup> According to Border Patrol agents we spoke with at the Tucson sector, a group of Border Patrol agents provided significant input into the revisions that the Boeing subcontractor made to the Project 28 training curriculum. Officials from the SBI net Training Division and Border Patrol agents reported that originally there were plans to train 728 Border Patrol operators located in the Project 28 area by January 2008. However, now no additional training will be conducted on Project 28, as they are expecting that future SBI net development will eventually replace Project 28. For example, according to the SBI net Training Division, the COP version 0.5 currently under development by Boeing will replace the Project 28 COP, and this will require new training.

TACTICAL INFRASTRUCTURE DEPLOYMENT ON SCHEDULE, BUT FURTHER DEPLOYMENT WILL BE CHALLENGING AND TOTAL COSTS ARE NOT YET KNOWN

Deployment of tactical infrastructure projects along the southwest border is on schedule, but meeting the SBI program office’s goal to have 370 miles of pedestrian fence and 300 miles of vehicle fencing in place by December 31, 2008, will be challenging and total costs are not yet known.<sup>18</sup> As of February 21, 2008, the SBI program office reported that it had constructed 168 miles of pedestrian fence and 135 miles of vehicle fence (see table 3).

TABLE 3.—TACTICAL INFRASTRUCTURE DEPLOYMENT PROGRESS AS OF FEBRUARY 21, 2008

Infrastructure Type	Miles in Place Before SBI	Miles Deployed Through SBI	Total Miles in Place as of 2/21/08	Target for 12/31/08	Miles Remaining to Meet 12/31/08 Target
Pedestrian fencing .....	78	90	168	370	202
Vehicle fencing .....	57	78	135	300	165

Source: GAO analysis of SBI data.

According to SBI program office officials, the deployment of tactical infrastructure projects is on schedule, but these officials reported that keeping on schedule will be challenging because of various factors, including difficulties in acquiring rights to border lands.<sup>19</sup> Unlike prior fencing projects that were primarily located on Federal land, approximately 54 percent of planned projects are scheduled to be constructed on private property. We previously reported that as of July 2007, CBP anticipated community resistance to deployment for 130 of its 370 miles of pedestrian fencing miles. CBP officials told us that, of 480 owners of private property along the relevant segments of the border, all but 148 gave CBP access to survey their land prior to December 2007. In December, CBP, working in conjunction with the Department of Justice (DOJ), sent letters to most of the 148 remaining land owners reiterating the request for access and notifying them of the Government’s intent to pursue court-ordered access if necessary. As of February 16, 2008, approximately 50 percent of the land owners who received these letters had given CBP access to their land to do surveys. In some cases where access has not been granted, DOJ has begun the legal process known as “eminent domain” to obtain court-ordered access to the

<sup>16</sup>GAO-08-131T.

<sup>17</sup>According to the SBI net Training Division, the reason some staff received the initial Project 28 training but did not receive the updated training was because the staff were either transferred or because of changed job responsibilities.

<sup>18</sup>The Consolidated Appropriations Act of 2008, requires DHS to complete construction by December 31, 2008 of 370 miles (or other mileage determined by the Secretary) of reinforced fencing along the southwest border wherever the Secretary determines it would be most practical and effective in deterring smugglers and aliens attempting illegal entry.

<sup>19</sup>In October 2007, we reported that according to CBP officials, other factors that continue to pose a risk to meeting deployment targets include conducting outreach necessary to address border community resistance and devoting time to identify and complete steps necessary to comply with environmental regulations. See GAO-08-131T.

property.<sup>20</sup> SBI program office officials state that they are working to acquire rights to border lands; however, until the land access issues are resolved, this factor will continue to pose a risk to meeting the deployment targets.

SBI program office officials are unable to estimate the total cost of pedestrian and vehicle fencing because they do not yet know the type of terrain where the fencing is to be constructed, the materials to be used, or the cost to acquire the land. In addition, in October 2007, we reported that to minimize one of the many factors that add to the cost, CBP has previously drawn upon its Border Patrol agents and Department of Defense military personnel to assist in such efforts.<sup>21</sup> However, SBI program office officials reported that they plan to use more costly commercial labor for future infrastructure projects to meet their deadlines. In February 2008, SBI program office officials told us that they estimate construction costs for pedestrian fencing will be about \$4 million per mile and vehicle fencing costs will be about \$2 million per mile. However, total costs will be higher because this estimate does not include other expenses, such as contract management, contract incentives to meet an expedited schedule, higher-than-expected property acquisition costs, and unforeseen costs associated with working in remote areas.

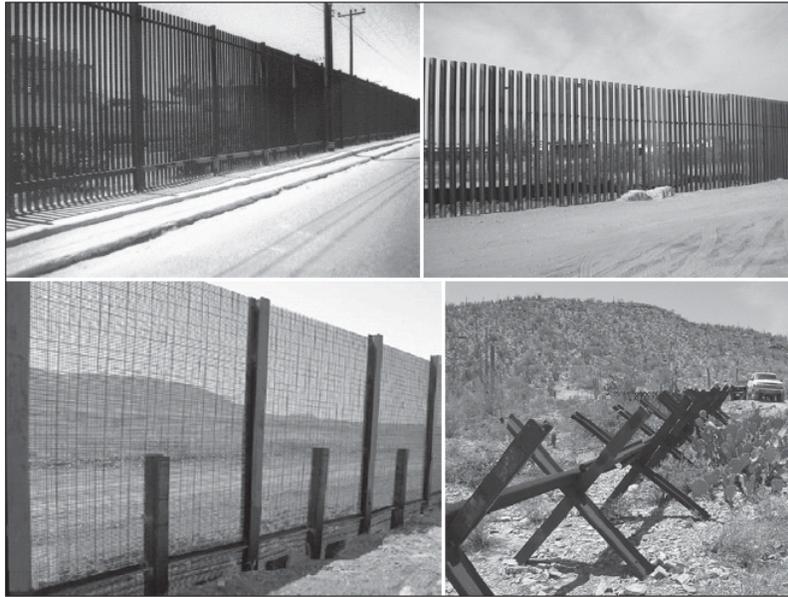
As the SBI program office moves forward with tactical infrastructure construction, it is making modifications based on lessons learned from previous fencing efforts. For example, for future fencing projects, the SBI program office plans to buy construction items, such as steel, in bulk; use approved fence designs; and contract out the maintenance and repair of the tactical infrastructure. SBI program office officials estimate that buying essential items in bulk will make fencing deployment more economical and will reduce the likelihood of shortages and delays of critical equipment. SBI program office officials also believe that using pre-approved and tested fence designs (see fig. 4) will expedite preconstruction planning and will allow for more efficient maintenance and repair. In addition, the SBI program office plans to award a contract to maintain and service all initial, current, and future tactical infrastructure deployed through SBI because it believes that it will be more efficient than relying on Border Patrol agents and military personnel who also have other duties.

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<sup>20</sup> Eminent domain refers to the power of a Government entity to take privately owned property, especially land, and convert it to public use, subject to reasonable compensation of the owner.

<sup>21</sup> GAO-08-131T.

**Figure 4: Examples of Approved Pedestrian and Vehicle Fencing Solutions**



Source: CBP

The Picket Fence (upper left), Bollard Fence (upper right) and Post & Rail with wire mesh (lower left) are examples of pedestrian fencing; the Normandy Vehicle Fence (lower right) is an example of vehicle fencing.

**PROGRESS MADE TO MEET STAFFING GOALS AND A HUMAN CAPITAL PLAN PUBLISHED, BUT IMPLEMENTATION IS IN THE EARLY STAGES**

The SBI program office established a staffing goal of 470 employees for fiscal year 2008, made progress toward meeting this goal and published a human capital plan in December 2007; however, the SBI program office is in the early stages of implementing this plan. As of February 1, 2008, the SBI program office reported having 142 Government staff and 163 contractor support staff for a total of 305 employees, up from 247 staff on September 30, 2007. In addition, SBI program office officials reported that they had selected an additional 39 staff that the program office is in the process of bringing onboard. These officials also told us that they believe they will be able to meet their staffing goal by the end of September 2008 and will have 261 Government staff and 209 contractor support staff on board (see table 4). In addition, according to SBI program office officials, they would like to bring the ratio of Government employees to contractor staff closer to 1:1 because their office has determined that that ratio provides the right mix of personnel with the skills necessary to ensure appropriate Government oversight. The targeted ratio, based on the staffing goal for fiscal year 2008, would result in a better than 1:1 ratio of Government-to-contract support staff.

**TABLE 4.—ACTUAL AND PLANNED SBI PROGRAM OFFICE STAFF**

Number of SBI Staff	Actual, September 30, 2007	Actual, February 1, 2008	Planned, September 30, 2008
Government employees .....	113	142	261
Contractor support staff .....	134	163	209

TABLE 4.—ACTUAL AND PLANNED SBI PROGRAM OFFICE STAFF—Continued

Number of SBI Staff	Actual, September 30, 2007	Actual, February 1, 2008	Planned, September 30, 2008
Total .....	247	305	470

Source: GAO analysis of CBP data.

In December 2007, the SBI program office published the first version of its Strategic Human Capital Management Plan and is now in the early implementation phase. As we have previously reported, a strategic human capital plan is a key component used to define the critical skills and competencies that will be needed to achieve programmatic goals and outline ways an organization can fill gaps in knowledge, skills, and abilities.<sup>22</sup> The SBI program office’s plan outlines seven main goals for the office and includes planned activities to accomplish those goals, which align with Federal Government best practices.<sup>23</sup> However, the activities are in the early stages of implementation. We have previously reported that a properly designed and implemented human capital program can contribute to achieving an agency’s mission and strategic goals.<sup>24</sup> Until the SBI program office fully implements its plan, it will lack a baseline and metrics by which to judge the program. Table 5 summarizes the seven human capital goals, the SBI program office’s planned activities and steps taken to accomplish these activities, as of February 20, 2008.

TABLE 5.—HUMAN CAPITAL GOALS, PLANNED ACTIVITIES, AND STEPS TAKEN AS OF FEBRUARY 20, 2008

SBI Human Capital Goals	Planned Activities	Steps Taken as of February 2008
(1) Develop a coherent framework of human capital policies, programs, and practices to achieve a shared vision integrated with SBI’s strategic plan.	Complete the SBI human capital plan.	<ul style="list-style-type: none"> <li>Completed the first draft of the human capital plan.</li> <li>Prepared the fiscal year 2008 staffing plan.</li> </ul>
(2) Prepare leaders to lead and manage the work force.	(1) Identify key leaders’ skills and competencies, develop and deliver a leadership/management workshop focused on equipping SBI leaders with these skills.	<ul style="list-style-type: none"> <li>Planning SBI leadership offsite meeting in early April, which will include discussions of leadership needs.</li> <li>Planning to conduct 360° assessments for SBI leadership in late spring/early summer.</li> </ul>
(3) Create and instill within the organization a value-driven organization.	(2) Identify key organization values and create an SBI Value Statement.	<ul style="list-style-type: none"> <li>Not yet started.</li> </ul>
(4) Develop and implement a succession management plan.	Develop a succession strategy for mission critical positions.	<ul style="list-style-type: none"> <li>Not yet started.</li> </ul>
(5) Define the performance culture (reward excellence).	Based on the CBP Awards and Recognition Program, create an SBI policy and practice on rewards and recognition.	<ul style="list-style-type: none"> <li>Designed but not yet implemented a program to recognize high performers.</li> <li>Drafted a recognition program.</li> </ul>

<sup>22</sup> See GAO, *Human Capital: Key Principles for Effective Strategic Workforce Planning*, GAO-04-39 (Washington, DC: December 2003), and *Framework for Accessing the Acquisition Function at Federal Agencies*, GAO-05-218G (Washington, DC: September 2005).

<sup>23</sup> These best practices are contained in the Government-wide Human Capital Assessment and Accountability Framework which was developed by Office of Management and Budget, the Office of Personnel Management, and the GAO.

<sup>24</sup> GAO-04-39.

TABLE 5.—HUMAN CAPITAL GOALS, PLANNED ACTIVITIES, AND STEPS TAKEN AS OF FEBRUARY 20, 2008—Continued

SBI Human Capital Goals	Planned Activities	Steps Taken as of February 2008
(6) Hire, recruit, develop, and retain employees with the skills for mission accomplishment.	Fill vacancies with qualified professionals and create a Supervisors' Onboarding Guide and retention interview process.	<ul style="list-style-type: none"> <li>• Developed an orientation course for new employees.</li> <li>• Drafted, but not yet finalized the Supervisors' Onboarding Guide.</li> <li>• Recruitment efforts under way to fill open SBI positions in all programs.</li> </ul>
(7) Establish leadership accountability for human capital management.	Clarify key leadership responsibilities and metrics of success.	<ul style="list-style-type: none"> <li>• Not yet started.</li> </ul>

Source: GAO analysis of CBP data.

#### CONCLUDING OBSERVATIONS

Securing the Nation's borders is a daunting task. Project 28, an early technology project, resulted in a product that did not fully meet user needs and the project's design will not be used as the basis for future SBInet development. To ensure that future SBInet development efforts deliver an operational capability that meets user needs and delivers technology that can be used in additional projects, it is important that the lessons learned on Project 28 continue to be applied and that user input continues to be sought so that future technology projects are successful. In the tactical infrastructure area, although fencing projects are currently on schedule, meeting future deadlines will be challenging because of various factors, including difficulties in acquiring rights to border land. Furthermore, future tactical infrastructure costs are not yet known because issues regarding land acquisition have not been resolved and other decisions, such as the materials to be used, have not been made. These issues underscore Congress' need to stay closely attuned to DHS's progress in the SBI program to make sure that performance, schedule, and cost estimates are achieved and the Nation's border security needs are fully addressed.

This concludes my prepared testimony. I would be happy to respond to any questions that Members of the subcommittees may have.

Ms. SANCHEZ. Thank you, Mr. Stana.

I have just been informed that in about 10 to 15 minutes, we are going to have one vote on the floor. So what I would like to try to do—I notice that we have been joined by our Chairman of the full committee, Mr. Thompson, and our Ranking Member, the Oversight Committee.

What I would like to try to do is to get through the testimony of the witnesses and then hopefully break for a vote. You guys could take a coffee break at that point and we will come back for the questions.

So if you could adhere to the 5-minute rule as much as you can, I would really appreciate it.

I believe now that we have Mr. Krone for 5 minutes.

#### **STATEMENT OF ROGER A. KRONE, PRESIDENT, NETWORK AND SPACE SYSTEMS, INTEGRATED DEFENSE SYSTEMS, THE BOEING COMPANY**

Mr. KRONE. Thank you and good morning, Chairman Thompson, Chairwoman Sanchez, Ranking Member Souder, Chairman Carney,

and Ranking Member Rogers, and distinguished subcommittee Members.

I am Roger Krone, president of Boeing's Network and Space Systems, and I am pleased to be here at this time with the program having achieved full acceptance of Project 28 last Thursday.

P-28's purpose is to provide the Border Patrol with a prototype deployment that they can use in daily operations, while, at the same time, evaluating the system to make recommendations for technology and operational improvements in future developments.

Recommendations from the Border Patrol, maturation of systems design, availability of new technology, and differences in border terrain, environment, threat and other factors dictate that each future deployment will be a unique combination of technology, infrastructure, and response capability specifically chosen to maximize the efficiency for the Border Patrol in that location.

Lessons learned: While we are proud of the accomplishment of our P-28 team, we recognize the need to incorporate improvements and lessons learned into the overall SBInet program.

There are three that I would like to highlight today. First and most importantly, it is the need for engagement with a broad set of customer stakeholders, to include the actual users within the Border Patrol.

Knowing how these various customers work together and understanding what technology and infrastructure serves best to assist them in accomplishing their mission is key to a successful SBInet program.

We now have excellent working relationships with a wide range of DHS stakeholders, including the Border Patrol, and are evolving the system to meet the needs and desires they express.

Chief Aguilar and his staff deserve a lot of credit for bringing this about.

A second lesson learned is the need for a much more capable command and control software, referred to as the common operating picture. We initiated an effort on Boeing funds in October to address this requirement and signed a task order formalizing the project on December 7, last year.

The first edition of the next generation common operating picture will be available in mid-2008.

Another major lesson is the need for more robust integration and testing prior to deployment. In connection with that, Boeing has invested company funds to support DHS in the creation of new facilities to conduct the increased testing.

We built a systems integration lab in Huntsville, Alabama to test and integrate systems components in a lab environment prior to installing them in the field.

In Northern Virginia, we have created two additional laboratories. The first is a command, control, communications and intelligence common operating picture, rapid application development, joint application development lab to assist in the work on the next generation common operating picture.

The second lab in Northern Virginia is a mission analysis and assessments lab to improve our capabilities, to design and model future lay-downs of the system.

The first two labs are operational now and the mission analysis lab will be fully operational this spring.

All of these facilities are allowing shoulder-to-shoulder joint development by contractor and government user teams.

If I may, I have a 90-second clip to show those labs in operation. We could run the clip now.

[BEGIN VIDEO CLIP]

The first part of the clip shows the command and control center in Tucson and the existing towers that are part of the P-28 system. So this is the command and control center and we show, inside of that, what the screens look like, how the Border Patrol agents use the system.

So that is actually the C-2 center and I understand that many of you have actually visited the C-2 center.

Here is a Border Patrol agent getting training on the system.

These are the towers that we currently have deployed. You can see, if we need to make adjustments to the radar, it is difficult. We have to lower the tower.

So integrating the system in Tucson has been difficult.

This is the new lab in Huntsville. You can see we have replicated in the lab three screens and you can see engineers here working on this system.

Then, actually, on top of that physical building, we have installed two towers where we can put the radars and the EO sensors and technicians can easily access the equipment.

Here, you see a technician adjusting one of the fleers. That was the radar on top of the tower. This makes it much easier, much faster for us to integrate.

This is the rapid application development system here in Northern Virginia.

By the way, we have encouraged staff and Members to come and visit.

We can actually replicate the common operating picture in this lab and we are actually connected back to Huntsville. So we can tie the actual hardware in the loop into our development facility here in Northern Virginia.

Of course, the end result is to deploy, in the future sectors, what we call Tucson 1 and Tucson 2, a robust system.

[END VIDEO CLIP]

Madam Chairwoman, with these and other lessons learned on P-28, we believe we are positioned to continue spiraling the system. We recognize the geographically diverse border will require a varied mix of technologies and personnel to support and conduct border security efforts in each unique segment of the border.

The SBInet program has made significant progress since last October, when I appeared before the committee.

Boeing is committed to building, deploying and continually improving an efficient operational system to assist the Border Patrol in securing America's borders.

Thank you.

[The statement of Mr. Krone follows:]

## PREPARED STATEMENT OF ROGER A. KRONE

FEBRUARY 27, 2008

Good morning, Chairman Thompson, Ranking Member King, Chairwoman Sanchez, Ranking Member Souder, Chairman Carney and Ranking Member Rogers. I am Roger Krone, President of Boeing's Network and Space Systems. It is a pleasure to be back before this committee to talk about Project 28 and the future of SBInet.

I am pleased to be here at this time with the program having successfully achieved a major milestone—Full Acceptance of Project 28—last Thursday. P-28 is an initial proof of concept of the SBInet technical solution on a segment of the border. Its purpose is to provide the Border Patrol with a prototype deployment they can use in daily operations, while at the same time, evaluating the system to make recommendations for technology and operational improvements in future deployments. We have always understood that the P-28 installation in Arizona is not the end-state configuration of SBInet technology. Recommendations from the Border Patrol, maturation of system design, availability of new technology, and differences in border terrain, environment, threat, and other factors dictate that each future deployment will be a unique combination of technology, infrastructure, and response capability specifically chosen to maximize efficiency for the Border Patrol in that particular location.

Before turning to the lessons learned and future of the program which you asked me to address, I would like to acknowledge and express my appreciation for the leadership of the Department of Homeland Security on this project. The "hands-on" approach by DHS leadership, including several trips to the border, has been instrumental to the progress and success of this program. We look forward to their continued involvement in 2008. My thanks also go to leadership of this committee and the committee staff for their interest in this program and advice.

## LESSONS LEARNED

While we are proud of the accomplishments of our P-28 team in achieving this milestone, we recognize the need to incorporate improvements and "lessons learned" into our overall SBInet program activities.

First, and most important, is the need for engagement with a complete set of customer stakeholders to include the actual SBInet users within the Border Patrol. Knowing how these various customers work together and understanding what technology and infrastructure serves best to assist them in accomplishing their mission is key to a successful SBInet program. We now have excellent working relationships with a wide range of DHS stakeholders including the Border Patrol and are evolving the system to the needs and desires they express. Chief Aguilar and his staff deserve a lot of credit for bringing this about.

A second lesson learned is the need for much more capable command and control software, usually referred to as the Common Operating Picture (COP). We initiated an effort in October to address this requirement and signed a task order formalizing the project on December 7, 2007. The first edition of the next generation Common Operating Picture (COP 0.5) will be available in mid-2008.

Another major lesson we have learned is the need for more robust integration and testing prior to deployment. In connection with that, Boeing has invested company funds to support DHS in the creation of new facilities to conduct the increased testing. We built a System Integration Lab (SIL) in Huntsville, Alabama, to test and integrate system components in a lab environment prior to installing them in the field. In Northern Virginia, we have created two additional laboratory facilities. The first is a Command, Control, Communications and Intelligence (C3I) Common Operating Picture Rapid Application Development/Joint Application Development (RAD/JAD) Lab to assist in the work on the next generation Common Operating Picture. The second is a Mission Analysis and Assessment (MA&A) Lab to improve our capabilities to design and model the future laydowns of the system. The labs are operational now and the MA&A lab will be fully functional this spring. All of these facilities are allowing joint development by contractor and Government user teams.

## NEAR TERM IMPROVEMENT AND EXPANSION OF SBINET

Mr. Chairman, with these and other lessons learned on P-28, we believe we are positioned to continue spiraling the system. We recognize that a geographically diverse border will require a varied mix of technologies and personnel to support and conduct border security efforts in each unique segment of the border. Our combined

Government/Boeing team has made significant progress on the planning, designing, engineering and management for future deployments in diverse environments.

*A. Next Generation Common Operating Picture Command and Control Software*

I have already mentioned the next generation Common Operating Picture which is being developed. Work is progressing on schedule, and the first version is due out this summer. This Common Operating Picture software will be a much more robust set of command and control software based on our collaboration with the Border Patrol and our extensive experience with networked systems. It will give the Border Patrol the benefit of a fully integrated Common Operating Picture as well as providing CBP, DHS and others the benefit of connectivity and potential growth.

*B. Systems Engineering Approach*

Boeing has now deployed our standard systems engineering processes which will be utilized on all future task orders. Top level user requirements are analyzed through an iterative systems engineering process to determine hardware and software needs. The hardware and software needs are allocated to subsystems and lower level products. Once procured, each product is tested in the Systems Integration Laboratory in a hierarchical approach starting with the individual product, then integrating and testing products together at the subsystem level and then as fully integrated systems prior to deployment. Given the varying environmental conditions, products will also be sent to the intended deployment location for testing to ensure unique site conditions are understood. Additional subsystem and system verification testing occurs during deployment. Once the system is fully deployed, a series of operational evaluation tests will be conducted with Border Patrol Agents operating the system.

*C. Expanded Fencing*

As you know, the Boeing Team constructed 31 miles of barriers and fencing south of the Barry M. Goldwater Range in Arizona. That project was completed last fall. We have signed a task order for which we will perform supply chain management for pedestrian and vehicle fence construction along the Southern Border. When completed, these physical barriers will reduce the probability of vehicles and/or pedestrians attempting to cross the border in these areas.

CONCLUSION

In conclusion, the SBInet program has made significant progress since last October when I appeared before the committee. P-28 is now producing a higher degree of situational awareness for Border Patrol Agents. The Boeing Team, partnered with our Government customer, is preparing the next spiral of this system and is ready for the increased activity of the deployments that lie ahead. We are committed to building, deploying and continually improving a robust, efficient, operational system to assist the Border Patrol in securing America's borders.

Ms. SANCHEZ. Thank you.

I believe the other two gentlemen will not be testifying verbally today, although there are some statements that have been submitted.

So with that, with the vote, I am told it is one vote on the floor, but I am told it is a procedural vote and there could be others or who knows what.

So I think we are going to try, to the extent possible, to begin the questioning, and then maybe after a couple people, we will cut it off.

Mr. Carney, I will let you go ahead for 5 minutes, if you would like.

Mr. CARNEY. Thank you, Madam Chairwoman.

Mr. Ahern, when problems with P-28 first began coming to light, the Department's initial response seemed to be to deny them.

As they deepened, we were told that the biggest failing was that you all failed to "manage expectations." For some frank and productive meetings we recently had with Deputy Secretary Schneider and other senior Department officials, I had hoped that we had gotten past those absurdities.

Frankly, it was insulting, it was. So I was dismayed to see that in your testimony, it includes the same old-same old.

I am particularly concerned with your statement that "Once the P-28 effort was underway, with much public interest in its development, it came to mean different things to different people. Unfortunately, those interpretations diverged from what P-28 was intended to be and what the Government contracted for."

What does this mean? Are you still trying to manage our expectations here? Are you telling us we didn't hear what we heard, what Mr. Thompson and I heard?

This has got to stop. We have got to know now what is going on. Then I have a follow-up.

Mr. AHERN. First off, not trying to go ahead and mislead or have any further confusion to this process, what I wanted to state through the testimony, and I am happy to answer the question now, is that clearly the opportunity through this contract was for Boeing to go ahead and demonstrate their core capabilities through this demonstration project.

We certainly could have waited and taken a longer approach to making sure it was done through a laboratory-type environment. We wanted to get it out there and see how the core capabilities could be demonstrated in an operational environment.

It was not ready for operational deployment, and that is, I think, one of the key distinctions I would like to try to make here, because I believe that there was a lot of confusion internally with our own organization.

This isn't just pointed in any particular direction, that it was to deliver immediate operational capability. This was a demonstration of capabilities that was certainly probably overstated.

As we got to the point of moving through the summer timeframe, when we started to get engaged with some of the acceptance testing of this process, we realized that the operational capabilities were not there.

That is when we started to go ahead and engage further with the operators, leading up to the conditional acceptance on December 7, this year, where we had a chance then to actually test it with much more rigor in an operational environment, working through the final deficiencies that led us to the final acceptance of February 21.

Mr. CARNEY. You referred to P-28 as a proof of concept and it doesn't work as it was originally advertised, intended to.

What concept are we proving?

Mr. AHERN. Well, again, it was the concept as far as the solicitation was written based on input from operators, the program management staff, our acquisition experts, both within the organization and within the Department of Homeland Security, and each one of the companies that responded to the solicitation provided their proof of concept.

The concept of operations was then to be put into the field for that demonstration, and that is what I believe was to occur during that period of time, not to deliver initial operating capability.

This was not to be a plug-and-play type of system.

As we have continued to learn over the last several months, we realized, as far as the initial hardware suite needs to be swapped out and upgraded. We realized, also, that the common operating

picture, the software, actually needs to be more robust and upgraded, as well, and that is going to take us through to the further development of this system as it goes forward.

Mr. CARNEY. Okay. Mr. Stana, from your most recent work, what have you heard from the agents in the field? What do they think of Project 28 and SBInet, more generally?

Mr. STANA. It is interesting, because we made three substantive visits, one in May 2007, one in September 2007, and the other one just a couple weeks ago.

It is interesting to note the difference in attitude toward Project 28.

I think they had every reason to believe in the field that Project 28 was going to be two things. It was going to be a test of operations, concept, and it was to leave behind a capability.

The fact that Boeing even issued a 1-year guarantee on the parts would indicate that there was supposed to be a leave-behind capability.

I can go through this document, which is the task order, and show exactly what was supposed to be left behind and what the tolerance expectation was supposed to be, which would give anybody the idea that this was supposed to be more than a simple test.

However, in May, the Border Patrol was excited about it. People were being trained. They were excited about the capabilities.

There were some parts they really weren't sure of, like taking operational control of cameras in the cars. They didn't see a need for it. But Boeing proposed it. Maybe it would work.

It never really ended up working as they thought.

In September, after they missed the deadline, some of the excitement turned to skepticism. The Border Patrol was understanding they were going to have to be retrained. They heard the radars focusing on raindrops and mesquite leaves, and it created some skepticism.

By February, after the Border Patrol was working with the Boeing representatives to try to overcome some of the initial problems, they kind of came to a resignation that maybe it is time to get beyond this.

It is not what they wanted, it never will be. They are going to replace all the equipment. Why put more money into something that is not eventually going to be the solution? Let's get it behind us, learn our lessons, and move forward.

Mr. CARNEY. So we were resigned to accept Project 28 is what you are telling me.

Mr. STANA. Well, I mean, it is the secretary's call. It is within his prerogative to accept it. I don't know what criteria he used to accept it.

We got some documents yesterday that we plan to go over to look and see exactly what testing was done and what the criteria was to say that they met the contract specifications.

If you look in this document, what the contract specifications were meant to be, they were very high—95 percent, plus or minus 5 percent detection, things like that.

I don't think they are close to that.

Mr. CARNEY. Chief Aguilar, Mr. Giddens, what detection rate are we at now with P-28?

Mr. AGUILAR. Given the capabilities that we have right now under Project 28, we do not have a means to measure the actual detection rate, and that was not part of our understanding as to what was going to happen, not under P-28.

Under SBInet, fully developed, we do have an expectation of being able to measure the actual incursions on a part of the border where SBInet is deployed.

Mr. CARNEY. Mr. Krone, it is your project. It is your system. Is it 95 percent?

Mr. KRONE. Well, I would have to second what Chief Aguilar said, that we do not have a method of measuring end-to-end system performance against the 95 percent criteria.

The components are all working according to specification at this point, though.

Mr. CARNEY. So we were contracted for 95 percent and something we can't measure. I just want to be sure I understand this.

Mr. GIDDENS. Sir, may I?

Mr. CARNEY. Yes, Mr. Giddens.

Mr. GIDDENS. We don't share the view that GAO has that the 95 percent was an acceptance criteria.

Mr. CARNEY. Was that in the document?

Mr. GIDDENS. It was in the document as an indication of this was a goal as an end-state and where the system would pursue. It was not a hard objective for P-28 and the intent of P-28 was to be able to have a test process that we are undergoing now to try to understand, to characterize the system and be able to set the right thresholds and objectives moving forward.

But acceptance of P-28 was not tied to a 95 percent detection.

Mr. CARNEY. Mr. Stana.

Mr. STANA. I would agree with that, but that changed. As I understand the document trail, that changed on or about September 10, when Boeing informed them that they would not be following some of the cost criteria for acceptance.

So this is when the bar began to lower, or maybe it had begun to lower before, but the bar was lowering from a leave-behind capability to something less than that as a demonstration of concept.

The two concepts were always there, but it seems that the emphasis began to shift more in the late summer and early fall to the testing rather than a leave-behind deployed capability.

Mr. CARNEY. Okay. We will return to this. Thank you. I am way over my time, Madam Chairman.

Ms. SANCHEZ. We do have a vote on the floor, with about 7 minutes to go.

So I would recess for—I hope it is just one vote. That is what we are anticipating. So we will go over and we will get the feel on the floor.

But I would imagine you probably have at least 10 minutes to grab a cup of coffee or something. I am sure there is staff around who can direct you, if you haven't already figured it out, because you have been here before so many times.

We will return and take up this line of questioning. Thank you.

[Recess.]

Ms. SANCHEZ. The committees will now be back in order.

At this point, we will go with Ranking Member Rogers for his 5 minutes, if you will.

Mr. ROGERS. Thank you. I thank the guests for being with us today.

I was really frustrated listening to the answers to Chairman Carney's questions. It is disturbing to hear that you can't tell us what degree of effectiveness that that 28-mile stretch of land is achieving.

Greg, is that an accurate assessment, that you really just don't know how effective it is?

Mr. GIDDENS. At this point, we do not. Since we did final acceptance on February 21, we will now start and, actually, we will have a third party do some tests to give us insight on that.

But since we were still—Boeing was still working on the system and evolving it and getting it to final acceptance, we did not do that type of formal testing on the system until we had final acceptance.

So now that we have done that, that is when we will start to do that type of deliberate testing to get those percentages.

Mr. ROGERS. In the dialog going back between Chief Aguilar and Mr. Stana, there was some disagreement as to whether or not there was an expectation that, at some point, hopefully, in the near future, it is going to achieve a 95 percent level of effectiveness.

Is that wrong? Is that not what your expectation is?

Mr. GIDDENS. My expectation for SBInet overall is to reach the 95 percent. Again, we did not have a requirement for P-28, as itself, to reach 95 percent, but rather to get a demonstration project out that would function, that we could use to test and characterize the system. But it did not have a requirement for 95 percent.

Mr. ROGERS. By what point in time do you think we should be able to know, by this third party testing, what degree of effectiveness it is achieving?

Mr. GIDDENS. Sir, I am pulling this off memory. I think we have about a couple months of a test regimen and then we have a review of test reports of that to analyze the data.

So we are looking in the 2- to 3-month period.

Mr. ROGERS. Now, my understanding is that your Department paid no more than the original \$20 million that was contracted; is that correct?

Mr. GIDDENS. Sir, that is correct and, also, we got consideration back from Boeing due to the schedule delays and for the minor issues that were not resolved, as well.

Mr. ROGERS. What were the actual costs of the project?

Mr. GIDDENS. Sir, I will try to be particular on this. The actual cost was \$20.6 million, but in logistics and future work, there is a \$2.2 million credit.

So, effectively, it would be \$20.6 million minus \$2.2 million.

Mr. ROGERS. I guess my question is: How much did Boeing have to spend to meet that contract requirement?

Mr. GIDDENS. Sir, I don't know how much Boeing has spent.

Mr. ROGERS. Mr. Krone.

That is the lead-up to your answer.

Mr. KRONE. Sir, my answer is nowhere near that remarkable.

What we have said before this committee is, because we actually don't disclose financial data at the contract level, but more than twice the original value.

Mr. ROGERS. Okay. That is disturbing to know that this, what would seem to be a very manageable project, with no really new technology involved, this is stuff that we have been using in the DOD for quite a while, couldn't be put in place within what you expected the contract price to be.

What happened?

Mr. KRONE. I think we underestimated the integration of off-the-shelf systems. We didn't do appropriate integration testing in the laboratory. So we ended up integrating in the Tucson center and when we brought this off-the-shelf hardware together with off-the-shelf software, it didn't function as we had anticipated.

Also, as we started to operate shoulder-to-shoulder with actual Border Patrol agents, there were capabilities that we hadn't envisioned that they would want that they felt necessary to have in the system, enhancements on how they control cameras, how they do focus, how they track suspects, and we added those capabilities, as well.

Mr. ROGERS. Mr. Giddens, you know the history of ISIS and what a disaster that was, and we had hoped to take the lessons from that and do better on this and, apparently, we haven't done much better.

My question to you is: what lessons are you taking from this to make sure that, as we go forward with our next phase of SBI, we are going to do better?

Mr. GIDDENS. Sir, I guess I would start, respectfully, I think there is a difference between what happened with ISIS and what happened with Project 28.

When Customs and Border Protection was presented with this system last summer, in July, we believed it did not meet the contractual requirements and instead of trying to move forward in some way or maneuver around that fact, we didn't take acceptance.

I think that is the difference, I think, than what—

Mr. ROGERS. I agree the outcome as far as what you had to pay is desirable and so you learn not to sign an open-ended contract.

But my point is the implementation of this technology to achieve its desired goal did not work out any better.

My time is up. I apologize for going over and yield back.

Ms. SANCHEZ. It is okay, it is a good line of questioning and we allow it when we are trying to get some facts on—we will now hear, for 5 minutes, from the gentleman from Laredo, Mr. Cuellar.

Mr. CUELLAR. Thank you, Madam Chair.

Let me ask you, Mr. Krone. Last time we were here, I had asked you to get me the information to the cost of the equipment and you had a series of items.

Mr. KRONE. Right.

Mr. CUELLAR. Cameras, towers, and I still haven't received that information.

That was nine portable radial camera towers, two mobile command and control communication units, four unattended ground sensors, 50 field agent communications systems, a common operating picture, and 70 satellite phones.

I was trying to get the cost for each item.

Mr. KRONE. Right. Sir, I actually am checking with my staff. We actually prepared that and submitted it and if it didn't arrive at your office, then I apologize. But we did prepare it.

Mr. CUELLAR. Would you make sure, by the end of the day, that I get that delivered to my office?

Mr. KRONE. Yes, absolutely.

Mr. CUELLAR. A question to, I guess, maybe Mr. Giddens or Mr. Aguilar, Mr. Ahern.

Besides using electronics, which we are talking about, let me just move to another option—the eradication of Carrizo cane along the Rio Grande. I know that Mr. Souder was down there and saw what we are seeing there.

I think what you all are looking at is you all are looking at a USDA research facility, Weslaco, at the Moore Air Force Base. My understanding is that under the USDA budget proposal, they are recommending to close this facility, which is, I believe, the facility that you all are using that will be responsible for the development of the biological control agent *Arundo donax*, the insects, which are—again, I can tell you some people in my area don't like that approach.

I mean, there is either a biological approach or there is an herbicide approach.

When we had Chairman Bennie Thompson in Laredo, we were talking to the Texas Oil and Water Conservation. They have been using a particular herbicide for years at the Eagle Pass, at the Eagle Pass water district, at, north of that, the Pecos River.

So they have been using this for years and years. When they asked them at the Pecos area, "What would you rather use, insects or biological or the herbicides?" about 98 percent of them, of the landowners at the Pecos River said, "We want to use this herbicide."

The cost of this herbicide is about \$200 an acre. It has proven to be safe.

We had a meeting down there, a field hearing. Afterwards, we had invited, previously, homeland security. Originally, they said yes. Then they said no, because they said, "We don't want to sanction this particular trip to a ranch where they have used this herbicide."

Personally, I went up there with a couple folks and we saw what was happening there, and it is working. I saw it first-hand.

I know that Mr. Souder also went to another ranch where they cleared the Carrizo, put grass, and Michael McCaul was also there, and it has worked.

So if we can do it for \$200 an acre, why can't we use this, especially when they are talking about closing your facility that is going to be used in this biological approach?

Mr. AGUILAR. Congressman, we are actually looking at three options out there, one of which includes that herbicide that is acceptable for use close to the Rio Grande River. That is a major concern that we have.

One of the actual proposals included the use of Round-Up, what we would typically use in our lawns.

That we cannot and should not use along the river because it feeds into the river and has potential for environmental damage. So that is the second option.

The third option is going to be what you just described, to include the possibility of actually burning or cutting the Carrizo cane down. The Carrizo cane grows at a very fast rate, 7 inches per week once you cut it down.

Then we have to find a way to either uproot it or use that type of herbicide.

The third option that we are looking at is, in fact, the biological agent that includes at Moore Field and Weslaco.

But all three of those are being looked at. We have not ruled any one of them out and, in fact, one of the things that we are going through right now is the actual EIS process to figure out which one is the best, and we are listening to the community on what they think would be the best utility.

Mr. CUELLAR. Because if you think you are going to get pushback from the private property owners on the fence, you are going to get pushback on this biological, I can tell you that much, when you start saying we are going to release these Spanish bugs into your area.

Would you be willing to sit down with some of the soil and water folks and the A&M folks from Texas at least so you can listen to them? Because they—

Mr. AGUILAR. Absolutely.

Mr. CUELLAR [continuing]. They feel that you guys are not listening. We just want an audience on that.

Mr. AGUILAR. Absolutely, yes, sir.

Mr. CUELLAR. Last question, Madam Chairwoman.

Ms. SANCHEZ. I will allow it.

Mr. CUELLAR. Thank you, Madam Chairwoman.

Mr. Ahern, the ports of entry, as you recall, back in November, had sent a letter asking—and we are trying to work with you. We are not trying to set up a trap—asking how much personnel do you need at the ports of entry and how much infrastructure do we need at the ports of entry, north and south.

As you recall, we haven't been able to get that information since November of last year and I have been promised over and over and over that we would get it.

Do you all have that information available now?

Mr. AHERN. Yes, we do and it is regrettable we don't have it provided to you just yet. I know you asked the secretary at the hearing a couple of weeks ago.

We will make sure that we do get that to you. But I would be happy to give you a broad overview of what I believe is kind of our elements necessary going forward.

Mr. CUELLAR. If you can give us a broad overview. Do you know when you can actually get us something in writing?

Mr. AHERN. I will check on that right after the hearing and provide that information back to staff to find out exactly where it is.

Mr. CUELLAR. Will it be within 3 days, 5 days, a month, a year?

Mr. AHERN. It would be in a very short time. I know it is cleared the organization—

Mr. CUELLAR. Would that be within 3 days? Would it be 1 week? I have been asking since November and everybody has been promising this.

Mr. AHERN. It is in the clearance process outside of our organization. So I will need to find out precisely where it is and if I can have to the end of the day to give your staff the exact answer when they could expect that, I would be happy to.

Mr. CUELLAR. Okay.

Mr. AHERN. But if I could just broadly state, as far as what is needed, certainly, as we focus between the ports of entry on SBI, to make sure we get operational control through the three pillars of infrastructure, personnel and technology, the same things are needed for the ports of entry.

I believe even more so now, as we gain that operational control, we continue to see the growth in travel and trade coming across the borders. We just had the Governors conference here this week for the board of Governors who were in from Texas, New Mexico, California, as well as Arizona, and their counterparts across the border.

Clearly, we need that same capability at the ports of entry. The facilities, some are as many as 70 years old. You are aware of some of those.

Certainly, as far as the technology, it is not necessarily there nor the personnel.

So we are working on a concept to actually have the same pillars of the appropriate staffing, looking at the model that we have that will be in the report to you.

Depending as far as how quickly some of the enhancements to facilities come on, it could be in the 2,500 to 3,000 range, but we will work that model based on the precision of the needs for the facilities.

The capital investments needed for the facilities is estimated at about \$500 million a year over a 10-year period and, also, as far as the technology.

The western hemisphere travel initiative, with the RFID readers, as well as the license plate readers, it is the beginning of technology, but it is not the complete answer.

But we will be happy to give you a detailed briefing, even in addition to the letter, if you would like.

Ms. SANCHEZ. The gentleman's time has expired.

Commissioner Ahern, it is great to hear it in concept, but I think we really, this committee, many of the Members want to see it detailed as far as you have it detailed out.

So I will expect to hear from Mr. Cuellar if you don't get back to him with a date certain when he can have that information.

Mr. AHERN. Understood.

Ms. SANCHEZ. I will now ask my Ranking Member from Indiana, for 5 minutes, please.

Mr. SOUDER. Thank you.

I am incredibly frustrated on a number of fronts, and the more time I spend in hearings, the more frustrated I get.

I don't sense that the administration, I am not talking about any of you individually, as a whole does not understand that this issue is on fire across the country. Every administration has this prob-

lem, Republican or Democrat, that OMB does not want people to tell us the truth about the estimated costs, for fear it might bust the budget.

The fact of the matter is we don't know, and then if we see a number come and choose not to fund it because we have needs in education and health care and everything else or Iraq, then that is our decision.

But we are sitting here trying to figure out what is this going to cost, how quick could we get it done, what is the feasibility, and we can't even get things cleared, which isn't your problem, but it is administration-wide.

It wasn't us, Mr. Ahern, who made Project 28 into a big deal. It was Secretary Chertoff and the President of the United States, who implied, when the Senate was debating the immigration bill and giving amnesty to the people on citizenship track, to the people who are here, that "Oh, we are going to have the border all sealed. Look at Project 28. This is how we are going to do it and we are going to have all this done. So let us pass the administration bill," last year.

Now, we are hearing 2011, we will have parts of this done. There is no sense of urgency here.

Ten years until completion is an estimate. Ten years. That is another, what, 18 years after 9/11. We need to understand what we are actually hearing.

Then we hear the frustrations with the project that you are hearing us bubble over.

In my limited time left, I want to raise a couple other issues. I want to, first off, support Mr. Cuellar.

Look, there isn't much favorability among any of us to release millions of bugs and wasps on the border if there are other alternatives.

At these ranches, the fact is the cane grows fast. They have had the one that I visited cut for 4 years. While it grows fast, it doesn't get thick fast.

The cane can be mowed in its early stages. So all they are doing is mowing. It is labor-intensive to destroy the cane if you do it manually. It may have to be contracted out.

But once you get it down and get the grass, the grass chokes the cane and it is a far more acceptable type of environmental solution. This is an invasive species that the whole Project 28, as you move to Texas, which is the biggest part of the border, with the river, you cannot make electronics or other fence work if salt cedar and Carrizo cane are blocking the view. It isn't going to work.

Between Congressman Pascrell and I, we saw, in the Laredo sector, in the morning, one of the Border Patrol with the dog got somebody that close behind me in the cane because we couldn't see him.

In the area of this ranch where they hadn't cut it down, because they didn't need to for the view, I would have also been lost in that view.

The cane is incredibly thick and the salt cedar does the same thing. In addition to basically destroying the river, it is taking anywhere from 33 to 50 percent of the water out in a species that was

planted by somebody else because they thought it would accomplish something else.

The Bermuda grass, I believe, can accomplish this, but it ought to be a priority, not one of the three things we are studying, and then—you know what? In Indiana, every year, we kill everything that is threatening a soybean and do it without doing soybean and it goes into our rivers and then you eat it.

This is an herbicide challenge that, without introducing something that destroys the river or the other, but this other stuff isn't going to work as you move to Texas, as we are learning.

Now, I have another gripe and that is that at Presidio, that I am going to give you warning, otherwise, I am just going to attach it and we will see how Congress votes in an appropriations bill. At Presidio, the only crossing between Laredo and El Paso, there is 3.5 miles of fencing on each side.

It is not a high-traffic place, but when you are building the fencing, it would seem to be cost-effective to build it at one time.

By the way, the idea of redoing the dikes and putting it up on the dike is a terrific idea, and that a lot of people don't understand, you are learning the fencing challenges as we go through this.

The soil is different, different kinds of vehicle barriers, that it is more complicated than any of us thought, which is why we should have been on this a lot earlier.

But as you look at these barriers, that one needs to go farther. I was told, "Oh, well, this is the big area." By the way, that is Pablo Acosta's house right there on the border, who is a feature in the book "Drug Lord," because this area is a big drug-running area.

Guess what? Those hills over there past where the fence is going to be, that is where they got Pancho Villa, and that is why General Pershing was down there.

This is an historic smuggling area and there is visibility. A vehicle barrier on top of the levy, as far as the levy goes, makes a lot of sense to do it at one time, because the startup of getting the steel down, moving the companies in, is going to be prohibitive later, and, I would argue, there, physical barriers matter some.

I think that, also, at Eagle Pass, that this challenge has to be that there has to be some sense of urgency in the negotiation.

I heard the mayor of Eagle Pass, on a San Antonio radio station, whining away about us putting a fence on top of—we have already moved it back from the golf course. We have already gone to a decorative fence. We have already built him a park, and he is still holding it up.

I understand that all this isn't your problem, but the American people inside the country are demanding security reasons and that when we only have a few border things like this, we are going to have to be more aggressive at the Federal Government level, be cooperative as much as possible with the community, but we cannot have this project held up.

I have incredible frustration with Project 28, and I hope we get a round two with this. But I wanted to put these other things out there, too, because you are headed into more problems as you move into the biggest border, which is Texas.

Ms. SANCHEZ. I thank the gentleman from Indiana.

At this point, we will ask the gentleman from New Jersey, Mr. Pascrell, for 5 minutes.

Mr. PASCRELL. Thank you.

I want to associate myself with the words of Mr. Souder. He doesn't have immigrant phobia. I think he has a realistic approach to this subject.

This is what we mean, I want to make it clear from the beginning, of doing what we said we are going to do and not having high expectations and then having a hearing such as this, because that is where we have been.

Many of the witnesses, in fact, have to admit that after so many years of promises and testing and millions of dollars spent, we are no closer to a technology solution to really securing the border.

I will tell you what is at stake. What is at stake is not just cutting off the folks at the pass, but what is at stake is a comprehensive reform of our immigration policy.

This is unacceptable. Unacceptable. It is what is holding up comprehensive immigration reform. Everybody talks about border security. Everybody talks about defending the country at our borders and protecting.

It is incredible that we are only at where we are. We are 98 yards from the goal line and we started quite a few years ago.

Now we discover that 54 percent of the properties to build this fence, to build this protection, are on private property. Didn't we realize this? I didn't hear any of you speak up when folks on the floor of the House of Representatives were pointing fingers, and, mind you, most of those fingers were pointed in the southern border. You would think we never had any other borders in the United States of America.

So we talk about chemical security, cyber security, port security, airline, transit, et cetera. Border security is absolutely connected. Connect the dots to immigration reform. I don't care which side of the aisle you are on. We have all agreed upon it.

The years that I am hearing, going out to 2011, 2018, you have got to be kidding me. You are afraid to put proposals in front of us because the administration is not doing what they said they were going to do.

Let us say it. Let us be honest.

Now, let us get to the questions, more importantly.

Mr. Giddens and Mr. Ahern, it is my strongly held belief that border security cannot be accomplished by simply erecting a physical barrier or relying on technology.

Our Nation needs a layered, multifaceted approach. I also feel that the current inability for the Department to find a border security solution that actually works makes it impossible for Congress to enact real immigration reform, as I have stated.

Unfortunately, your departments have been unable to give this committee and the Congress a real assessment on how much it will actually cost to secure the entire border.

Project 28 was supposed to be an example of how we could use technology to secure the border. Yet, here we are 8 months after the first deadline and the system still isn't fully operational.

So the lesson here is that we simply can't secure 28 miles of border with \$20 million. We saw pictures up there, up there on the

screen, and lovely pictures of gentlemen, ladies, sitting at the screens and you just told us they all have to be replaced, that equipment.

I mean, we are not as stupid as we look. When it comes to erecting a physical border, your Department has estimated an average cost of \$3 million per mile. But the GAO has estimated that, in fact, it costs roughly \$4.5 million per mile, and this does not even include any estimate of how much it will cost to maintain and repair the border fence over the long term.

So, Mr. Giddens and Mr. Ahern, I hope one of you can answer the question. How much will it actually cost in total to implement the technology and erect the physical fence necessary to secure the border with Mexico and, also, what kind of annual costs are we looking at for the entire border to repair and maintain these facilities?

Two questions, pretty simple, 5½ years into it, you should be able to answer those questions.

Mr. AHERN. Let me go ahead and begin, and then I will ask Mr. Giddens to give a little more precision on some of the numbers.

But first off, I would respectfully state that I don't completely agree with your assessment or we are with securing the country's borders.

I think there is action. Certainly, as far as with P-28, there has not been the timeliness or the action or actually the progression that we had hoped to this point in time, but I think we are in a good place as we go forward, and I think we have testified to that—

Mr. PASCRELL. Mr. Ahern, 90 percent of the discussion today, regardless of which side of the table we are on, is about the border in the south. We have other borders.

Nobody even talks about this. You don't talk about it. So don't give me the malarkey about we don't have a clear assessment as to what is going on.

Sir, continue. I am sorry I interrupted you.

Mr. AHERN. I was going to go ahead and end with the northern border after I completed laying down some of the things we are doing on the southern border.

Beginning with the tactical infrastructure, no one has ever stated technology nor P-28 is going to be the sole solution to this problem. It is the combination of the technology, the personnel and the tactical infrastructure.

We will have 670 miles of the border constructed with fencing by the end of this calendar year. We will have doubled the size of the Border Patrol since 2001 by the end of this calendar year, when we exceed 18,000 personnel to secure our borders to be able to respond to the threats that are there.

We will continue to develop the technological solutions, not solely P-28. As we demonstrated, we now have four UASs out there, as well as additional fixed and helicopters that are out there patrolling the borders and providing the technology.

We have also put out and we will actually continue to deploy a total of 40 mobile surveillance systems. These are the ground-based radar systems that will actually be able to provide security gaps being filled as we go forward.

So we will be providing that security this year, as well.

As to the northern border, we have now deployed and we will have our fifth air branch on the northern border deployed this fiscal year. We did not have those prior to 9/11.

We have increased substantially the size of our ports of entry as far as with technology—91 percent of the containers coming in from Canada are secured through radiation portal monitors.

The staffing has increased substantially. Border patrol will increase the size of the Border Patrol agents to 1,500. Certainly not enough for 5,000 miles, but we have different challenges and different risks for the borders and they need to be addressed appropriately.

We will continue to take a look at the technological solutions that are appropriate for the northern border this year as we look at a demonstration project for an SBI-type solution for the northern border, when we actually demonstrate the technology in a maritime environment later this year.

Mr. PASCRELL. Well, Mr. Ahern, we have chosen this fence. We have chosen this technology. By the end of this year, GAO is claiming that when you add up the pedestrian fencing and the vehicle fencing, you are talking about 670 miles, we will still have—we will have, just in this project, just in this project, we will still have, according to their figures, if you add them up, 367 miles to go.

When are we ever going to do this?

Mr. AHERN. Well, first off, as far as the miles that are needed, we have done careful assessments of those areas based on the analysis of the nine southwest border sectors, and maybe the Chief wants to elaborate in more detail, based on the risk and based on the apprehensions and based on the intelligence that is out there.

We believe that immediate solution of 670 miles for tactical infrastructure is appropriate for this year.

Mr. PASCRELL. Mr. Giddens was going to respond, Madam Chairwoman. Mr. Giddens was going to respond, if he would.

Ms. SANCHEZ. Mr. Pascrell, as usual, you are 3 minutes over.

Please respond and then we will move on.

Mr. GIDDENS. Sir, I believe your question was when are we going to move forward on this.

As Mr. Ahern indicated, we are going to reach the 670-mile goal by the end of this calendar year and we currently have efforts underway and we are doing a tremendous amount of work on the environmental front, to go through the process that is required under NEPA, and, also, we are going through the process of real estate acquisitions and gaining access to land, both public and private.

The Congress has clearly indicated that they have a strong desire for us to be very consultative through this process and we are trying to balance both the consultative nature, as well as the urgency to move forward.

Mr. PASCRELL. Madam Chairwoman, let me just say that if we continue to do geometrically what we are doing now, we will secure all our borders by the year 2028.

Now, that doesn't make me sit very comfortable and I know you don't either.

Ms. SANCHEZ. The gentleman's time has expired.

I will remind him that all our borders are not just land borders. So we really have even a larger problem than that, and that is a major problem.

I have not had a chance—Mr. Reichert, you will be next for 5 minutes, please.

Mr. REICHERT. Thank you, Madam Chair.

I might take longer than 8 minutes. I don't speak as fast as Mr. Pascrell does.

Ms. SANCHEZ. You are subject always to the gavel, Mr. Reichert.

Mr. REICHERT. Yes, ma'am.

We are talking about P-28, right? Isn't that why we are here? Okay.

So I am confused. We are no longer closer is what—we are no closer than we were 5½ years ago to a technology solution is what Mr. Pascrell said.

We have been at this for 5½ years. When was Boeing awarded the RFP? When did that happen?

Mr. KRONE. I think September 2006.

Mr. REICHERT. September 2006. When did the work begin?

Mr. KRONE. Well, the engineering and development work probably occurred shortly thereafter, within weeks.

Mr. REICHERT. When we started this project, was there a close working relationship with Border Patrol and Boeing, the stakeholders, the users of the system?

Mr. KRONE. Sir, I think there was a close working relationship with the Border Patrol, but not at the agent level. So I think where we learned a lot certainly in the summer of 2007 is when we actually got down to active users in Tucson who were on patrol every day and were able to sit with them in the command and control center and in some of the vehicles.

I think we learned a lot that we had only made assumptions about.

Mr. REICHERT. Was Boeing asked to develop the system without the input of the user?

Mr. KRONE. Well, I know it is characterized that way. I think it is a matter of degree, sir.

We actually had access to some members of the Border Patrol in the proposal process, but clearly it was not, I think, sufficient for us to design a system that met the needs of the actual Border Patrol agent who is out on patrol.

Mr. REICHERT. Chief, why was the man or woman on the beat not involved in the process of putting this project together with Boeing?

Mr. AGUILAR. That is one of the first questions I asked, Congressman, when we started going through this process.

Unfortunately, it was the process, the contractual process that was selected as a part of Project 28.

Now, I am glad to say that now we are fully engaged at the agent level. But at the very beginning, by contract, we could not engage at the agent level. In fact, even at my level, we couldn't engage with Boeing.

Mr. REICHERT. Who was responsible for the contractual agreement between the two agencies?

Mr. AGUILAR. I would have to pass that off to—

Mr. GIDDENS. Sir, this was established during the source selection process that began in 2006 and then culminated with the award of the contract to Boeing in September 2006.

As part of that process, Boeing proposed a demonstration project, in response to our solicitation, as did all the vendors. During that process, they did have limited exposure to CBP and, through the source selection process, which the process itself had Border Patrol and other users' involvement, that process resulted in the selection of Boeing and in the award of their firm fixed price effort that we know as Project 28.

There were reviews on Project 28 and there was some input provided, but there was not contractual direction provided to Boeing due to the nature that this was a firm fixed contract, which is part of the reason we sit in here today and we only have, from the Government's perspective, a \$20 million liability.

While we are moving forward with P-28, we had a very systematic process, working with all the users to generate requirements and then go from that to specs. So that as we move forward, as we are now, it is not in the firm fixed price environment, but in a cost-plus, which gives us an opportunity to have the side-by-side relationship that we have now.

Mr. KRONE. Congressman, if I could add. I don't want to leave the impression that Boeing is, if you will, hiding behind the fixed price contract structure.

We believe, in retrospect, that regardless of the nature of the contract, we at Boeing should have reached out to the Border Patrol agent and, clearly, that is a lesson learned and a deficiency on our part.

There has been a lot of discussion about the fixed price contract and though I think that turned out to be a tremendous value for the Government, I don't want you to think that Boeing is using that as an excuse for not reaching out to the actual user and involving them early.

Mr. REICHERT. No. Madam Chair, if you would indulge me just a few seconds longer. Thank you, ma'am.

It is not where I was going at all with this.

Mr. KRONE. Okay.

It is just a point that I wanted to make that how important it is for all of you to work together. Coming from my law enforcement background, I have really identified with the issue.

I think this really boils down to, as Mr. Stana, as quoted in the "Wall Street Journal," has recognized, this lack of cooperation at the beginning with the user has really resulted in some of its deficiencies that now we see are highlighted.

Mr. REICHERT. But the last question, very quickly, Madam Chair, if I may, is how—now, you are taking the lessons learned. How does Boeing intend to apply those lessons learned to your furtherance of the projects in Yuma, El Paso?

Mr. KRONE. Right. Well, absolutely, we have taken them quite at heart and we have—since, frankly, the last time we were here, we have actually had some coordination meetings with the Border Patrol.

We have had all of the sector chiefs for a broad session with our technical team. We are now, if you will, shoulder-to-shoulder in our

systems integration lab and as we go about designing the next generation common operating picture, we are doing that, if you will, with the Border Patrol agents side by side.

So a tremendous lesson learned for us and it is really what we call an IPT or an integrated process team, where we include the user from the very beginning.

Mr. REICHERT. Madam Chair, I thank you and I yield.

Ms. SANCHEZ. We will now hear from the Chairman of the full committee, Mr. Thompson.

Mr. THOMPSON. Thank you very much, Madam Chairwoman.

I am glad we are to this point in this project, but there are still, I think, some questions that we need to at least bring out.

Mr. Giddens, can you give me the timeline between the acceptance of this project and the awarding of any other contracts after this project?

In other words, did we award another contract on this SBInet before we had accepted the first contract?

Mr. GIDDENS. Yes, sir, we did. We have several contracts with the Boeing Company under SBInet.

The most recent one relative to the P-28 and the next generation, the common operating picture, was awarded in December, when we accomplished the conditional acceptance of P-28 and we saw, with that conditional acceptance, the confidence to move forward with that next generation of software and common operating picture.

We have had other contracts that—

Mr. THOMPSON. You have made my point.

Mr. Stana, is this considered good business practice to award another contract before you accept a prior contract?

Mr. STANA. It is interesting that you raise that. It was a year ago today that Greg Giddens and I and several others were at a hearing and one of the observations we made was about concurrency and the need to manage the risk that is associated with running many projects concurrently.

To their credit, the Department did begin to do them more consecutively.

Now, with respect to this one, my understanding of the common operating picture task order is to build on what was already used and found to be good and not so good about the COP, the common operating picture, provided for Project 28.

So it was to build on that experience and if the lessons learned are appropriately applied, then I think you could manage that risk in this case.

I don't know. I am not justifying whether it should have been Boeing or another company to do it. It is just that in order to move forward, they did have to move ahead.

Mr. THOMPSON. Well, I think my point that I am trying to make is do you wait until you have accepted the product in total and then award or do you award before you accept the product, and I think some of us have some concern that the ink had not even dried on the contract before we were moving to another level with this contract.

Mr. Krone, I think you want to make a comment.

Mr. KRONE. Yes, if I could, sir.

CBP made a decision, when we encountered difficulty with P-28, to halt the further deployment of P-28. At one time, we actually contemplated building more towers and propagating that system this year.

We actually reconfigured the program to go back and correct the deficiencies in the system and as of today, we are not under contract, if you will, to deploy more towers.

All we are under contract to do is to create the next generation command and control software and as that gets rolled out and runs through tests, if that is adequate, then we are only hopeful that CBP will decide to deploy that and to build additional towers.

So I think, to some degree, sir, they actually took to heart the comments that you have made and we have stopped the deployment of the P-28 system pending the completion of this new, improved software.

Mr. THOMPSON. Chief Aguilar, are you satisfied with a less than 95 percent detection rate with this demonstration?

Mr. AGUILAR. With this demonstration, we have a system that has given us capabilities that we didn't have in the past.

Am I satisfied to the 95 percent requirement that we have? Absolutely not. That is what we are working toward on the full SBInet deployment, which is going to be a build on from Project 28.

Mr. THOMPSON. All right. Well, then, my question, just for the record, is the original 95 percent detection rate we did not meet.

Mr. AGUILAR. No, sir, not under Project 28. As I understand it now, the contract specific to 95 percent was for the SBInet deployment, not for Project 28.

Mr. THOMPSON. Well, does a less than 95 percent detection rate put any of our agents at risk?

Mr. AGUILAR. Absolutely, yes, sir. If we can reach 95 percent today, that would be the best use of any technology.

Mr. THOMPSON. So it is to our advantage to meet that 95 percent.

Mr. AGUILAR. Absolutely, as fast as possible, yes, sir, and that is what we are building toward.

Mr. THOMPSON. Mr. Stana, your testimony before us was that it was your understanding that that should have been a prerequisite for this procurement.

Mr. STANA. Well, what I am reading from is the task order for Project 28 and the Project 28 task order says "contractor shall perform to the standards identified in figure 3E-1" and in figure 3E-1, it says "provide a common operating picture."

You are going to do detect, you are going to do identification, and the performance standard is CBP is able to detect 95, plus or minus 5 percent, of all border entries. That is the performance standard in the P-28 contract.

Mr. THOMPSON. Mr. Giddens, can you tell us why we accepted a contract without meeting that performance standard?

Mr. GIDDENS. Yes, sir, because the contract did not require us to meet that standard. We do not read in agreement with Mr. Stana on how he looks at the contract.

P-28 did not have as a requirement 95 percent detection as—

Mr. THOMPSON. Well, can you provide the committee with whatever contract document that this contract was performed under?

Mr. GIDDENS. Yes, sir.

Mr. THOMPSON. I would say to Mr. Stana, can you provide the information that you were provided to review the contract so that the committee can look at both and see whether or not there is a difference in contracting?

Mr. STANA. Yes, I will. I will point out that there are other aspects of this task order here that were also interesting along those lines, quality assurance standards program and things like that that ought to be read in this context.

My point isn't that 95, plus or minus 5 percent, is the standard only. My point is that this certainly created the expectation that something along those lines would be delivered, and it apparently hasn't been measured against.

Mr. THOMPSON. Well, my concern is that if Chief Aguilar's testimony is that anything less than that puts our agents at risk, then I want to make sure that we are getting our money's worth and that our men and women who put their lives on the line basically have a product that elevates that risk.

I want to be sure that if we invest in it, that it is to the benefit of the people who are sworn to protect us, and that is my incentive.

One of the last questions, I think. Mr. Ahern, throughout this project, we have had some challenges getting information. Were you under any pressure to not give us any information along the way?

Mr. AHERN. None whatsoever.

Mr. THOMPSON. Chief Aguilar, did you have any pressure?

Mr. AGUILAR. No, sir.

Mr. THOMPSON. I guess my last question is this project was due in June.

Did you receive any pressure to publicly support this project before it was completed?

Mr. AHERN. No. I think it is important, also, to provide an answer, certainly while you are here, Mr. Chairman, that I think that there have been representations throughout this hearing that we have not been good stewards of the taxpayers' dollars. I think that is anything but accurate.

I think, clearly, as far as we have—

Mr. THOMPSON. I don't know who made that representation.

Mr. AHERN. It has been a tone throughout this process and I would just like to state that I believe that we have held the contractor accountable through this process versus settling in the June–July, the September or the December time frame, and that we allowed them to continue to go ahead and fix this process with their own time and their own investment before we went to final acceptance.

Thank you for allowing me to put that onto the record.

Mr. THOMPSON. Well, now will you answer my question, which was: was Customs and Border Protection pressured to publicly support Project 28?

Mr. AHERN. Absolutely not.

Mr. THOMPSON. Chief?

Mr. AGUILAR. No, sir. The only thing I would add to that answer that I give is that the one constant throughout this process and remains today is what I refer to as the ground-truthing done by the agents in the field, and that is what I go on.

That ground-truthing is actually what was at the basis of not accepting on June 7, conditional acceptance on December 17, and then accepting last week, recognizing the limitations that it had. So that ground-truthing by those agents is absolutely critical to us.

Mr. THOMPSON. And that has been met.

Mr. AGUILAR. That has been what, sir?

Mr. THOMPSON. That has been met.

Mr. AGUILAR. The ground-truthing efforts by the agents telling us whether or not the project is meeting what we require.

Mr. THOMPSON. That has been met to your satisfaction.

Mr. AGUILAR. It has been met to the point that we have added capability that we didn't have in the past. It is not optimal and we are building toward that 95 percent degree that you spoke to. Yes, sir.

Mr. AHERN. Mr. Chairman, if I might add one other point to this, also. I think it is important and I don't make a frequent occasion of speaking for Secretary Chertoff, but I know that he has testified recently and even on his journal, his blog.

I was with him 2 weeks ago when we were in Tucson looking at the common operating picture at the Tucson command center and he asked the agents point blank, "Are you happy with what you have and do you see this as a future and something that will help you bring operational capabilities to secure the borders?"

There was a unanimous yes, because he went on to state that if it did not meet that expectation, he was not wedded to this solution or to Boeing as the provider and that we would move on.

Clearly, as far as—I think that is an accurate representation of—

Mr. THOMPSON. I appreciate it, but I don't know anybody whose boss would ask them that question that they would not give the same answer.

I mean, I am not asking for a response, but you ask a guy out in the field, "Are you satisfied with this?" he is not going to tell you no, because it is just not going to happen.

But what I would like, and I would like the Chief's response, is that people would be included in the process in the beginning so that they can help define the effort that you are trying to achieve, because they are the ones who are putting their lives on the line and I think it is in that spirit that all of us want this thing to work.

I appreciate the Chair's indulgence.

Mr. Ahern, I sent you a letter on February 8 and, at some point, dealing with an issue in my district, and I would hope that, at some point, I can get a response on it.

That is all I have.

Mr. AHERN. Absolutely. Also, we are trying to reach out to you over the last few days on another issue you had interest in, too, outside of your district.

Mr. THOMPSON. Thank you.

Ms. SANCHEZ. I thank the gentleman from Mississippi.

I am going to take my time now to sort of recap a little here and hopefully we will go into a second series of questions. I know the Members who are left here have a real interest in this.

Unfortunately, we also have some votes coming up. So we will see how all this works.

I want to go back to your last sort of indication, Commissioner Ahern, about something in the air as to whether things—taxpayers' money has not been safeguarded.

I believe what we have here is a very unhappy membership of this committee, generalizing, but I think a majority of it, with respect to how we have seen this project progress.

We are trying to figure out just where things began to change, how they changed, who changed them, what the expectations were, what the real contracts or task orders said, and how we have arrived at what we have received as an end product, and that is what we are really trying to do here.

We are going to keep asking the questions and we are going to keep bringing you up here until we have figured out what we got or how we got it and whether that is an acceptable way of doing business.

That is our job. If it is not an acceptable way of doing business, then I am sure, in a very bipartisan manner, as we have tried to manage this, we will have something to say to the administration over that.

So my real intent is, first of all, to ask Mr. Stana, who has been seeing this now for a while and is supposed to be an independent pair of eyes for us.

First of all, Mr. Stana, have you received the cooperation level that we expect now at this stage of the game? I know before we had problems. Are you getting the information that you asked for? Are you getting the meetings?

Are your people able to get their hands on the information they need in order for us to figure out how this project really evolved?

Mr. STANA. Madam Chairwoman, I would say absolutely, yes. Greg Giddens and his people have been absolutely cooperative with us.

When we travel to the sectors with the Border Patrol, their people have been nothing but candid and frank about the pluses and minuses of the system.

We have no complaints at this point.

Ms. SANCHEZ. Mr. Stana, in your opinion, in your professional opinion, was the contract task order, whatever it is that we have in writing, in which we engaged with Boeing for \$22 million or so, a project that was supposed to be a project across these 28 miles, in your opinion, was—in your reading, in your people's reading of that document, what we were supposed to receive, is it somewhat different, significantly different than what was accepted by the Department, or not different at all, adhered to the letter of whatever we signed on for?

Mr. STANA. The contract, the task order, as I understand it, was prepared by Boeing and signed off by Boeing. So there are certain ambiguities that could be read into this one way or the other.

I think if you do a strict reading of it, you could come to the conclusion that perhaps Boeing over-promised a bit with what it could deliver in the time it was allotted to perform in this contract.

It is not unusual in Government that you have a contractor who over-promises a little bit and you don't quite get what you thought

you were going to get. It is not uncommon, particularly in technology programs.

But it is a very ambitious schedule and very ambitious performance standards that are written in this document.

Ms. SANCHEZ. There is a general feeling off of this committee that Project 28 was to be a pilot project, something that would test things and something that, when finished, would be operational.

We would get it right until it was operational and it would be an ongoing operational piece and that then we would take lessons learned, technology off of that, and go and apply it in other sections, that it was not supposed to necessarily be a continuing pilot project, that it was supposed to, in fact, meet some standards for us to catch bad guys, intruders, et cetera.

It is a feeling of this committee that what was accepted, by some membership of this committee, that what was accepted was less than that standard of a real operational ongoing real project, but more so just a test bed where we don't have confidence levels as to what is happening or measurements as to what is happening.

In your professional opinion, what are we closer to in what the Department has accepted from Boeing and its conglomerates?

Mr. STANA. Let me answer it this way. As I understand it, and we have looked at these contracts and talked with a lot of folks over the last few months, originally, there were two goals.

One was to test the concept and the other one was to leave behind a capability. If you look at the language, there is nothing in here that is inconsistent with those two.

When you promise a guarantee for 1 year after acceptance for the materials you leave behind, certainly, you get the impression that a leave-behind capability was envisioned.

What we have is a test bed and test results which found that maybe this capability that was supposed to be delivered was not really the correct one in some ways.

The Border Patrol isn't finding it particularly useful for a number of reasons, everything from the mounting of the machines, the computers in the vehicles to their capabilities. You have to drive to a certain hotspot to pull a signal down.

It is not really what they had envisioned. Whether every agent should have the capability of controlling cameras and radars, that should be an open question.

Having said that, they have compiled enough lessons learned, that was the first—the concept—there are enough lessons learned that, if applied to future programs, it could be something that was worthwhile here.

Now, should the Government have waited until every particular facet of the performance standards were met before accepting this Project 28? That is a decision the secretary made. I am sure he gave lots of consideration to that versus moving on, taking lessons learned and moving the ball down the field.

So I am not trying to second guess that. But what I would say is as far as a leave-behind capability, which was one of the two original goals, the fact that we are going to be swapping out almost all of the equipment within the next year tells you that that wasn't met.

Ms. SANCHEZ. Will that swap-out be at an additional price to the taxpayers?

Mr. STANA. Yes.

Ms. SANCHEZ. Do you have an idea what the ballpark figure is of that additional cost on those 28 miles, the additional price to the—not the cost, but the price that we will pay as taxpayers to that?

Do you have any ballpark figure? Have you heard anything thrown around?

Mr. GIDDENS. Ma'am, I would like to take that back for the record and get back. I don't have a number on me for that.

But I want to clarify, though, that that expense is not to fix anything in P-28. It is to go to the next generation, because we believe, at final acceptance, P-28 has satisfied the terms of the contract.

As Mr. Stana indicated, in terms of the lessons learned, we believe we have gained great insight from having that capability out. It has allowed us to learn from it. I think it has allowed the Border Patrol to explore concept of operations.

We do want to do just as Mr. Stana said and apply those lessons learned to this next generation.

Ms. SANCHEZ. Mr. Stana, if, in the real world, you were secretary of homeland security and it was your job to sign off as to that task order that you have in front of you, after having taken a look and knowing and seeing what Mr. Chertoff signed off on, if you had been in that position, would you have signed off on behalf of the American taxpayers?

Mr. STANA. We received a number of documents yesterday that I would like to go through before I give you a decision. The documents were provided to us. They really speak to what the testing results were and what the acceptance was based on.

I just don't think I can make a good informed decision for the record until I get a chance to review those documents.

Ms. SANCHEZ. Thank you.

I will recognize Mr. Souder now, actually, for 5 minutes, if you have any additional questions you would like.

Mr. SOUDER. Thank you, I do. We have spent a lot of money learning lessons. You might say it has been a very expensive school, because this isn't the first round of doing this.

This was supposed to be building, as we talked during the break, on previous systems that weren't working and then this was another one.

Mr. Krone, for the record, you are not alone in this. Who are your partners in this?

Mr. KRONE. We have a broad series of partners. L-3, which I am sure, sir, you remember back from the ISIS days, DRS, Intergraph, Unisys, and Flair, Inc. There is a whole industrial team. Perot Systems.

I can get you a complete list, but those come to mind.

[The information follows:]

SBINET INDUSTRY TEAMMATES

- Unisys
- L-3 Communications
- USIS

- Perot Systems
- DRS Technologies
- Kollsman Inc.
- The Centech Group, Inc.
- LGS (formerly Bell Labs)

Mr. SOUDER. The reason I want to point that out is these are supposedly many of our best and brightest who were going to work on this.

I just want to say this for the record. I had a company that was a foreign-owned company, from Europe, who raised questions whether the partnership, because they hadn't really done anything like this before, was able to meet this.

Now, there is very little worldwide experience and, quite frankly, I wasn't going to intervene in any way, in a process anyway, especially for somebody not American. But it is not as though there weren't concerns going into this whether we were going to achieve some of the goals.

I am confused on the contract.

Mr. Giddens, is this—

Mr. KRONE. Sir, can I comment on that, very quickly?

We had Colesman on our team, which is associated with Elbit in Israel. They have actually quite a sophisticated system that they are involved in in Israel and we selected them to be on our team in an attempt to get those international lessons learned into our engineering.

Maybe we didn't have all of the right ones, but we did reach out.

Mr. SOUDER. I appreciate that clarification and I didn't mean to imply that this other company would have done it either, and I regret that that is what I implied.

I am just saying that there was a relative lack of experience from anybody having tackled anything this great, and I would expect that to be reflected in the kind of performance orders.

I wanted to get into a couple particulars, and I thought the last round of questioning was really helpful, but I want to say it again.

Mr. Giddens, did you disagree with something Mr. Stana said or you just is there are additional things beyond what he said, when he read that criteria?

Was he reading from something that was, in effect, incomplete or was it inaccurate, when he was reading the 95, plus or minus 5?

Mr. GIDDENS. I think he is reading that from the task order, but you have to look at the documentation in total and I think if you pull out one section of that, you don't get the complete picture, and that is why I think Chairman Thompson indicated he wanted us to do.

Mr. SOUDER. When it says that there is going to be swapping out of equipment, as I understood what you just said a minute ago, that didn't mean you were going to replace the Project 28.

Is the swapping out for future areas?

Mr. GIDDENS. Sir, we have a couple of efforts ongoing in the Project 28 footprint. We will transform Project 28 to this next generation with some new hardware and a new common operating picture software this summer.

We are also looking at a new start site that does not have current infrastructure and I think the deputy commissioner mentioned

earlier about a project that we are looking at in the northern border as a demonstration to look at the maritime and the air and the ground integration.

Mr. SOUDER. So Project 28 will function roughly as it is currently set.

Mr. GIDDENS. Sir, it will function as is until this summer, when we go in and replace some of the equipment and we replace the software that is behind the common operating picture. But it will be in use until that time.

Mr. SOUDER. Now I am confused again. So we are going to have to invest more in this 28 miles.

Mr. GIDDENS. Yes, sir.

Mr. SOUDER. Was that expected in the original?

Mr. GIDDENS. Yes, sir. We have indicated that even—

Mr. SOUDER. Is the stuff wearing out or it is just like the software program was wrong and they, with their own funds, beyond the contract, discovered a better way to do it? So now we have to come back in and the taxpayer is going to pay for that, then.

Mr. GIDDENS. What we are doing—and some of the equipment has been out in the field for several months. The swap-out that I was talking about is a swap-out as we look at new pieces of hardware, adding an additional type of radar for different areas in the terrain, and looking at different camera solutions, that we will swap that out this summer, as well as the next generation software for the common operating picture.

Mr. SOUDER. In these contracts, that presumably means you don't think that the current version meets what are at least optimal goals.

In the contract, is it that we have these hopes, high hopes and low standards? I am trying to separate what this gap is, because you accepted it. It sounded like you had high goals, but there are other things that can enable you to lower the goals down a little bit, because it is still an improvement, as Mr. Aguilar said.

But in this range, you are coming back in and saying, "But the software isn't really what we are going to do. We need different radar than we had or additional, because we didn't know that was"—I mean, you are going to learn some, but this was supposed to be where we were learning inside this contract, in the dollars that were there, not after.

I am confused.

Mr. Krone.

Mr. KRONE. So sorry, if I could, and this might take a minute to sort of explain the contract structure.

So there is what we call an IDIQ umbrella to the program which we refer to as SBInet, which is a series of multiple task orders. There is a cost in the IDIQ, which we call the spec, and it has the 95 percent probability of detect, and that is a requirement of the SBInet total program.

The concept in the acquisition was that this technology solution at maturity will achieve a 95 percent probability of detect. There is a task order called P-28 underneath that umbrella, and I have read both contracts, and the goal of the P-28 task order goal is to demonstrate on a prototype among a 28-mile piece of fence around Sasabe the technology solution.

In the fixed price contract, Boeing proposed specific cameras, specific radars, a specific set of software and a specific set of user equipment in the vehicles. That is what we were fixed price under contract to do.

It was, if you will, build it, test it, and see where we are. If we achieved a 95 percent probability of detect, we would have been done. But as we put this system together with radars that we specified in the proposal process, we actually got them out into the real terrain, with real operators, we are unhappy with their performance and so is CBP.

So we have, under a subsequent task order called the CQI task order, going back, looking at the operational software, the command and control software, and the specific sensors on the tower, and swapping out some of the sensors for sensors that are better able to operate in that particular environment.

Now, those sensors that we bought under P-28 we are not discarding. Those are going back into the program. They can be used for tests. They could subsequently be used in other areas, maybe rolling terrain, where the terrain is not as severe.

So the money that the Government has spent on P-28 for that equipment, that is not being discarded. We intend to keep those sensors and cameras around and perhaps reuse them further.

But we have asked quite a bit about this 95 percent probability of detect. We don't think, with the cameras that we have, the radars and cameras we have on the towers today and their geographical location, that the calculus would permit us to actually demonstrate 95 percent.

So in these improvements that we have talked about, the next generation COP and swap-out of some of the sensors, we want to get the system to where it is at 95 percent probability of detect, and that is the way the two contracts iterate.

The P-28 prototype had a goal of demonstrating that compliance specification. The requirement actually resides up at the SBI net contract.

Ms. SANCHEZ. The gentleman's time has expired.

We will allow Mr. Carney a couple of questions, I hope, in the next few minutes before we have to go and vote, and we will adjourn.

Mr. CARNEY. Thank you, Madam Chairwoman.

Let us continue on that line that—Mr. Krone, we didn't get 95 percent with the current cameras and radars, right?

Mr. KRONE. Well, actually, sir, we don't think we will.

Mr. CARNEY. What do we think we will get with the new cameras and the new radars?

Mr. KRONE. Our goal, our requirement—

Mr. CARNEY. What do we think we will get?

Mr. KRONE. We are going to put a system in that will deliver 95 percent probability of detect. If I could, the way we would determine that is we take the performance of the cameras in the actual environment, the geographical location of the towers, the spacing between towers.

We characterize the target, if you will, human beings crossing the border, and we analytically, using modeling and simulation, determine the performance of the system and then, through a sys-

tems engineering process, we look at performance of each of the sensors in the lab.

We then build this end-to-end. We go back and review systems performance so that we can verify that the system is performing as designed.

That is the process we are now embarking on to increase the performance, if you will, of this P-28 area so that we can demonstrate the probability of detect of 95 percent.

Mr. GIDDENS. Sir, could I add on to this? Mr. Krone is talking about, from Boeing's perspective, what they are bringing to this solution set.

But I want to go back to something the deputy commissioner talked about. We are also employing mobile surveillance systems. He showed the video of the unmanned aerial system.

All those things will be brought together. It is not just towers, it is not just unattended ground sensors. It is all of those working together.

When the Chief referred earlier about the overall SBInet, that is really what is encompassing that. It is not just a tower solution. It is really looking at all of those working together and what is their percentage of detection.

Mr. CARNEY. That I understand, but we are talking about P-28.

I want to close with this. We talk about added capability. Now, the P-28 and the cameras and radars, that is new to the Tucson sector, as I understand this correctly.

So, yes, that is added capability to the Tucson sector, but we have had cameras and radars elsewhere on the border.

So for the Border Patrol at large, what is new about P-28?

Mr. AGUILAR. What is new about 28 and the, again, marginal limited capabilities that it has brought to us is the following: that today, as we speak, we have a ground surveillance radar system that makes a detection. That same system, along with that ground surveillance radar, then queues in a camera, whether it is automatically or an agent sits in and actually queues in to the target.

We are able to detect, we are able to identify and classify what that intrusion is.

Now, compare that to the other pieces of technology that we have used in legacy Border Patrol, legacy INS.

By the way, all of that that I just described is in one location, centralized, and covers now a 28-mile area.

Mr. CARNEY. I saw it, yes.

Mr. AGUILAR. In the past, what we had is a camera or a camera system, if you will, that basically an agent would have to sit there and basically scan.

The only detection capability was for an agent to put an eye on that actual incursion as opposed to a ground surveillance radar system actually picking it up.

Once that agent picked up visually, then he made a call and said, "This is where it is at." Today we have the capability to call on GPS. So we have the beginnings of a system, a system of systems, if you will.

So by incorporating and integrating that technology, it gives us a force multiplier in the sense that it gives us a much broader scope of looking at our border, seeing what is happening real time.

As opposed to being dependent on stand-alone technology, one camera system may be able to see 3 miles.

Mr. CARNEY. That I understand. So, Chief, to your way of thinking, on Project 28, apparently going forward with it now.

Mr. AGUILAR. Yes, sir.

Mr. CARNEY. That is where SBInet is going.

Mr. AGUILAR. Project 28 is the first building block to the foundation for SBInet. Now we build on it to get us to that system that is going to be a truly collective system that brings in the air piece, that brings in the unattended ground sensors, that brings in the personnel blue force tracking, that brings in all of the other, to include intelligence speed, that will give us that unified situational awareness in density that we have never had before.

Mr. CARNEY. I think that is a distinction that is pretty fine in a lot of people's minds on is this the test bed for the future of the border.

Gentlemen, thank you for your time. I appreciate it. I am sure we will see you again. Take care.

Ms. SANCHEZ. I thank the witnesses for their valuable testimony and the Members for their questions.

Members may have additional questions. They will submit them to you in writing. We hope that you will answer back quickly.

Hearing no further business, the subcommittees stand adjourned.  
[Whereupon, at 12:25 p.m., the subcommittees were adjourned.]



## APPENDIX

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QUESTIONS FROM CHAIRWOMAN LORETTA SANCHEZ AND CHAIRMAN CHRISTOPHER P. CARNEY FOR JAYSON P. AHERN, DEPUTY COMMISSIONER, CUSTOMS AND BORDER PROTECTION, DEPARTMENT OF HOMELAND SECURITY

*Question 1.* Per the original SBInet bidding process, offerors were told to propose their technical solution, as well as what they could construct for \$20 million over a very short timeframe. Essentially, the Department created an incentive for the contractors to “knock your socks off” for \$20 million so they’d have an opportunity at a much bigger payoff through follow-on SBInet contracts. Doesn’t this structure almost guarantee that a contractor will overreach and overpromise? To some degree, didn’t the Government set up the first operational SBInet task order for failure?

Answer. Response was not provided at the time of publication.

*Question 2.* In addition to continued efforts on the “virtual fence,” the Department intends to have a total of 370 miles of pedestrian fencing constructed by the end of the current calendar year. We have heard that the locations for the planned fencing were determined by the operational needs of the Border Patrol, as identified by Border Patrol’s sector chiefs. Is that correct?

Answer. Proposed fence locations were determined through operational assessments made by the local Border Patrol Agents and Chiefs, based on illegal cross-border activity and the Border Patrol’s extensive field experience in these areas. The primary objective with selecting certain areas is to provide an additional security measure in areas experiencing significant illegal cross-border activities and traffic. The areas chosen for fencing were based on historical and common illicit trafficking trends and our vulnerabilities. Furthermore, three main factors contributed to fence location decisions in addition to the initial Border Patrol operational assessments: engineering assessments, which included construction costs; environmental analysis; and input from stakeholders. Each of these steps is a standard element of the planning process that enables DHS to make informed decisions in deploying a fence as operationally required.

*Question 3.* Some have said that the Department’s biggest failure with respect to Project 28 was the failure to manage expectations. Do you agree that was the Department’s biggest mistake, and why or why not?

Answer. The SBInet technology program is complex and DHS clearly understands the difficulties associated with communicating about highly technical aspects of the program. For example, the meaning of terms such as “spiral development,” “prototype” and “technology demonstrator” may not be readily understood by internal and external audiences. Additionally, while documents such as the SBInet Expenditure Plan submitted to Congress in December 2006 did identify the need for follow-on development, as discussed below, confusion did arise regarding the differences between Project 28—the initial fixed-price proof-of-concept prototype task order—and the overall SBInet solution. Finally, the aggressive development and deployment schedule for P-28 increased the communications challenges facing DHS. Recognizing these factors, DHS remains committed to ensuring that our communications, both internal and external, clearly lay out the scope and intent of the overall integrated SBInet solution and the projects that are being developed within CBP’s border security technology program.

We do not believe that Project 28 was a failure. As part of the competitive SBInet solicitation and original call to industry for proposals, firms were asked to propose an initial task which could be one or more parts of their overall concept of operations for border security. Project 28 was Boeing’s initial prototype demonstration and was designed to be a proof of its overall concept, something we could test, evaluate and learn from and the initial building block for the system’s future technology foundation. After successful field testing, CBP formally took acceptance from Boeing on February 21, 2008. As a prototype, the system provides initial capabilities and

CBP is now using the many lessons learned from P-28 to focus on the transformation of the future SBInet solution.

Clearly, we did not successfully avoid confusion of the overall SBInet program and its goals of an operational border surveillance system with what was essentially that first, fixed price proof-of-concept Task Order—Project 28. Project 28 was always intended to demonstrate the feasibility of Boeing's concept to design and deploy a tower-based integrated sensor and common operating picture concept to secure the border. Had we been more attuned to the divergence between expectations and reality regarding Project 28, we would have spent greater effort differentiating what Project 28 was and, more importantly, what it was not going to be. In hindsight, we now realize that many came to believe and expect that Project 28 would be an actual end-state "virtual fence" system for Border Patrol agents that would immediately be replicated across the border without further research, development and testing. P-28 was never intended to be the final, integrated operational configuration. Additionally, it was never conceived that this type of system would simply expand across the entire border.

*Question 4.* What does Project 28 not do today, now that it has been accepted, that you thought it would when the contract was awarded?

Answer. Response was not provided at the time of publication.

QUESTIONS FROM RANKING MEMBER MARK E. SOUDER FOR JAYSON P. AHERN, DEPUTY COMMISSIONER, CUSTOMS AND BORDER PROTECTION, DEPARTMENT OF HOMELAND SECURITY

*Question 1.* When do you expect the first deployment of SBInet along our northern border? To what extent is DHS coordinating with Canadian officials in this effort? Will SBInet be integrated with technologies already deployed by the Canadians?

Answer. Response was not provided at the time of publication.

*Question 2.* When do you anticipate SBInet will be fully deployed along both U.S. land borders and what is the total projected cost?

Answer. Response was not provided at the time of publication.

*Question 3.* The President's fiscal year 2009 budget requests \$41 million for deployment of Project 25, a tactical communications system in El Paso, Rio Grande Valley. What are the timeline and scope of this phase of SBInet?

Answer. Response was not provided at the time of publication.

*Question 4.* When will the COP.5 and C3I task orders be completed? Will these be applied to the entire Arizona border? If so, please provide a timeline for development and deployment, as well as projected costs.

Answer. Response was not provided at the time of publication.

QUESTIONS FROM CHAIRWOMAN LORETTA SANCHEZ AND CHAIRMAN CHRISTOPHER P. CARNEY FOR DAVID V. AGUILAR, U.S. BORDER PATROL, CUSTOMS AND BORDER PROTECTION, DEPARTMENT OF HOMELAND SECURITY

*Question 1.* Have you talked with agents who have been trained on P-28 concerning their experiences with it in the field? What have they told you about the performance? What do they like, what do they not like, and how will it need to be improved?

Answer. Agents like the system's ability to provide some situational awareness in an environment that has been lacking in technology. With P-28, agents in the field are provided blue force tracking of other P-28-equipped vehicles that are geospatially displayed on a map. Targets that have been classified as likely violators are dispatched to them in the field and also geospatially displayed.

P-28 provides a more efficient means of scanning the Area of Responsibility (AOR) for possible violators. With the integration of the radar sensors and surveillance equipment, the COP workstations identify and classify movement.

One dislike is that the P-28 software was originally developed for a police dispatch-type environment. Even though this was how P-28 was proposed and put on contract, the dispatch-type environment has resulted in information being held in dispatch until the COP operator assigns the information to a unit or multiple units. This has created a bottleneck of sensor information to the agents in the field from the COP workstations. However, by doing P-28 as a technology demonstration project, we were able to get on-hands experience with a system and use it to better define and refine our requirements.

In the future, a more real-time Command, Control, Communications, and Intelligence (C3I) system will need to be developed to best meet the needs of the Border Patrol as well as CBP as a whole. This type of C3I system will be better suited to the way operational decisions and deployments are made within CBP.

*Question 2.* We have been told by line agents that while P-28 does provide some functionality today, it is still not a force multiplier. In other words, the same number of agents provides the same level of security that it did before P-28 was put in place. Do you agree with this?

Answer. P-28 was designed to demonstrate key technologies and provide a platform to better inform our requirements definition. Although the P-28 system does not provide the force multiplier enhancements we envision the end SBInet system will provide, it does provide some efficiencies in detecting, identifying and classifying possible violators as well as increased situational awareness for agents in the field in an environment that has been lacking in technology.

*Question 3.* We have been told about apprehensions that were made using Project 28 technology. Do you believe these would not have happened using traditional Border Patrol techniques, without the P-28 technology?

Answer. P-28 has placed resources, in the form of detection and surveillance, in an area that has previously been limited to unattended ground sensors as a means of detection. Nine P-28 towers deployed 9 radar sensors and 27 cameras in an area where there had been limited surveillance activity using one IR camera mounted on a truck.

P-28 provides a more efficient means of scanning the AOR for possible violators. With the integration of the radar sensors and surveillance equipment, the COP workstations, identify and classify movement.

Some of the detections and apprehensions made with P-28 have taken place when other traditional means have been unsuccessful. As of 4/4/2008, there have been 3,144 documented apprehensions attributed to P-28.

*Question 4.* With regard to the expectations for what the COP 0.5 Task Order is expected to accomplish, we want to avoid any of the confusion that surrounds Project 28. To this end, please provide the acceptance criteria, both in narrative form and in detail (include attachments if necessary), for the COP 0.5 Task Order. Also, please describe plainly what new functionality you expect the Task Order to provide to the Border Patrol, as well as what it will do, and what it will not do.

Answer. Response was not provided at the time of publication.

*Question 5.* What does Project 28 not do today, now that it has been accepted, that you thought it would when the contract was awarded?

Answer. P-28 meets what we contracted for. P-28 was the initial demonstration of the feasibility of SBInet's integrated technology concept. As such, P-28 was designed to be an operational prototype that could be tested, evaluated, serve as the initial building block for the system's future technology, and provide valuable lessons learned. It was not intended to be a final operational configuration. P-28 provides operational technology in an area that did not have these resources and has increased CBP's effectiveness in this area along the Arizona-Mexico border.

QUESTIONS FROM RANKING MEMBER MIKE ROGERS FOR DAVID V. AGUILAR, U.S. BORDER PATROL, CUSTOMS AND BORDER PROTECTION, DEPARTMENT OF HOMELAND SECURITY

*Question 1.* It is clear that one of the most crucial elements to securing our Nation's borders is having adequate Border Patrol staffing levels.

How many Border Patrol Agents are currently deployed in the field?

How many are in training?

How many are in the pipeline?

Are you on track to reach your target number of desired agents by the end of this year?

Answer. As of March 29, 2008, there were 15,985 Border Patrol agents onboard, 1,264 agents in training, and 8,015 in the pipeline.

We believe we are on track to have more than 18,000 Border Patrol Agents on board by the end of calendar year 2008.

*Question 2.* In 2005, the Management subcommittee held a hearing on Border Patrol training and associated costs. At that hearing, a CBP Assistant Commissioner testified that it costs \$179,000 to recruit, hire, and train one Border Patrol Agent.

Do you know if that cost is still accurate, or has the cost been reduced since then?

Answer. The \$179,000 figure represented the budgeted cost for recruiting, hiring, training, equipping, and deploying a new Border Patrol Agent—to include salary costs, not just recruiting, hiring, and training. Budgeted costs for new Border Patrol Agents are updated annually. For the fiscal year 2009 budget, \$159,642 is the budgeted cost for recruiting, hiring, training, equipping and deploying a new Border Patrol Agent—to include salary costs.

The fiscal year 2009 figure is lower than figures used in the past because some costs (e.g., construction, "build out," and relocations) have been removed and are now treated as separate budget line items.

*Question 3.* According to the Department, in fiscal year 2007 assaults on Border Patrol Agents rose 31% as compared with 2006. Acts of violence perpetrated against Border Patrol Agents, including rocking, is a serious problem.

Could you please update the subcommittees on the scope of this problem?

What plans does the Border Patrol have to upgrade its vehicles to include reinforced steel and shatterproof windows to increase protection for the Agents?

Answer. As anticipated, the level of assaults on Border Patrol Agents along the southern border has increased as we have gained operational control and taken away sections of the border where smugglers once operated with impunity. The inability to freely conduct their illicit activities has frustrated these smugglers and led to their use of more violent tactics.

This is evidenced by the following statistics: From October 1, 2007, through March 31, 2008, there have been 577 assaults on Border Patrol agents Nation-wide. This represents a 35% increase as compared to the same time period in fiscal year 2007 and a 37% increase as compared to the same time period in fiscal year 2006. Of the 577 assaults that have occurred in fiscal year 2008, there have been 424 rocking assaults, with San Diego Sector experiencing the highest number of these types of assaults with 175.

In the five sectors with the largest number of rocking assaults (San Diego, El Centro, Yuma, Tucson, and El Paso), the Border Patrol has vehicles with reinforced steel cages over the windows and/or armored vehicles with bullet resistant glass. These five sectors account for 408 of the 424 rocking assaults. Each sector determines the appropriate number of vehicles to retrofit based on the volume of rocking assaults and the patrol area. For instance, San Diego Sector retrofitted additional vehicles at the beginning of this fiscal year based on the increased rocking assaults occurring in an area requiring the presence of agents close to the border fence.

In addition to the vehicle protection, Border Patrol has adopted less than lethal technology such as the FN-303 and Pepper ball launcher systems. These systems deploy "paint-ball" type projectiles filled with Oleoresin Capsicum powder for area saturation and kinetic impact to de-escalate violent situations. The Border Patrol continues to explore new technology to address border violence and to protect our agents.

#### *Border Violence Protocols*

On March 3, 2006, a bi-national action plan to combat border violence and improve public safety was signed by Secretary Michael Chertoff and Carlos Maria Abascal Carranza, Secretary of the Interior for Mexico. This action plan set forth goals and objectives to ensure that the appropriate law enforcement agencies of the respective governments work together to provide an effective comprehensive joint response to incidents of cross-border violence and crime.

In response to the aforementioned action plan, CBP created a headquarters bi-national working group to oversee the development and implementation of Border Violence Protocols along the southwest border.

The Border Violence Protocols have been implemented in all southwest border sectors. Parties from both sides of the border meet monthly to discuss border violence issues and how to address them.

#### QUESTIONS FROM CHAIRWOMAN LORETTA SANCHEZ AND CHAIRMAN CHRISTOPHER P. CARNEY FOR GREGORY GIDDENS, EXECUTIVE DIRECTOR, SECURE BORDER INITIATIVE, CUSTOMS AND BORDER PROTECTION, DEPARTMENT OF HOMELAND SECURITY

*Question 1.* Per the original SBInet bidding process, offerors were told to propose their technical solution, as well as what they could construct for \$20 million over a very short timeframe. Essentially, the Department created an incentive for the contractors to "knock your socks off" for \$20 million so they'd have an opportunity at a much bigger payoff through follow-on SBInet contracts. Doesn't this structure almost guarantee that a contractor will overreach and overpromise? To some degree, didn't the Government set up the first operational SBInet task order for failure?

Answer. The purpose of the "Offeror's Proposed Task Order" was to mitigate the Government's risk. CBP wanted to ensure that the contractor awarded the SBInet contract could demonstrate the feasibility of its proposed solution early enough in the development process so that course corrections could be made if necessary prior to awarding future operational task orders.

CBP does not believe it created an environment that encouraged industry to overpromise, or placed industry in a position where it would fail to perform the proposed

task order. Careful consideration was given to the evaluation criteria included in the SBInet solicitation, which supported CBP in focusing industry's attention and effort on the most important evaluation factors: the proposed SBInet solution; performance measures and quality assurance surveillance plan; the management plan; and performance risk.

A team of operational and subject matter experts from within DHS evaluated all of the proposals in this area to ensure that: (1) They were technically achievable; (2) they demonstrated the feasibility of their overall technical approach; and (3) the price proposed was reasonable and realistic. Our experts found that Boeing satisfied these evaluation criteria with its proposed task order for the initial demonstration. The Project 28 prototype was designed to be a proof of concept of a tower-based integrated sensor and common operating picture; it was not intended to be the comprehensive, integrated SBInet system. CBP is now taking the many lessons learned from Project 28 and focusing on the development and deployment of the integrated SBInet solution.

*Question 2.* We have been told that a lot of the lessons learned from P-28 will be useful for upcoming projects. What are these lessons, and how will you ensure that they are put to use as you move forward with SBInet?

Answer. While the prototype technology deployed under P-28 is operational today and detecting illegal entrants for the Border Patrol agents, SBInet is moving forward to design and deploy a Block 1 configuration of the system. As part of our ongoing design of the system, we are incorporating lessons learned from P-28. After reviewing and analyzing the lessons learned, we have categorized the challenges into the areas of program management, technology and acquisition. Specifically, areas that we are looking to improve and build on for future SBInet developments include expectation management, community and communications outreach, standard hardware integration, acquisition strategies and system training. Several technical, acquisition, and operational lessons have already been incorporated into our planning for future SBInet deployments. For example:

- Commercial off-the-shelf components, even proven technologies, cannot be integrated "right out of the box" in the field without interface design, thorough testing, and integration in the laboratory. SBInet is fully testing and integrating the first operational configuration of the SBInet solution in a Systems Integration Lab before testing in the field.
- The interfaces between the sensors and the COP are as important as the technical characteristics of the sensors themselves. The follow-on sensors selected for SBInet will have common standard controls and interfaces.
- The Project 28 towers had significant limitations due to the use of satellite data links and the inherent problems with latency and bandwidth. The follow-on operational configuration will use microwave data links in lieu of satellite data links.
- The P-28 COP software was based on a commercial civil system used for the dispatch of public safety assets. This proved to be inadequate for the command and control of a sensor net and the distribution of a near real time situational picture.

*Question 3.* Senior Department officials have told us that the acquisition plan for Project 28 was extremely risky. Do you agree, and if so what about it was risky? In retrospect, what steps should you have taken to mitigate those risks?

How risky is the acquisition plan for the COP 0.5 task order?

Why is it less risky than P-28?

Answer. The acquisition plan for the SBInet system, including the "Offeror's Proposed Task Order" (now known as Project 28), was aggressive from a schedule perspective but no less risky than similar major systems acquisitions throughout Government. Given the technical complexity of the acquisition and the unique requirements of Federal contracting, risk is unavoidable and must be managed. Given this reality the administration, DHS and CBP gave considerable thought and consideration to the overall acquisition strategy and plan for the SBInet system. For example:

- The term of the contract was limited to total of 6 years, including a 3-year base period with 3 1-year options.
- To mitigate future cost risk, evaluations of teaming agreements were conducted. This approach provided DHS the opportunity to ensure these agreements do not bind the Government to long-term pricing agreements that may not be competitive in future years.
- Comprehensive task order cost and price evaluations are conducted on each task order to ensure competitive and current market rates.
- Organizational conflict-of-interest mitigation plans, oversight, and technology reviews are in place to ensure that the contractor, associated corporate entities,

and subcontractors do not inappropriately leverage their role as “system designer” to drive solutions that would provide them with an unfair competitive advantage on future competitions.

- DHS retains the right and flexibility to separately compete work to support systems implementation. For example, DHS may opt to separately compete fence construction and installation for a given project area. Alternatively, it could choose to provide the contractor with furnished equipment and services such as wireless telecommunications.
- Although complex, the Department does not envision large capital assets being needed to support the solution. The absence of major capital asset acquisition and deployment reduces the overall risk level to the program.
- Strong program and contract management continues to be developed to ensure proper oversight of the contract.

Moreover, regarding Project 28 specifically, the purpose of the task order was to mitigate the Government’s risk. DHS and CBP wanted to ensure that the contractor awarded the SBInet contract could demonstrate the feasibility of its proposed solution early enough in the development process that course corrections could be made if needed.

The performance challenge experienced in the Project 28 task order involved inadequate systems integration of the technology. As a result of this lesson learned, Boeing has established a systems integration lab (SIL) that is being utilized to test the components and integrated system for future SBInet deployments. The lab will help determine the effectiveness of the hardware within our system of towers, sensors, communication, common operating picture hardware and software prior to deploying across the U.S. border.

The purpose of the C3I/COP task order and Project 28 task order are fundamentally different. Project 28 was a proof of concept while the C3I/COP task order is to develop the SBInet operating system based on requirements developed during the past 18 months. The C3I/COP task order is designed to limit risk associated with a software development project. The scope of the C3I/COP task order includes Command and Control (C2) software development, requirements identification for data, communications, intelligence and facilities that are necessary to develop and test the software. The C3I/COP task order requires the software to be developed with user-defined requirements that form manageable “builds”, tested in the field and released in increments over time. This development approach reduces risk by delivering smaller, more manageable software capability to CBP agents and officers.

*Question 4.* In its fiscal year 2009 budget request, the Department has asked for \$75 million for operations and maintenance on the physical border fence. It is our understanding that the Department intends to contract this work out to the private sector.

Do you plan to award this task order under the Secure Border Initiative? If so, when?

Given that Boeing has been awarded a \$733 million task order for the fence, are we to expect that they will get the O&M contract too?

Answer. The \$733 million task order awarded to Boeing for fence supply chain management was to cover analysis and identification of suppliers; acquisition, distribution and storage of materials; and monitoring of critical supply and delivery metrics to allow for early problem identification and resolution. It is important to note that, based on ongoing discussions with Boeing, we expect the actual cost of this task order to be under \$450 million.

For current fence maintenance requirements, the SBI Tactical Infrastructure (TI) program has awarded Operations and Maintenance (O&M) contracts through the United States Army Corps of Engineers (USACE) Multiple Award Task Order Contracts (MATOC). For maintenance requirements beginning in early fiscal year 2009, SBI is developing a longer term O&M acquisition strategy for all tactical infrastructure. This acquisition strategy involves full and open competition which will begin in the summer of 2008.

*Question 5.* With regard to the expectations for what the COP 0.5 Task Order is expected to accomplish, we want to avoid any of the confusion that surrounds Project 28. To this end, please provide the acceptance criteria, both in narrative form and in detail (include attachments if necessary), for the COP 0.5 Task Order. Also, please describe plainly what new functionality you expect the Task Order to provide to the Border Patrol, as well as what it will do, and what it will not do.

*Question 6.* What problems have been encountered to date with the COP 0.5 Task Order?

*Question 7.* How much has been Boeing been paid on the COP 0.5 Task Order to date?

Answer. The C3I COP software is being developed and delivered using a collaborative environment allowing end users to be directly involved to ensure solutions are tailored to meet their operational needs. The developer will incorporate a spiral approach that includes successful demonstrations of system performance and results in multiple releases of the system where each subsequent release provides an incremental addition of functionality and improvement in system capability.

Release 0.5 is the first release of the C3I COP software. This release is intended to support the initial deployment of SBInet technology (scheduled to begin the summer of 2008).

The C3I COP Release 0.5 software will provide, for Border Patrol Agents working in a station, control of cameras and a graphical display of radar and unattended sensor tracks that identify potential illegal activity. In addition, Border Patrol Agents will have an understanding of their situation and relative location to other agents through blue force tracking being displayed in the command center. For selected agents deployed in the field away from the station, Border Patrol vehicles will have the Release 0.5 software installed with touch screen capability to view sensor and blue force tracks.

The COP Release 0.5 software will undergo thorough developmental and operational testing prior to acceptance. In accordance with the SBInet Software Validation and Verification Plan (SVVP), the software product will be evaluated to determine its readiness and accepted at each phase or stage of production. Results of the SVVP activities coupled with operational testing will form the basis of system acceptance.

The C3I Task Order has a base period of 14 months and was awarded for \$64.5 million. As of March 13, 2008, SBInet has paid Boeing \$9,168,993 related to the C3I Task Order.

*Question 8.* What does Project 28 not do today, now that it has been accepted, that you thought it would when the contract was awarded?

Answer. Response was not received by the time of publication.

QUESTIONS FROM RANKING MEMBER MARK E. SOUDER FOR GREGORY GIDDENS, EXECUTIVE DIRECTOR, SECURE BORDER INITIATIVE, CUSTOMS AND BORDER PROTECTION, DEPARTMENT OF HOMELAND SECURITY

*Question 1.* When do you expect the first deployment of SBInet along our northern border? To what extent is DHS coordinating with Canadian officials in this effort? Will SBInet be integrated with technologies already deployed by the Canadians?

Answer. CBP has identified the Detroit Sector's lower St. Clair River/northern Lake St. Clair border zones as the location for testing certain SBInet technologies for application in a maritime (river/lake) cold weather environment. The goal of the Northern Border Demonstration project is to develop a prototype that demonstrates how an integrated air, land and maritime security solution could improve operations in a selected area of the northern border. The demonstration project will also examine opportunities to improve port of entry (POE) security by integrating existing cameras and installing additional tactical infrastructure to funnel pedestrian traffic into the POE. Although this project may result in some improvements to operational capabilities and provide technical insight for a final SBInet solution, it will not be the final solution for the Detroit area or the entire northern border.

Since September 2007, CBP has engaged and provided updates to the Canada Border Services Agency, Royal Canadian Mounted Police, and the Ontario Provincial Police on planned SBInet activities along the U.S.-Canada Border.

CBP will not be integrating Canadian technologies into SBInet for the Northern Border Demonstration project. For deployment of SBInet along the U.S.-Canadian border, CBP has not ruled out this possibility.

*Question 2.* When do you anticipate SBInet will be fully deployed along both U.S. land borders and what is the total projected cost?

Answer. CBP recently submitted the updated SBInet program cost and schedule projections in our 2009 President's budget request, as well as in our fiscal year 2008 SBInet Expenditure Plan. The SBInet Program is fully funded through 2008 to demonstrate key SBInet operational performance measures and production processes in two Border Patrol Stations. Subject to funding, the current plan is to complete deployment to Tucson in 2009, Yuma in 2010 and El Paso in 2011 at a cost of approximately \$1.2 billion.

*Question 3.* The President's fiscal year 2009 budget requests \$41 million for deployment of Project 25, a tactical communications system in El Paso, Rio Grande Valley. What are the timeline and scope of this phase of SBInet?

Answer. El Paso Schedule: CBP's Office of Information and Technology (OIT) has contracted out the system design for the Project 25 (P25) Tactical Communications

System in El Paso, and expects the design to be complete in May 2008. The anticipated schedule for implementing, testing, and accepting the system runs as follows:

- Complete acquisition of new frequency assignments: October 2008\*;
- Complete negotiation of new radio frequency (RF) site leases: April 2009\*;
- Acquire, program, and stage P25 Tactical Communications infrastructure equipment and subscriber units (e.g., portable and mobile radios, and dispatch consoles): no later than October 2009;
- Complete preparation (install equipment sheds, towers, power, electrical grounding, tower installation) of radio frequency sites: December 2009;
- Install and optimize P25 Tactical Communications equipment at RF sites: March 2010;
- Conduct acceptance testing of equipment, correct/reengineer system issues identified during testing, then conduct final acceptance testing: September 2010.

Rio Grande Valley (RGV) Schedule: CBP OIT has completed operational requirements gathering for the P25 Tactical Communications modernization in RGV. Once funded, RGV modernization will require approximately 30 months.

*Question 4.* When will the COP.5 and C3I task orders be completed? Will these be applied to the entire Arizona border? If so, please provide a timeline for development and deployment, as well as projected costs.

Answer. There is a single C3I task order (often referred to as the COP task order) with Boeing to develop and deliver releases of the COP software. COP 0.5 (the initial software release under the task order) will be completed in time to support our initial deployments to two locations in the Tucson Sector beginning this summer.

The C3I task order will support the entire Arizona border.

The C3I task order is funded for an initial period of 14 months, with the likelihood that it will be extended as we develop additional capabilities. This will be a spiral development activity, which means that future releases will add new capabilities as we continue to deploy along the border. The current task order was awarded for \$64.5 million.

QUESTIONS FROM RANKING MEMBER MIKE ROGERS FOR GREGORY GIDDENS, EXECUTIVE DIRECTOR, SECURE BORDER INITIATIVE, CUSTOMS AND BORDER PROTECTION, DEPARTMENT OF HOMELAND SECURITY

*Question 1.* Do you believe that the technical problems that delayed the Department's initial acceptance of P-28 have been sufficiently resolved?

*Question 2.* Do you plan to use any components from P-28 along other parts of the border?

Answer. The Government conditionally accepted P-28 on December 7, 2007, acknowledging 53 open discrepancies, but allowing Border Patrol use of the system to determine operational capabilities and concepts. Concurrently, Boeing worked to resolve system performance issues and discrepancies. During this period of operational testing, additional deficiencies were identified and subsequently corrected to DHS's satisfaction. Final acceptance occurred in February 2008.

As good stewards of taxpayers' money, DHS held Boeing accountable for all contract deliverables, resulting in the delay in acceptance of P-28. As a result of the delay and minor technical issues that were not resolved, the Government received financial reparation of over \$2 million from the Boeing Company, effectively reducing the cost of P-28.

We do not intend to use components of P-28 along other parts of the border. P-28 was a prototype and was designed to be a demonstration of critical technologies and systems integration. Concurrent with P-28, we have been developing the production equipment and software that will be tested in a laboratory prior to deployment to two locations in the Tucson Sector.

*Question 3.* When do you intend to begin testing and ultimately deploying SBInet on the northern border?

Answer. The Northern Border Demonstration will begin this year, and will test SBInet technologies along the U.S.-Canada border. The Northern Border Demonstration is currently in its planning phase. The goal of this Northern Border Demonstration is to develop a prototype that demonstrates how an integrated air, land and maritime security solution could improve operations in a selected area of the northern border. This demonstration project will also examine opportunities improve port of entry (POE) security by integrating existing cameras and installing addi-

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\*These requirements have considerable external schedule risks. Specifically, radio frequency acquisition is dependent on approval from National Telecommunications and Information Administration (NITA), Department of Commerce. Site lease negotiation is dependent on site owners, and has proven to be one of the most significant schedule risks.

tional tactical infrastructure to funnel pedestrian traffic into the POE. Although this project may result in some improvements to operational capabilities and provide technical insight for a final SBI-net solution, it will not be the final solution for the Detroit area or the entire Northern Border. Full SBI-net deployment schedule(s) for Northern Border Sectors have not been determined.

*Question 4.* You last testified before our subcommittees in October 2007.

Since that time, what new developments have occurred?

What problems have been identified, which ones have been addressed, and which ones remain?

*Answer.* Since October 2007, we have completed 16.4 miles of pedestrian fence (PF) and 32.9 miles of vehicle fence (VF) bringing deployed fencing totals along the southwest border to 171.4 miles of PF and 142.4 miles of VF as of April 4, 2008. We fielded our initial proof of concept called Project 28 (P-28) along 28 miles of the Arizona-Mexico border as an initial demonstration of the feasibility of SBI-net's integrated technology concept.

In addition to fielding P-28, we have gone through the structured process of generating operational requirements, and are now developing our first operational configuration of equipment and software that we will field in the summer of 2008. Pending successful integration testing early this summer, we will deploy our first two operational sites in Arizona by year's end. We are planning to complete the deployment of SBI-net technology to the Tucson Sector in 2009, Yuma in 2010 and El Paso in 2011.

After the P-28 module was designed, installed, and the Boeing testing program was underway, technical deficiencies were identified. Consequently, the Government delayed acceptance of P-28 from the original target of early summer 2007. After Boeing fixed the majority of the deficiencies, the Government conditionally accepted P-28 on December 7, 2007, so the Border Patrol could begin using the system to determine opportunities for improvements, as well as learn how it would enhance their operational capabilities. During this time, Boeing worked to resolve the remaining system performance issues until only one issue, an infra-red camera (FLIR) flicker anomaly, remained. The FLIR flicker anomaly remained a key driver for final acceptance from an operational perspective and was considered to be critical to system performance. Boeing identified the root cause of the issue and upgraded the grounding systems on the towers in late January. Final testing of this solution indicated the problem was resolved. Of the 53 open items from conditional acceptance, all were closed except four with minimal operational impact that were waived in exchange for financial consideration.

Consequently, CBP accepted P-28 on February 21, 2008. In consideration of the schedule delays and waived open items, Boeing has credited the Government \$2.2 million in logistics, maintenance and support for the P-28 system.

Through the development of Project 28, CBP has learned several valuable technical, acquisition, and operational lessons, and has already incorporated these lessons learned into our planning for future SBI-net deployments. For example:

- Commercial off-the-shelf components, even proven technologies, cannot be integrated "right out of the box" in the field without interface design, thorough testing, and integration in the laboratory. SBI-net is fully testing and integrating the first operational configuration of the SBI-net solution in a Systems Integration Lab before testing in the field.
- The interfaces between the sensors and the COP are as important as the technical characteristics of the sensors themselves. The follow-on sensors selected for SBI-net will have common standard controls and interfaces.
- The Project 28 towers had significant limitations due to the use of satellite data links and the inherent problems with latency and bandwidth. The follow-on operational configuration will use microwave data links in lieu of satellite data links.
- The P-28 COP software was based on a commercial civil system used for the dispatch of public safety assets. This proved to be inadequate for the command and control of a sensor net and the distribution of a near real-time situational picture.

QUESTIONS FROM CHAIRWOMAN LORETTA SANCHEZ AND CHAIRMAN CHRISTOPHER P. CARNEY FOR RICHARD M. STANA, DIRECTOR, HOMELAND SECURITY AND JUSTICE, GOVERNMENT ACCOUNTABILITY OFFICE

*Question 1.* What are you hearing from agents in the field about what they think of Project 28 and SBI-net more generally?

*Answer.* SBI program officials and Border Patrol agents told us that although Project 28 did not fully meet their expectations, they are gathering lessons learned

and are ready to move forward with developing SBInet technologies that will better meet their needs. In February 2008, SBInet and Border Patrol officials identified issues that remain unresolved with Project 28. For example, the Border Patrol reported that problems remained with the resolution of the camera image at distances over 5 kilometers, while expectations were that the cameras would work at about twice that distance. Border Patrol agents also reported that they would have liked to have been involved sooner with the design and development of Project 28, since they are the ones who operate the system, and stated that it is not an optimal system. Border Patrol agents from the Tucson sector provided examples of Project 28 capabilities that do not adequately support Border Patrol operations because of their design. For example, Border Patrol agents have had difficulties using the laptops mounted into agent vehicles to provide them with Common Operating Picture information. However, according to Border Patrol agents, Project 28 has provided them with improved capabilities over their previous equipment, which included items such as cameras and unattended ground sensors that were only linked to nearby Border Patrol units, not into a centralized command and control center. In addition, Border Patrol officials we spoke with at the Tucson sector noted that Project 28 has helped its agents become more familiar with the types of technological capabilities they are integrating into their operations now and in the future.

*Question 2.* Mr. Stana, in your testimony you point out that under the Project 28 task order, Boeing was to provide the Department with a system with the “capabilities required to control 28 miles of border in Arizona.” Based on your analysis, did Boeing fulfill that requirement?

Answer. The Project 28 task order required Boeing to work with U.S. Customs and Border Protection (CBP) in achieving operational control of a minimum of 28 miles of border. The task order contained specific performance standards, which were also reflected in the Quality Assurance Surveillance Plan. The Director of CBP’s SBInet Acquisition Office told us the performance standards described in the Project 28 task order and the Quality Assurance Surveillance Plan constituted performance goals, rather than firm requirements. Therefore, CBP did not hold Boeing to these performance measures. Boeing delivered and deployed the individual technology components of Project 28—such as the towers, cameras, and radars—on schedule. However, CBP delayed the implementation of the system due to Boeing’s inability to integrate these components with the COP software. From June 26 through November 19, 2007, Boeing submitted three corrective action plans, documents that defined Boeing’s technical approach for correcting the problems associated with Project 28 and the steps that needed to occur for DHS to conditionally accept the system. DHS officially notified Boeing in August 2007 that it would not accept Project 28 until certain problems were corrected. In its testimony at the February 27, 2008 hearing, CBP reported that of the 53 open items from conditional acceptance, all were closed except four. These four items had minimal operational impact and were waived in exchange for financial consideration. In consideration of the schedule delays and waived open items, Boeing has credited the Government \$2.2 million in logistics, maintenance and support for the Project 28 system. Consequently, CBP officials told us that Boeing had met contract requirements and on February 22, 2008, DHS announced final acceptance of Project 28.

*Question 3a.* When Project 28 was awarded, we heard a great deal about how the contract was \$20 million firm-fixed-price. We were told that unlike with previous failed border security technology projects, the risk to the Government was low, because no matter Boeing’s costs the taxpayers would foot only the originally agreed-upon bill. Yet, in your testimony, you list a number of new task orders awarded to Boeing under SBInet. It seems the Department is paying Boeing to replace substandard radar, cameras, and other equipment for Project 28, and to develop and install new Common Operating Picture (COP) software to replace the existing, deficient COP technology at Project 28.

Don’t these new task orders undermine the assurances the Department gave about the Project 28 task order being firm-fixed-price?

*Question 3b.* Is it possible that Boeing is trying to recoup its losses on the initial task order with work on these new task orders?

Answer. In September 2006, CBP awarded a prime contract to the Boeing Company for 3 years, with three additional 1-year options. The prime contract establishes that only CBP’s Office of Procurement is authorized to issue the task orders needed to obtain services and supplies under the contract, and CBP has the authority to approve or disapprove key subcontracts. As the prime contractor, Boeing is responsible for acquiring, deploying, and sustaining selected technology and tactical infrastructure projects. In this way, Boeing has extensive involvement in the SBI program requirements development, design, production, integration, testing, and maintenance and support of SBI projects. For example, in September 2006 Boeing

was awarded a program management task order for \$135.9 million related to, among other things, mission and systems engineering to develop and deploy the SBInet system. As of February 15, 2008, CBP had awarded eight task orders to Boeing, one of which was the Project 28 task order. The total firm-fixed-price for the Project 28 task order, awarded on October 20, 2006, was \$20.6 million. The Project 28 task order describes the project as a solution that includes the equipment and services necessary to achieve operational control of a minimum of 28 miles of border. More recently, in its testimony on February 27, 2008, CBP reported that Project 28 was designed to be a proof of concept and the first building block for the system's technology foundation. CBP stated in its testimony that while Project 28 was met with much public interest, it came to mean different things to different people. CBP reported that those interpretations diverged from what Project 28 was intended to be and what the Government contracted for, specifically, a task order segment of work that would demonstrate the technical approach and feasibility of the proposed overall SBInet solution. According to CBP, many lessons from Project 28 have been learned that will inform future technology development. While Boeing delivered and deployed technology components, such as towers, cameras and radars, both the SBI program office and Border Patrol officials told us that Project 28 did not fully meet their expectations and many of its components will be replaced during the next phase of technology development. This next phase, described by CBP as Block 1, is an effort to design, develop, integrate, test and deploy a technology system of hardware, software, and communications to the Yuma, Tucson, and El Paso sectors, with deployment beginning in summer 2008 and completion is expected in 2011.

*Question 4.* Where do you think the Department went wrong with Project 28, and what lessons should be applied to future SBInet task orders, as well as to future border security projects?

*Answer.* Officials from the SBInet program office said that although Project 28 did not fully meet their expectations, they are continuing to develop SBInet with a revised approach and have identified areas for improvement based on their experience with Project 28. For example, testing to ensure the components—such as radar and cameras—were integrated correctly before being deployed to the field at the Tucson sector did not occur given the constraints of the original 8-month timeline of the firm-fixed-price task order with Boeing, according to officials from the SBI program office. As a result, incompatibilities between individual components were not discovered in time to be corrected by the planned Project 28 deployment deadline. To address the issue of moving forward with SBInet development, Boeing has established a network of laboratories to test how well the integration of the system works, and according to the SBI program office, deployment will not occur until the technology meets specific performance specifications. Another lesson learned is that both SBInet and Border Patrol officials reported that Project 28 was initially designed and developed by Boeing with limited input from the Border Patrol. Border Patrol agents reported that they would have liked to have been involved sooner with the design and development of Project 28, since they are the ones who operate the system. Border Patrol agents are now operating Project 28 in the Tucson sector and have stated that it is not an optimal system and does not function as had been promised. However, SBInet and Border Patrol officials said that future SBInet development will include increased input from the intended operators. Finally, CBP stated in its February 27, 2008 testimony that while Project 28 was met with much public interest, it came to mean different things to different people. CBP reported that those interpretations diverged from what Project 28 was intended to be and what the Government contracted for, specifically a task order segment of work that would demonstrate the technical approach and feasibility of the proposed overall SBInet solution. CBP officials said that they could have done a better job managing expectations for the system and plan to do so for future projects.

*Question 5.* Mr. Stana, in your testimony you refer to a \$733 million task order under the Secure Border Initiative to Boeing for “supply and supply chain management” related to physical fence construction. What have you been able to learn from the Department or the contractor about how this task order was awarded and what Boeing’s responsibilities will be under the task order? Have you had any difficulty obtaining this information?

*Answer.* On January 7, 2008, CBP awarded Boeing with a letter task order for the development and implementation of a supply and supply chain management system solution to support the execution of tactical infrastructure projects. Specifically, under the letter task order, Boeing is to begin to analyze and provide a solution for managing and delivering supplies to the contractors. Also, the letter task order requires Boeing to provide the Government with certified cost and pricing data prior to finalizing the task order. According to SBI officials, the maximum price of for the task order will be \$733 million. On April 17, 2008, SBI officials told us that the

terms of the task order are still being negotiated. As part of our ongoing SBI work for the subcommittees, we plan to review this task order once it's finalized.

*Question 6.* What does Project 28 not do today, now that it has been accepted, that you thought it would do when the contract was awarded?

Answer. The scope of the project, as described in the task order between Boeing and DHS, was to provide a system with the detection, identification, and classification capabilities required to control the border, at a minimum, along 28 miles within the Tucson sector. To do so, Boeing was to provide, among other things, mobile towers equipped with radar, cameras, and other features, a common operating picture (COP) that communicates comprehensive situational awareness, and secure-mounted laptop computers retrofitted in vehicles to provide agents in the field with COP information. The task order also contained specific performance standards, which CBP determined to be performance goals, rather than firm requirements. In October 2007, we reported that Boeing delivered and deployed the individual technology components of Project 28—such as the towers, cameras and radars on schedule. However, Boeing's inability to integrate these components with the COP software delayed the implementation of Project 28 over 5 months after the planned June 13, 2007 milestone when Border Patrol agents were to begin using Project 28 technology to support their activities. SBI program office officials told us that Boeing selected the system based on initial conversations with Border Patrol officials, but when deployed to the field, Boeing found limitations with the system. As we reported in October 2007, among other technical problems that CBP reported were that it was taking too long for radar information to display in command centers and that newly deployed radars were being activated by rain or other environmental factors, making the system unusable.<sup>1</sup> According to officials from the SBI program office, Boeing worked to correct these problems from July through November 2007. As one example of improvement, Border Patrol officials reported that Boeing added an auto focus mechanism on the cameras located on the nine towers. However, SBInet and Border Patrol identified issues that remain unresolved. For example, the Border Patrol reported that as of February 2008 problems remained with the resolution of the camera image at distances over 5 kilometers, while expectations were that the cameras would work at about twice that distance.

QUESTIONS FROM RANKING MEMBER MIKE ROGERS, FOR RICHARD M. STANA, DIRECTOR, HOMELAND SECURITY AND JUSTICE, GOVERNMENT ACCOUNTABILITY OFFICE

*Question 1.* You testified before our subcommittees in October of 2007. Since that time, what new developments have occurred?

What problems have been identified, which ones have been addressed, and which ones remain?

Answer. In our February 2008 testimony<sup>2</sup> before the subcommittees, we reported that:

- On February 22, 2008, DHS announced final acceptance of Project 28, a \$20.6 million project to secure 28 miles along the southwest border, and is now gathering lessons learned to use in future technology development.
- CBP has extended its timeline and approach for future projects and does not expect all of the first phase of its next technology project to be completed before the end of calendar year 2011.
- Border Patrol agents began using Project 28 technologies in December 2007, and as of January 2008, 312 agents in the area had received updated training.
- According to Border Patrol agents, while Project 28 is not an optimal system to support their operations, it has provided greater technological capabilities than did their previous equipment.
- As of February 21, 2008, the SBI program office reported that it had constructed 168 miles of pedestrian fence and 135 miles of vehicle fence. Deployment of fencing along the southwest border is on schedule, but meeting CBP's goal to have 370 miles of pedestrian fence and 300 miles of vehicle fence in place by December 31, 2008, will be challenging and total costs are not yet known.
- CBP's SBI program office established a staffing goal of 470 employees for fiscal year 2008, made progress toward meeting this goal and published its human capital plan in December 2007; however, it is in the early stages of implementing the plan.

<sup>1</sup>GAO, *Secure Border Initiative: Observations on Selected Aspects of SBInet Program Implementation*, GAO-08-131T (Washington, DC: October 2007).

<sup>2</sup>GAO, *Secure Border Initiative: Observations on the Importance of Applying Lessons Learned to Future Projects*, GAO-08-508T (Washington, DC: February 2008).

*Question 2.* The GAO has been reviewing Border Patrol training and associated costs. What are the most recent findings, and do you believe the current costs for training are as low as they could be without sacrificing the quality of the training?

Do you believe that DHS and Boeing have taken the necessary steps to ensure SBIInet has sufficient program oversight?

Answer. In March 2007 we reported the average cost to train a new Border Patrol agent at the Border Patrol Academy in Artesia, New Mexico was \$14,700.<sup>3</sup> This average cost was consistent with other Federal and non-Federal law enforcement training programs. The Border Patrol was considering several alternatives to improve the efficiency of the basic training program such as instituting a proficiency test for Spanish that would allow those who pass the test to shorten their time at the academy by about 30 days, potentially reducing the average cost to train a new agent. We also reported that the Border Patrol's training program had the attributes of an effective training program. However, we did not assess the extent to which these initiatives and attributes affected the quality of the training program.

We, the DHS Office of the Inspector General (OIG), and the DHS Acting Deputy Secretary's office, have program oversight activities underway. We have work under way to review various components of the SBI program. Specifically, we are reviewing: (1) Technology implementation; (2) the extent to which Border Patrol agents have been trained and are using SBI technology; (3) infrastructure implementation; and (4) how the CBP SBI program office has defined its human capital goals and the progress it has made to achieve these goals. We plan to report on these objectives later this year. Also, as mandated in the Consolidated Appropriations Act, 2008,<sup>4</sup> we examined DHS's fiscal year 2008 expenditure plan for the SBI program and expect to issue a report in late spring 2008. We are also reviewing SBIInet as part of a broader look at DHS's use of performance-based services acquisition, an acquisition method structured around the results to be achieved instead of the manner by which the service should be performed. We expect to issue a report on this effort in spring 2008. In addition, we are conducting work to assess the development and deployment of SBIInet's command, control, and communications systems, and surveillance and detection systems and expect to issue a report later this year. Finally, we have ongoing work on the oversight process of major acquisitions at DHS, including SBIInet, and plan to report on the results of that review in the fall 2008.

In August 2007, the DHS OIG initiated six audits related to SBI, that include reviews of: (1) CBP's SBIInet small business opportunities; (2) the implementation of the Secure Fence Act of 2007; (3) CBP's construction of Border Patrol facilities; (4) the use of contractor support services; (5) oversight of the SBI and SBIInet programs; and (6) SBI financial and program accountability. The DHS Acting Deputy Secretary conducted a program management review from September 11 through 20, 2007 of the SBIInet program. The program management review team included technical experts from, among other entities, the Defense Acquisition University, Massachusetts Institute of Technology's Lincoln Laboratory, John Hopkins University's Applied Physics Lab, and the Institute for Defense Analysis. The results of this review included findings and recommendations on system requirements, architecture, engineering, test and evaluation, logistics, and the acquisition strategy. SBIInet officials told us that they are addressing these recommendations. Given the size, complexity, and importance of the SBIInet program we believe that continued and enhanced departmental oversight is needed in order to increase the prospects for a successful outcome.

QUESTIONS FROM CHAIRWOMAN LORETTA SANCHEZ AND CHAIRMAN CHRISTOPHER P. CARNEY FOR ROGER A. KRONE, PRESIDENT, NETWORK AND SPACE SYSTEMS, INTEGRATED DEFENSE SYSTEMS, THE BOEING COMPANY

*Question 1.* Mr. Krone, can you give us your assessment of Boeing's performance on Project 28—starting at the very beginning, up through the failed test this summer, and through to final acceptance?

Answer. The performance of the Boeing team throughout Project 28 was mixed, in that we made significant progress in some areas and could have performed better in others. The team successfully acquired and installed all the hardware and software required for the P-28 system within the time frame required to meet the proposed June 13, 2007, completion date. However the integration activity was not adequate to identify and resolve the technical issues such as the video interfaces, communications stability on the Agent's Mobile Data Terminals, and processing of radar

<sup>3</sup>GAO, *Homeland Security: Information on Training New Border Patrol Agents*, GAO-07-540R (Washington, DC: March 2007).

<sup>4</sup>Pub. L. No. 110-161, 121 Stat. 1844, 2047-2049.

tracks. Lack of sufficient schedule to resolve these issues in an integration laboratory led to these issues being discovered and resolved in the field, and consequently, we did not meet the schedule commitments and expectations of our CBP customer.

From the test in July until final acceptance, Boeing, in conjunction with CBP, assembled a large contingent of technical experts, internal and external to the company, to resolve over 900 issues. While the resolution of these issues resulted in significant improvement in the performance of the P-28 system, the process took longer than originally expected. Boeing's commitment to successful Final Acceptance of P-28 by our CBP customer never wavered, and we gleaned significant "lessons learned" from this experience. We are applying these lessons to our present activities with the CBP.

*Question 2.* Mr. Krone, from Boeing's perspective what are the big lessons learned from Project 28 and how are you applying them to your ongoing SBInet work?

Answer. The big lessons learned from Project 28 were: (1) The need for user (agents/officers) involvement in requirements generation and system design; (2) much more capable command and control software; (3) more rigorous integration lab testing prior to the field deployment; and (4) better alignment of expectations among users.

All the lessons learned are being applied to our processes for future deployment. Relative to user involvement, we have implemented user working groups for requirements definition and system design, and are now using an industry standard technique called Rapid Application Development/Joint Application Development (RAD/JAD) to facilitate the interchange with Border Patrol Agents, OFO officers and "super users". To upgrade the command software, we initiated an effort in October 2007, which was formalized in December, 2007, to create the next generation Common Operating Picture. The first edition COP 0.5 will be available this summer. To ensure components will work together as a system when deployed, we have invested in systems integration labs and are conducting rigorous testing in these facilities prior to deploying technologies and capabilities into the field. Finally, Boeing is making a significant effort to make sure, at every step of the way in every task order, that we define precisely what we intend to do in terms that all stakeholders understand.

*Question 3a.* Please describe for us the status of the "COP 0.5" task order, including:

What work has been done, what remains to be done?

Answer. The following table provides dates of key program milestones that have been completed. All were completed on schedule.

Milestone	Date Completed
C3I COP Task Order Kickoff .....	7 Dec 2007.
Requirements Review .....	20 Dec 2007.
Integrated Baseline Review .....	5 Feb 2008.
Architecture Framework Review .....	6 Feb 2008.
Design Review .....	19-20 Feb 2008.
RAD/JAD* Sessions .....	23/24 Jan and 12/13 Feb 2008.
0.5.1 Software Release .....	29 Feb 2008.
0.5.2 Software Release .....	27 Mar 2008.

\* RAD/JAD=Rapid Application Development/Joint Application Development.

The work that remains to be done is enumerated in response to Question 3, part e.

*Question 3b.* What problems you have encountered?

Answer. We encountered key risks/issues as follows:

- *Staffing.*—Aggressive staffing targets necessitated use of Boeing company funds to "hot start" staffing, which has been accomplished.
- *Task Order Contract Structure.*—The use of multiple task orders can introduce schedule misalignment between system segments that are required to be integrated. We are intensifying the effort to coordinate work among multiple task orders within the SBInet IDIQ contract to reduce this risk.
- *Correlation and Fusion.*—While we have achieved significant improvement over the previous P-28 capability we are applying lessons learned to implement even more advancements in the 1.0 version of the COP.

*Question 3c.* How you incorporated lessons learned from Project 28?

Answer. The most significant lesson learned from P-28 with respect to the development of COP 0.5 was the need to have users (agents/officers) involved in the requirements generation and design. We used an industry standard technique called

Rapid Application Development/Joint Application Development (RAD/JAD) to bring Border Patrol Agents, OFO officers and “super users” together with Boeing developers to understand and refine system requirements. This process complimented our rigorous Systems Engineering approach and allowed multiple interactions between users and developers over the course of the three software builds.

*Question 3d.* What steps you have taken to build on the BorderNet project?

Answer. The Boeing team made multiple trips to Douglas, Arizona, to interview BorderNet users and observe operation of the BorderNet system. The design of the Mobile Data Terminal (MDT) was heavily influenced by those interactions. Our understanding of the Concept of Operations (CONOPS) and system utility were also greatly advanced through the process.

Key CBP BorderNet leaders were consulted and engaged throughout the development of the 0.5 COP. Their participation in key program milestones (above table) and RAD/JAD sessions allowed the Boeing team to understand the importance of the BorderNet project in refining the needs of the Border Patrol.

Key BorderNet components were identified and are currently under evaluation. These components include “Agent Command” software for Mobile Data Terminals (MDT) and “Fusion Command” software for RADAR correlation and fusion. The BorderNet provider is now part of the Boeing Team and is working on the COP development.

*Question 3e.* What is your time frame for completing the task order, including all milestones and your current detailed estimate for testing, deploying, and obtaining acceptance?

The following chart contains the remaining COP 0.5 development milestones and completion dates:

Milestone	Date Completed
Informal Factory Qualification Testing Completed .....	1 May 2008.
Test Readiness Review .....	NLT 28 June 2008.
System Level Test .....	(After integration with Block 1 Hardware).
Production/Operational Readiness Review .....	15 July 2008.*

\* Last Milestone for version 0.5 COP.

*Question 4.* What does Project 28 not do today, now that it has been accepted, that you thought it would when the contract was awarded?

Answer. The Project 28 system has all the functionality that was planned for it when the contract was awarded. There are, however, functions that do not work as well within the CONOPs of the Border Patrol and the P-28 environment as we had envisioned. Examples include ease of use of the COP and the robustness of radar data processing.

QUESTIONS FROM RANKING MEMBER MARK E. SOUDER FOR ROGER A. KRONE, PRESIDENT, NETWORK AND SPACE SYSTEMS, INTEGRATED DEFENSE SYSTEMS, THE BOEING COMPANY

*Question 1.* What is the process for companies that are not currently part of the SBInet industry team, to offer their solutions or products to the SBInet toolkit? What opportunities will exist during future phases of deployment to incorporate new solutions within the various tool categories?

Answer. Needs of the program are described on the Program Web site, <http://www.boeing.com/defense-space/SBInet/index.html>. Companies wishing to offer solutions or products to the SBInet toolkit should register their product and interest on the Web site using the link provided. Additionally, SBInet program personnel continue to conduct additional outreach to industry. They participate in several outreach events annually, many focusing on small businesses, in which program needs are discussed and industry feedback received. The next major opportunities to participate in the program will be in the areas of urban surveillance technologies, maritime surveillance technologies, and remote cold climate surveillance technologies.

*Question 2.* Can prospective SBInet partners have their product tested at the integration lab in Huntsville or another location, to identify strengths and weaknesses and modify their product to meet the needs of SBInet?

Answer. Use of the Boeing Systems Integration Lab (SIL) in Huntsville as a general test and development facility for aspiring suppliers is not currently in the scope of the program. While some individual interface and integration testing is conducted on newly selected products, the bulk of individual equipment testing is expected to have occurred prior to delivery of the equipment to our lab.

*Question 3.* I understand that Boeing is under contract with DHS to develop and implement a supply and supply chain management system solution for SBInet physical infrastructure projects. Can you describe the progress that is being made under this task order?

Answer. Good progress is being made. Boeing's scope of work for this task order is to supply primary steel and wire mesh raw material for the various fence configurations. Boeing completed the following activities since the letter contract award on January 7, 2008:

- Analysis of Alternatives Report was submitted on January 21, 2008.
- Selected steel distributor and awarded purchase order on March 14, 2008.
- Selected wire mesh supplier and awarded purchase order on March 14, 2008.

QUESTIONS FROM RANKING MEMBER MIKE ROGERS FOR ROGER A. KRONE, PRESIDENT, NETWORK AND SPACE SYSTEMS, INTEGRATED DEFENSE SYSTEMS, THE BOEING COMPANY

*Question 1a.* You last testified before our subcommittees in October of 2007. Since that time, what new developments have occurred?

Answer. Since October 2007, several significant developments have occurred.

- Boeing completed work enabling the U.S. Government to accept the P-28 System in February 2008.
- A new Common Operational Picture software application is under development. Work is progressing on schedule, and the first version is due out this summer.
- Boeing has invested company funds to support DHS in the creation of new facilities to conduct the increased testing. We built a System Integration Lab in Huntsville, Alabama, to test and integrate system components in a lab environment prior to installing them in the field. In Northern Virginia, we have created two additional laboratory facilities. The first is a Command, Control, Communications and Intelligence (C3I) Common Operating Picture Rapid Application Development/Joint Application Development (RAD/JAD) Lab to assist in the work on the next generation Common Operating Picture. The second is a Mission Analysis and Assessment (MA&A) Lab to improve our capabilities to design and model the future lay-downs of the system. The labs are operational now and the MA&A lab will be fully functional this spring. All of these facilities are allowing joint development by contractor and Government user teams.
- A new Integrated Product Team has been established to assist CBP in the implementation of improved intelligence operations, including the integration and implementation of existing intelligence solutions.

*Question 1b.* What problems have been identified, which ones have been addressed, and which ones remain?

Answer. As noted above, the most significant problems we experienced were: (1) The need for user (agents/officers) involvement in the requirements generation and system design; (2) a much more capable command and control software; (3) more rigorous integration lab testing prior to the field deployment; and (4) better alignment of expectations among users. The actions taken to address these issues were discussed as part of the answer to Question 2.

Remaining technical challenges include radar data declutter and post-processing, further improving ranges of both electro-optical and infrared sensors, software algorithms to allow the fusion and correlation of data, and low-cost, high-bandwidth, scalable communication solutions. The team is working to address these issues in the future.

