

April 2008

SUPPLY CHAIN SECURITY

U.S. Customs and
Border Protection Has
Enhanced Its
Partnership with
Import Trade Sectors,
but Challenges
Remain in Verifying
Security Practices



Highlights of [GAO-08-240](#), a report to congressional requesters

Why GAO Did This Study

U.S. Customs and Border Protection (CBP) is responsible for ensuring the security of cargo containers shipped into the United States. To strike a balance between security and commerce, CBP oversees the Customs-Trade Partnership Against Terrorism, or C-TPAT program. As part of this program, CBP aims to secure the supply chain—the flow of goods from manufacturers to retailers—through partnerships with international trade companies. Member companies agree to allow CBP to validate their security practices and, in exchange, they are awarded benefits, such as reduced scrutiny of their cargo. In 2005, GAO reviewed the C-TPAT program and noted operational challenges. For this report, GAO was asked to assess the progress CBP has made since 2005 in (1) improving its benefit award policies for C-TPAT members, (2) addressing challenges in validating members’ security practices, and (3) addressing management and staffing challenges. To perform this work, GAO analyzed a nonprobability sample of completed validations; reviewed annual, human capital, and strategic plans; and held discussions with CBP officials.

What GAO Recommends

GAO is recommending that CBP improve its electronic validation instrument, improve the validation process, enhance its records management system, and establish performance measures for improving supply chain security. CBP concurred with each of the recommendations.

To view the full product, including the scope and methodology, click on [GAO-08-240](#). For more information, contact Stephen Caldwell at (202) 512-8777 or caldwells@gao.gov.

SUPPLY CHAIN SECURITY

U.S. Customs and Border Protection Has Enhanced Its Partnership with Import Trade Sectors, but Challenges Remain in Verifying Security Practices

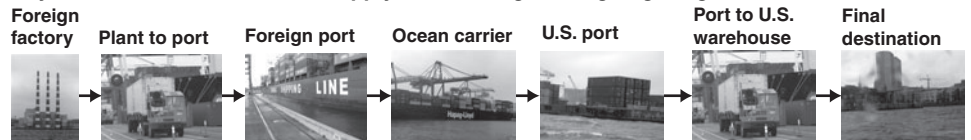
What GAO Found

CBP has strengthened its policies for granting benefits to importers, C-TPAT’s largest member sector, and is working to improve its policies for members in other trade sectors. For example, starting in March 2005, CBP began requiring members in 9 out of the 10 trade sectors to meet minimum security criteria and it plans to finalize criteria for the tenth trade sector by mid-2008. CBP has also introduced a process that awards benefits for C-TPAT importers on a three-tiered basis, depending on validation of their security practices. CBP officials told us that they interpret the benefit tiering provisions of the Security and Accountability for Every Port Act of 2006 to apply mainly to importers. Nevertheless, CBP considered implementing tiered benefits for other trade sectors, but it has not been able to identify additional benefits to offer nonimporters in a tiered structure.

CBP has taken steps to improve the security validation process, but still faces challenges in verifying that C-TPAT members’ security practices meet minimum criteria. CBP has sought to strengthen the validation process by providing appropriate guidance and developing a portable, electronic instrument to help ensure that validation information is consistently collected, documented, and uniformly applied to decisions regarding the awarding of benefits to C-TPAT members. However, the usefulness of the instrument is limited due to its default “no” responses. Specifically, if a response is marked “no,” it is unclear whether a security specialist, who has the discretion to answer or not answer individual questions, intentionally answered the question or if the response was an automatic default. This factor limits the ability of CBP to validate security practices at member companies.

CBP has taken actions to address C-TPAT management and staffing challenges, such as implementing a human capital plan, a records management system, and performance measures. While these actions have addressed a number of challenges, others remain. In particular, CBP’s records management system does not include interim processing dates—such as the date that security specialists send companies the 30-day validation notification letter—to enable management or others to determine CBP’s compliance with program requirements. Further, although CBP has developed performance measures for facilitating the flow of commerce, it has not developed performance measures to assess the effectiveness of C-TPAT’s efforts to improve supply chain security.

Key Points in the International Supply Chain Using Oceangoing Cargo Containers



Source: GAO.

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Abbreviations

ATS	Automated Targeting System
CBP	Customs and Border Protection
CSI	Container Security Initiative
C-TPAT	Customs-Trade Partnership Against Terrorism
DHS	Department of Homeland Security
FAST	Free and Secure Trade
GPRA	Government Performance and Results Act
NII	nonintrusive inspection
SAFE Port Act	Security and Accountability for Every Port Act
SCSS	supply chain security specialist
VSAT	Validation Security Assessment Tool
WMD	weapon of mass destruction

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United States Government Accountability Office
Washington, DC 20548

April 25, 2008

Congressional Requesters

In fiscal year 2007, more than 11 million oceangoing cargo containers carrying goods were offloaded at U.S. seaports. Facilitating the free flow of these goods while ensuring that the containers do not pose a threat to homeland security—whether by carrying weapons of mass destruction (WMD) or other dangerous materials—remains one of many challenges facing the Department of Homeland Security (DHS).

In an effort to strike a balance between the need for security and free-flowing maritime commerce, U.S. Customs and Border Protection (CBP)—a component of DHS responsible for protecting the nation’s borders at and between official ports of entry—oversees the Customs-Trade Partnership Against Terrorism program, known as C-TPAT.¹ CBP’s port of entry responsibilities encompass 326 airports, seaports, and designated land borders. C-TPAT, which applies across all transportation modes, is a component of CBP’s multifaceted approach for overseeing the security of containerized cargo and the international supply chain—the flow of goods from foreign manufacturers, suppliers, or vendors where such shipments originate to retailers. CBP’s strategy also includes the following:

- **Advance information:** Under its “24-hour Rule,” CBP requires that carriers present complete vessel containerized cargo declarations to CBP 24 hours before loading such cargo aboard a vessel at foreign ports bound for the United States.
- **Automated advanced targeting:** CBP officers evaluate cargo information forwarded from carriers before its arrival in the United States using the Automated Targeting System (ATS). The system, using a rules-based program, allows for uniform review of cargo shipments to identify the highest risk shipments, and presents data in a format to permit CBP officers to address specific intelligence threats and trends.
- **Use of non-intrusive inspection (NII) technology and mandatory exams for all high-risk shipments:** CBP has deployed detection technologies to our nation’s sea, air, and land border ports of entry that include large-

¹ Ports of entry are government-designated locations where CBP inspects persons and goods to determine whether they may be lawfully admitted into the country.

scale X-ray and gamma-imaging systems as well as a variety of portable and hand-held technologies to enable CBP to inspect a larger portion of commercial traffic.

- Container Security Initiative (CSI): Through CSI, CBP places staff at designated foreign seaports to work with its foreign counterparts to inspect high-risk cargo for WMD before the cargo is shipped to the United States.²

CBP initiated C-TPAT as part of its strategy in November 2001. C-TPAT aims to secure the flow of goods bound for the United States by developing a voluntary antiterrorism partnership with stakeholders of the international trade community comprised of importers; customs brokers; air, sea, and land carriers; and other logistics service providers such as freight consolidators and nonvessel common carriers. To join C-TPAT, a company submits a narrative security profile which CBP compares to its minimum security requirements for the company's trade sector. In what is referred to as vetting, CBP then reviews the company's compliance with customs laws and regulations and reviews any violation history to identify information that might preclude approval of benefits. Once any omissions, such as failure to address criteria, or other issues are resolved to CBP's satisfaction, CBP accepts the company's agreement to voluntarily participate in C-TPAT and the company becomes a certified C-TPAT member. Companies that join the program commit to improving the security of their supply chain and agree to provide CBP with information on their specific security measures. In addition, the companies agree to allow CBP to validate or verify, among other things, that their security measures meet or exceed the agency's minimum security requirements. The purpose of this latter step, referred to as validation, is to help CBP ensure that the security measures outlined in a member's security profile are actually in place and effective.³ In return, C-TPAT members are entitled to various benefits—chief among them, a reduced likelihood of scrutiny of their cargo. As of the end of 2007, CBP had awarded initial C-TPAT certification to 7,948 companies that accounted for approximately 30

² For a further discussion of CSI, see GAO, *Supply Chain Security: Examinations of High-Risk Cargo at Foreign Seaports Have Increased, but Improved Data Collection and Performance Measures Are Needed*, [GAO-08-187](#) (Washington, D.C.: Jan. 25, 2008).

³ Member companies' security practices are to be revalidated every 3 years.

percent of all U.S. imports.⁴ In addition, by the end of 2007, CBP had validated the security of 79 percent of certified C-TPAT members.

In October 2006, the Security and Accountability for Every Port (or SAFE Port) Act of 2006 established a statutory framework for the C-TPAT program.⁵ In addition to formally establishing C-TPAT as a voluntary government-private sector program to strengthen and improve the overall security of the international supply chain, the act codified existing membership processes for C-TPAT and added new components, such as time frames for certifying, validating, and revalidating members' security practices. In addition, CBP—in recognition of the growing interdependence of nations that requires policymakers to work in partnerships across boundaries to achieve vital national goals—has engaged in outreach efforts through the World Customs Organization to improve the security of international trade by promoting an international framework of standards governing customs and related business relationships.⁶ These efforts have made C-TPAT a focal point for other countries wanting to establish similar customs-to-business partnership programs or, having programs, seeking reciprocal arrangements whereby one country can attain a certain level of assurance about and accept the customs security standards and practices and business partnership programs of another country. This attention places an added responsibility on CBP to effectively manage the C-TPAT program.

Our prior work on C-TPAT has acknowledged that while the C-TPAT program holds promise as part of a maritime security strategy, it has faced management and operational challenges. In March 2005, for instance, we reported on weaknesses in CBP's approach to validating C-TPAT members seeking to take advantage of the program's benefits.⁷ In particular, we reported that these weaknesses compromised CBP's ability to verify that supply chain security measures, described in security information

⁴ According to CBP's Executive Director, Cargo and Conveyance Security, C-TPAT members include other transportation modes in addition to seagoing vessels and, as a whole, accounted for 46 percent of imported containerized cargo as of September 2007.

⁵ Pub. L. No. 109-347, 120 Stat. 1884 (2006).

⁶ The World Customs Organization is an international organization aimed at enhancing the effectiveness and efficiency of customs administrations. We plan to report in the spring of 2008 on our ongoing review of CBP's role in promoting international standards.

⁷ GAO, *Cargo Security: Partnership Program Grants Importers Reduced Scrutiny with Limited Assurance of Improved Security*, [GAO-05-404](#) (Washington, D.C.: Mar. 11, 2005).

submitted by program members, were accurately reported and followed. In our July 2003 report, we identified other challenges with C-TPAT, including that the program lacked adequate performance measures and a human capital plan indicating how CBP intended to develop new staff to meet the program's growing demands.⁸

Recognizing the importance of the C-TPAT program, you asked us to conduct another review. For this report, we updated information from our 2005 report and addressed the following questions:

- What has CBP done to strengthen its policies for awarding benefits to companies that participate in C-TPAT in response to our 2005 report?
- What progress has CBP made in addressing challenges in its processes for validating C-TPAT companies' security processes that we identified in our 2005 report?
- What actions has CBP taken since 2005 to address overall management and staffing challenges of the C-TPAT program and ensure that the program operates as intended?

To address the first objective, we reviewed CBP's minimum security criteria and discussed its development with CBP and C-TPAT program officials. We also reviewed CBP's benefits for C-TPAT importers and subsequent requirements under the SAFE Port Act for granting benefits to C-TPAT participants. To address the second objective, we reviewed a nonprobability sample of 25 validations completed from March 1, 2006, through September 30, 2006. Our review included examining hard copy records and other data, such as comments or observations made by security specialists. The results of this review are not generalizable. However, because we selected the validation cases based on the variety of their field office location, role in the supply chain, use and nonuse of CBP's automated validation instrument, and type of validation questionnaire used, they provided us an overall understanding of the validation activities and documents that are collected during validation site visits. In CBP field locations where we performed the reviews, we also discussed the validation process with 11 supply chain security specialists who conduct C-TPAT validations. These specialists were selected based

⁸ GAO, *Container Security: Expansion of Key Customs Programs Will Require Greater Attention to Critical Success Factors*, [GAO-03-770](#) (Washington, D.C.: July 25, 2003).

on their availability and their views are not generalizable beyond the group. Nonetheless, because the specialists were selected nonsystematically and by chance and included a wide range of experience in the specialist position, their interview statements provided broad-based, realistic personal descriptions of what occurs in CBP's validation process for C-TPAT members. We also obtained information on and reviewed CBP's application of an automated instrument that CBP developed for use in the validation process. In addition, we compared the criteria for importers to the three questionnaires used in the validation process. To address the third objective, we reviewed documentation on C-TPAT Portal—CBP's newly implemented records management system—and C-TPAT's 2007 annual plan, 2005 human capital plan, and 2004 strategic plan. We supplemented our document reviews with discussions, as appropriate, with agency officials.

We conducted this performance audit from May 2006 to April 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. A more detailed discussion of our scope and methodology is contained in appendix I.

Results in Brief

In response to our March 2005 recommendations and in accordance with the SAFE Port Act, CBP has strengthened its policies for granting benefits to importers—C-TPAT's largest member sector—and has efforts underway to improve its policies for granting benefits to C-TPAT members in other sectors. For example, between March 2005 and November 2007, CBP established requirements for C-TPAT members in nine trade sectors to meet minimum security criteria for their specific trade sector, including importers and C-TPAT members in eight trade sectors other than importers: sea carriers; highway carriers; rail carriers; air carriers; foreign manufacturers; U.S. customs brokers; U.S. and foreign maritime port authorities and terminal operators; and long haul highway carriers in Mexico. In addition, CBP is finalizing criteria for the one remaining trade sector—freight consolidators/ocean transportation intermediaries and nonvessel operating common carriers—and plans to issue the criteria by mid-2008. CBP has also introduced a “tiered” benefits process, as provided in the SAFE Port Act, for C-TPAT importers, which account for about 48 percent of C-TPAT's members. CBP awards importers benefits on a three-tiered basis, depending in part on CBP's validation of the importers'

sustained commitment to implementing certain supply chain security practices. CBP has not established the tiered benefits structure for the other C-TPAT trade sectors—about 52 percent of C-TPAT’s members. Rather, it grants these trade sectors certain benefits such as access to other C-TPAT members and attendance at CBP-sponsored security training upon their certification into the program. CBP officials told us that they interpret the benefit tiering provisions of the Safe Port Act to apply mainly to importers. Nevertheless, CBP has considered implementing tiered benefits for these other trade sectors, but it has not been able to identify additional benefits to offer nonimporters in a tiered structure.

CBP has taken steps to improve the C-TPAT security validation process, but remains challenged to verify that C-TPAT members have security practices consistent with the minimum security criteria established for their particular trade sector. First, there are problems with the portable, personal computer-based data-gathering instrument that CBP has provided to its security specialists to help ensure that validation information is consistently collected, documented, and uniformly applied to decisions regarding the awarding of benefits to C-TPAT members. The SAFE Port Act requires that CBP have internal controls to provide a standardized work program for executing validations and other C-TPAT processes; however, we found that the instrument’s design does not result in a consistent validation process. In particular, we found that the usefulness of the instrument is limited by the fact that it provides default “no” responses. For example, if a response is marked “no,” it is unclear whether a security specialist, who has the discretion to answer or not answer individual questions, intentionally answered the question or if the response was an automatic default. Second, while the validation instrument allows specialists an opportunity to collect data on the results of members’ internal or third-party audits and inspections of their supply chain security practices, CBP does not require security specialists to use these data in validating members’ security practices as an alternative to direct testing, even though CBP views direct testing as impractical. Third, our work shows that CBP lacks a systematic process to ensure appropriate actions are taken in response to security specialists’ recommendations in validation reports. Without such a key internal control, CBP does not have reasonable assurance that companies implement its recommendations to enhance supply chain security practices in accordance with CBP criteria. Until CBP overcomes these collective challenges, CBP will be unable to assure Congress and others that C-TPAT member companies that have been granted reduced scrutiny

of their U.S.-bound containerized shipments actually employ adequate security practices.

CBP has taken a number of actions to address C-TPAT management and staffing challenges, but continues to confront issues in effectively managing the program. To strengthen C-TPAT program management, CBP, among other things, developed a human capital plan, implemented a records management system for documenting program decisions, and put additional performance measures in place. In addition to developing a human capital plan to address C-TPAT staffing challenges, CBP increased the number of supply chain security specialists, and projected its resource needs in light of additional workload requirements included in the SAFE Port Act. CBP believes its current staffing level will allow it to meet the act's requirements through 2009. CBP also developed and implemented C-TPAT Portal—a centralized electronic records management system to facilitate information storage and sharing and communication with C-TPAT members. This system provides CBP capability to track the status of C-TPAT applicants and members to ensure that they are certified, validated, and revalidated in accordance with SAFE Port Act requirements. However, certain data are missing from Portal, including interim processing dates, such as the date the security specialist sends members the 30-day validation notification letter, and this inhibits management's ability to determine compliance with its requirements for managing and operating the C-TPAT program. This lack of data also precluded us from fully assessing a sample of C-TPAT members' records to determine compliance with the program's requirements, thus not meeting internal control standards that documentation should be readily available for examination. Finally, CBP's efforts to develop C-TPAT program performance measures have focused on program administration and participation, and the internationalization of C-TPAT principles. However, the difficulty of determining the deterrent effect of security practices continues to challenge CBP in seeking outcome-based performance measures for the effectiveness of C-TPAT's efforts to ensure improved supply chain security. For example, CBP has not collected data on the results of C-TPAT members' actions to enhance supply chain security. Moreover, the lack of security-specific performance measures limits CBP's ability to evaluate progress for this program goal. Nevertheless, CBP remains subject to the requirement that federal agencies develop outcome-based performance measures to assess program results.

We are making recommendations to the Secretary of Homeland Security to direct the Commissioner of U.S. Customs and Border Protection to

improve CBP's implementation of SAFE Port Act provisions and its ability to meet C-TPAT program goals by: (1) revising the electronic instrument used in validations to include appropriate response options and eliminate the use of default "no " responses; (2) requiring validations to include the review and assessment of any available results from audits, inspections, or other reviews of a member's supply chain security; (3) ensuring that C-TPAT validation report recommendations are implemented by establishing a policy for security specialists to follow up with member companies when CBP requires them to make security enhancements to ensure that the necessary steps are taken; (4) enhancing the C-TPAT records management system to completely document key data elements needed to track compliance with SAFE Port Act and other CBP internal requirements; and (5) identify and pursue opportunities in information collected during C-TPAT member processing activities that may provide direction for developing performance measures of enhanced supply chain security.

We provided a draft of this report to the Secretary of Homeland Security for review and comment. We received comments from DHS and CBP that are reprinted in appendix III. DHS and CBP agreed with our recommendations and outlined actions that CBP plans to take to implement them. CBP also provided technical comments, which we have incorporated into the report as appropriate.

Background

Vulnerability of the Supply Chain

Supply chain security is a principal element in the U.S. layered strategy to protect maritime commerce. In the post 9/11 environment, the movement of cargo containers in a supply chain from foreign manufacturers, suppliers, or vendors to retailers in the United States is vulnerable to terrorist action. Several studies of maritime security conducted by federal, academic, nonprofit, and business organizations have identified vulnerability in the movement of oceangoing cargo in containers. Every time responsibility for cargo in containers changes hands along the supply chain there is the potential for a security breach; thus, vulnerabilities exist that terrorists could exploit by, for example, placing a WMD into a container for shipment to the United States or elsewhere. While there have been no known incidents of containers being used to transport WMD, criminals have exploited containers for other illegal purposes, such as smuggling weapons, people, and illicit substances. Finally, while CBP has noted that the likelihood of terrorists smuggling WMD into the United

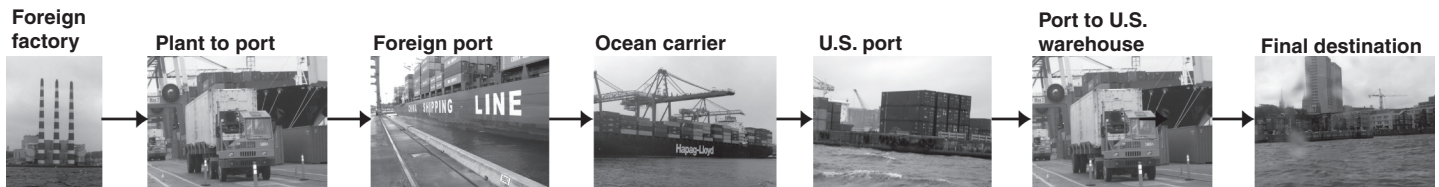
States in cargo containers is low, the nation's vulnerability to this activity and the consequences of such an attack are potentially high. For example, in 2002, Booz Allen Hamilton sponsored a simulated scenario in which the detonation of weapons smuggled in cargo containers shut down all U.S. seaports for 12 days. The results of the simulation estimated that the seaport closures could result in a loss of \$58 billion in revenue to the U.S. economy along with significant disruptions to the movement of trade.

According to research initiated by the U.S. Department of Transportation's Volpe National Transportation Systems Center, cargo security is affected by the number of individual companies contracted to facilitate the movement of cargo through its supply chain.⁹ The National Strategy for Maritime Security stated that the complexity of the process for handling containerized shipments makes it more difficult to embed security practices and reduce vulnerabilities than for other types of cargo.¹⁰ Container ships carry cargo for thousands of companies and the containers are loaded individually away from the port. Each transfer of a container from one party to the next is a point of vulnerability in the supply chain. The security of each transfer facility and the trustworthiness of each company are, therefore, critical to the overall security of the shipment. Cargo must be loaded in containers at secure facilities and the integrity of the container must be maintained to its final destination. In addition, supply chain personnel need to employ various methods to prevent the misuse of containers and conveyances for transporting WMD and other illegal commodities, as well as to detect tampering. Further, supply chain personnel are to report any unlawful incidents to DHS and, when appropriate, resolve such incidents prior to the arrival of the identified containers in the United States. Therefore, embedding security practices and vulnerability reduction efforts into commercial practices for all key points in the international supply chain using oceangoing cargo containers—shown in figure 1—rests upon implementing, among other things, customs-to-business partnerships, such as C-TPAT.

⁹ Department of Transportation Volpe National Transportation Systems Center, *Intermodal Cargo Transportation: Industry Best Security Practices* (Cambridge, Mass.: June 2002).

¹⁰ The *National Strategy for Maritime Security* (September 2005). The document is guided by the objectives and goals contained in the *National Security Strategy* and the *National Strategy for Homeland Security*.

Figure 1: Key Points in the International Supply Chain Using Oceangoing Cargo Containers



Source: GAO.

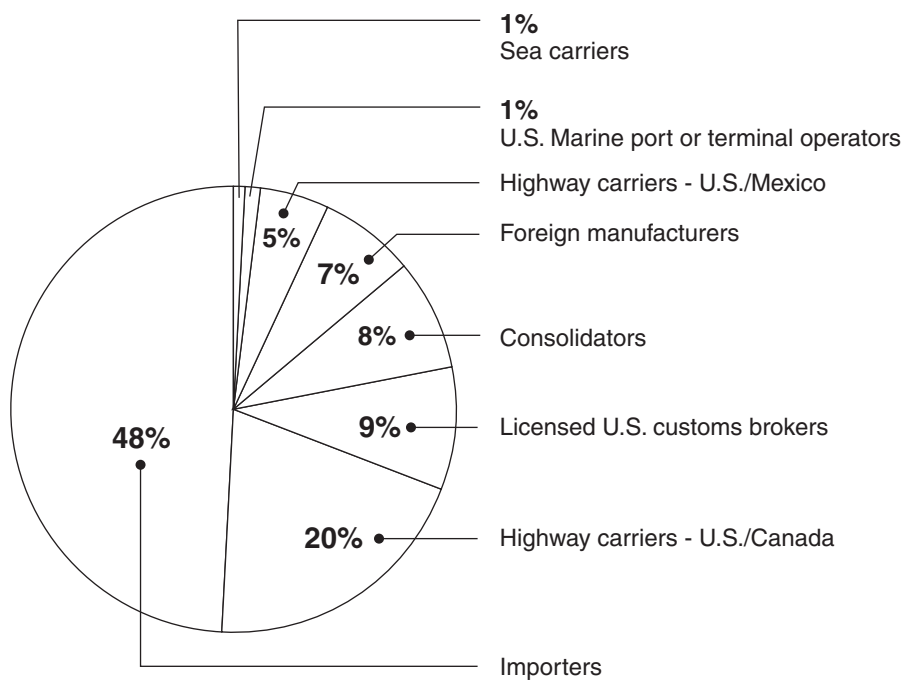
C-TPAT Program Structure and Membership

CBP conducts C-TPAT as a voluntary partnership program between the business community and CBP, designed to enhance the security of international supply chains to the United States, thus helping CBP to achieve its goals of homeland security and facilitation of trade by reducing the number of containers that otherwise might be screened for WMD because of risk considerations. CBP uses C-TPAT to pursue these goals by encouraging importers, freight forwarders, carriers, and other import logistics service companies to improve their security practices and to persuade their international supply chain service providers—companies operating overseas and outside CBP’s jurisdiction—to do the same. CBP accomplishes this through partnership agreements and by reviewing C-TPAT members’ security practices. As a first step in C-TPAT membership, a company must sign an agreement with CBP signifying its commitment to enhance its supply chain security consistent with C-TPAT minimum security criteria and to work with its service providers to enhance security throughout its supply chain to the United States. The partnership agreements that C-TPAT members sign provide CBP with the authority it needs to conduct the program, including validating members’ security practices and assessing the results of audits and internal reviews of member companies.

Under C-TPAT, CBP officials work with private companies to review their supply chain security plans and improve members’ overall security. In return, C-TPAT members may receive benefits, such as reduced scrutiny or expedited processing of their shipments. CBP data show that from 2004 through 2006, C-TPAT members were responsible for importing about 30 percent of U.S.-bound cargo containers, and specifically imported 29.5 percent of the 11.7 million oceangoing cargo containers arriving at and offloaded in the United States during the first 9 months of 2007. In September 2007, CBP had over 7,000 C-TPAT members from the import trade community that had various roles in the supply chain, as described in table 1. Importers, at 48 percent, were the largest C-TPAT member

group and, as shown in figure 2, the remainder of about 52 percent was distributed among nine other sectors that participate in international supply chains as business partners to importers.

Figure 2: Percent of C-TPAT Members by Trade Sector, as of September 30, 2007



Source: GAO analysis of CBP data.

Note: Percentages do not total 100 percent due to rounding and the exclusion of air carriers and rail carriers, each of which accounted for less than 1 percent of the C-TPAT program's membership.

Other trade sectors that are not importers serve in various roles as business partners to importers including supplier, manufacturer, vendor, service provider, and customer. Nonimporters participating in C-TPAT benefit by acquiring status as a “preferred importer business partner,” which is a company that importers prefer to do business with based on the company’s known acceptance of C-TPAT security requirements. According to CBP, the agency wants importing companies to have their business partners either join C-TPAT or adhere to C-TPAT security requirements. Table 1 describes the role of trade community members in the international supply chain.

Table 1: Roles of Trade Community Members in the Supply Chain

Trade community member	Role in the supply chain
Air/rail/sea carriers	Carriers transport cargo via air, rail, or sea
Border highway carriers	Highway carriers transport cargo for scheduled and unscheduled operations via road across the Canadian and Mexican borders.
Importers	Importers, in the course of trade, bring articles of trade from a foreign source into a domestic market.
Licensed customs brokers	Brokers clear goods through customs. The responsibilities of a broker include preparing the entry form and filing it, advising the importer on duties to be paid, and arranging for delivery to the importer.
Freight consolidators/ocean transportation intermediaries and nonvessel-operating common carriers	A freight consolidator is a firm that accepts partial container shipments from individual shippers and combines the shipments into a single container for delivery to the carrier. A transportation intermediary facilitates transactions by bringing buyers and sellers together. A nonvessel-operating common carrier is a company that buys shipping space through a special arrangement with an ocean carrier and resells the space to individual shippers.
Port authorities/terminal operators	A port authority is an entity of state or local government that owns, operates, or otherwise provides wharf, dock, and other marine terminal investments at ports. Terminal operator responsibilities include the overseeing and unloading of cargo from ship to dock, checking the actual cargo against the ship's manifest (list of goods), checking documents authorizing a truck to pick up cargo, overseeing the loading and unloading of railroad cars, and so forth.

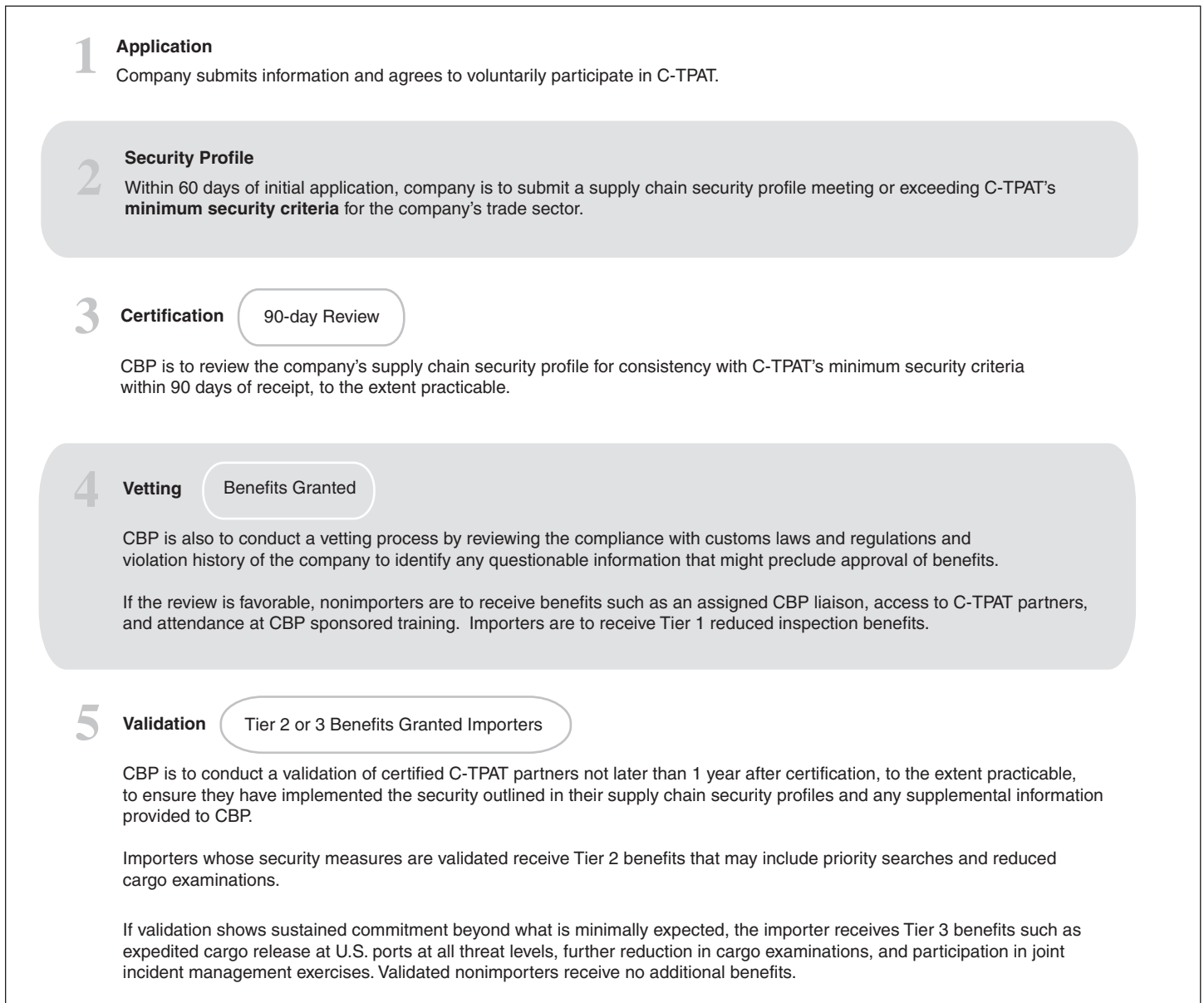
Source: GAO.

CBP hired 156 supply chain security specialists to provide services for C-TPAT members, as of September 2007 to, among other things, review the C-TPAT applicants' and members' security practices. The security specialists are located in five C-TPAT field offices: Washington, D.C.; Miami, Florida; Los Angeles, California; Newark, New Jersey; and New York, New York. Overall, for fiscal year 2007, the C-TPAT budget was about \$55 million. The budget for fiscal year 2008 was about \$56 million, and the budget for fiscal year 2009 is also about \$56 million.

CBP's Multistep Review Process for Accepting C-TPAT Members

CBP has a multistep review process for accepting businesses as members in the C-TPAT program and granting them benefits. As described in figure 3, the process consists of five steps: application, submission of a security profile, certification, vetting, and validation.

Figure 3: Overview of the C-TPAT Member Acceptance Process



Source: GAO.

Companies first complete an online electronic application that includes submission of corporate information, a supply chain security profile, and an acknowledgement of an agreement to voluntarily participate. In

completing the supply chain security profile, companies are to conduct a comprehensive self-assessment of their supply chain security procedures using the C-TPAT security criteria or guidelines that were jointly developed by CBP and the trade community for their specific participant category—such as U.S. importers or sea, rail, and highway carriers. These security profiles are to summarize the applicant’s current security procedures in areas such as container security, personnel security, and security training and threat awareness.

CBP next uses a certification process to review a new company’s application and security profile by comparing their contents with security criteria, looking for any weaknesses or gaps in security procedures as described by the companies. In what is referred to as vetting, CBP also reviews the company’s compliance with customs laws and regulations and reviews any violation history to identify information that might preclude approval of benefits. Once any omissions or issues are resolved to CBP’s satisfaction, CBP accepts the company’s agreement to voluntarily participate in C-TPAT and the company becomes a certified C-TPAT member, eligible for certain program benefits. The SAFE Port Act refers to certified members as “Tier 1 participants” and provides that CBP is to offer them “limited benefits,” such as a maximum 20 percent reduction in the score that CBP uses in identifying cargo for inspection that arrives at U.S. ports.

CBP’s final step in the review process for accepting new C-TPAT members is validating that the security measures outlined in a certified member’s security profile are reliable, accurate, and effective. Member companies are selected for validation either on the basis of (1) a risk assessment; (2) CBP’s election to focus on a particular country, industry, or commodity; (3) CBP headquarters’ direction in accordance with a mandate, such as a SAFE Port Act requirement; or (4) meeting the SAFE Port Act requirement to complete validations not later than 1 year after certification, to the extent practicable. During the validation process, CBP security specialists meet with company representatives to verify that the supply chain security measures contained in the company’s security profile are in place as described in the profile. If the company is an importer operating an international supply chain, the security specialists are to visit the company’s domestic and foreign sites.¹¹ The CBP security

¹¹ One country, China, denies CBP personnel access to conduct supply chain security validations. For more information on CBP efforts to conduct validations in China, see app. II.

specialist assigned to a company identifies potential sites to visit based on research of the company's business history, import transportation modes, facility locations, and other factors. Preliminary selections are discussed with company officials and the C-TPAT program director provides final approval. To initiate the validation, the security specialist provides the member an outline of the discussion areas for meetings and site visits and a site visit agenda. Upon completion of the validation process, CBP prepares a final validation report it presents to the company. The report may include recommendations to improve security and required actions, if any, the member must take to conform to minimum security requirements, as well as a determination on whether the member should continue to receive program benefits and, if an importer, whether additional program benefits are warranted. The SAFE Port Act refers to validated members as Tier 2 participants and provides that CBP is to extend benefits to them, which may include reduced examinations of cargo, among other benefits.

Once a C-TPAT member completes the validation process, CBP requires the member to perform an annual self-assessment—essentially an update of its security profile—that provides the member with an opportunity to review, update, or change its security procedures as needed. CBP requires its security specialists to annually certify that members complete the self-assessment, but does not subject each annual self-assessment to its validation process. Rather, CBP plans to revalidate members' security once every 3 years, as stated in the House Appropriations Committee report accompanying the fiscal year 2007 DHS appropriations bill.¹³ CBP began revalidations in early 2007—about 3 years from the time the first C-TPAT members had been initially validated. As part of an overall revalidation strategy, CBP first performed annual revalidations of U.S./Mexico long haul highway carriers because of the high risk for drug trafficking and also conducted special revalidations for members involved in a serious violation, such as a drug seizure.

¹³ The SAFE Port Act required CBP to conduct revalidations at least once every 4 years, but CBP has elected to perform them every 3 years in response to the committee report language.

SAFE Port Act and International Initiatives that Affect the C-TPAT Program

The SAFE Port Act provides a statutory framework for the C-TPAT program, which previously had been an agency initiative not specifically required by law. The act formally established the program's structure, including eligible participants, basic requirements, benefits, and operating processes. Moreover, the act mandated that the program have sufficient internal controls¹⁴ to support C-TPAT management systems and include such elements as a strategic plan to identify outcome-based goals and performance measures; an annual plan to match available resources and projected workload; a standardized work program to execute its processes; and a record management system to document processing determinations.¹⁵

In recent years, CBP's international efforts have made C-TPAT a focus of other countries interested in developing similar customs-to-business partnership programs or considering arrangements with other countries to mutually accept the results of programs similar to C-TPAT. Foreign officials within the European Union and elsewhere have closely observed the C-TPAT program as one potential model for enhancing supply chain security. As we have previously reported and CBP has recognized, in security matters the United States is no longer self-contained, either in its problems or its solutions.¹⁶ The growing interdependence of nations requires policymakers to recognize the need to work in partnerships across boundaries to achieve vital national goals. For this reason, CBP has committed, through its strategic planning process, to promote an international framework of standards governing customs and related business relationships in order to enhance supply chain security. C-TPAT is one component of this ongoing, broad-based effort.¹⁷

¹⁴ Internal controls are the integral components of an organization's management that provide reasonable assurance of the effectiveness and efficiency of operations, the reliability of financial reporting, and the compliance with applicable laws and regulations.

¹⁵ Outcome-based goals are goals that reflect the intended purpose of a program or activity.

¹⁶ See GAO, *Maritime Security: The SAFE Port Act: Status and Implementation One Year Later*, [GAO-08-126T](#) (Washington, D.C.: Oct. 30, 2007).

¹⁷ GAO has work ongoing addressing international maritime security efforts and plans to issue a report in the spring of 2008.

CBP Has Strengthened C-TPAT by Establishing Minimum Security Criteria and a Tiered Approach to Awarding Benefits to Importers

In March 2005, we reported that CBP had not taken a rigorous approach to verifying C-TPAT members' supply chain security, thereby limiting its ability to ensure that the program helps prevent terrorism and that members are deserving of any C-TPAT benefits received.¹⁸ Since our report, CBP has acted on our recommendations to strengthen the security validation process by establishing minimum security criteria for the majority of C-TPAT members and providing a tiered structure for awarding benefits to importers. CBP also has actions underway to establish minimum security criteria for its remaining members.

CBP Is Completing Its Establishment of Minimum Security Criteria for C-TPAT Members

Since March 2005, CBP has been working with the trade community to establish revised C-TPAT minimum security criteria for specific trade sectors to replace the more general security guidelines previously in effect for C-TPAT participation. As of November 2007, CBP had issued the revised criteria for 9 of the 10 trade sectors that participate in C-TPAT: importers, sea carriers, highway carriers, rail carriers, air carriers, foreign manufacturers, U.S. customs brokers, U.S. and foreign maritime port authorities and terminal operators, and long haul highway carriers in Mexico. The agency anticipates finalizing criteria for the remaining trade sector—freight consolidators/ocean transportation intermediaries and nonvessel-operating common carriers—and making it effective by mid-2008. According to CBP, defining the makeup of this sector is a challenge because of the variety of entities that may serve in this role.

Overall, these criteria provide greater specificity about what is expected of the C-TPAT members. For example, the older, general guidance to foreign manufacturers required that “Where a manufacturer out sources or contracts elements of its supply chain, such as a transportation, conveyance, warehouse...the manufacturer must work with these business partners to ensure that pertinent security measures are in place and adhered to throughout their supply chain.” The minimum security criteria for foreign manufacturers now state that “Foreign manufacturers must have written and verifiable processes for the selection of business partners including, carriers, other manufacturers, product suppliers....”

¹⁸ GAO-05-404.

Table 2 lists the trade sectors for which CBP has issued minimum security criteria and provides examples of the criteria established. The SAFE Port Act of 2006 ratified this approach, requiring that companies seeking to participate in C-TPAT maintain security measures and supply chain security practices in accordance with criteria established by CBP.

Table 2: Examples of Minimum Security Criteria That Trade Sectors Must Meet for C-TPAT Participation

Trade sector	Examples of minimum security criteria	Month/year revised minimum criteria effective
Importers	Written procedures must stipulate how seals are to be controlled and affixed to loaded containers.	March 2005
Sea carriers	A vessel visitor log must be maintained and a temporary visitor pass must be issued.	March 2006
Highway carriers	Trailers must be stored in a secure area to prevent unauthorized access and/or manipulation.	March 2006
Foreign manufacturers	To help ensure the integrity of cargo, procedures must be in place to ensure that information received from business partners is reported accurately and timely.	August 2006
Rail carriers	Rail carriers must have procedures in place for reporting unauthorized entry into rail cars and locomotives.	August 2006
U.S. customs brokers	For all brokers, procedures for the issuance, removal, and changing of access devices (e.g., keys, key cards, etc.) must be documented.	January 2007
U.S. and foreign marine port authorities and terminal operators	An employee identification system must be in place for positive identification and access control purposes.	August 2007
Long haul highway carriers in Mexico	Written procedures must exist which identify specific factors or practices, that may deem a shipment from a certain shipper of greater risk.	August 2007
Air carriers	Procedures must be in place to prevent, detect, or deter unmanifested material and unauthorized personnel from gaining access to aircraft, including concealment in cargo.	November 2007

Source: CBP.

Note: CBP has not issued minimum security criteria for one trade sector—freight consolidators/ocean transportation intermediaries and nonvessel operating common carriers. CBP projects that criteria will be issued and effective for the trade group by mid-2008.

CBP Has Established Tiered Benefits for Importers

As another step to strengthen C-TPAT policies, CBP introduced a “tiered” benefits process for importers, whereby benefits are awarded on a tiered basis depending, in part, on CBP’s validation to verify the importer’s supply chain security plans and the extent to which importers demonstrated a sustained commitment to implementing minimum supply chain security practices. This tiered approach, which is now codified in the SAFE Port Act, addresses a problem we identified in our March 2005 report, namely, that CBP granted companies full C-TPAT benefits before

verifying C-TPAT members' security procedures.¹⁹ At that time, we reported that CBP's screening process for certifying and assessing member companies provided no actual verification that the security measures in the company's reported security profile were accurate and being followed before granting benefits. Under the new tiered approach, CBP postpones the granting of broader benefits for individual importers—who make up 48 percent of C-TPAT members—until after it conducts a validation to verify the individual importer's supply chain security practices.

While importers receive tiered benefits, other C-TPAT trade sectors—which include sea carriers, highway carriers, U.S. marine and port terminal operators, foreign manufacturers, consolidators, and U.S. customs brokers and account for about 52 percent of C-TPAT members—receive all benefits available to them, such as access to other C-TPAT members and attendance at CBP-sponsored security training, upon being certified into the program and before their security plans are verified. CBP considered the practicality and relevancy of implementing tiered benefits for the nonimporter trade sectors as well as importers, but CBP officials said they are having difficulty identifying additional benefits available to offer nonimporters in a tiered benefit structure. Specifically, CBP officials said that C-TPAT participants in these sectors generally derive their benefits from the business world in the form of increased marketability once they are designated a C-TPAT member. Hence CBP would have no additional benefits to offer these participants.²⁰

While the SAFE Port Act provides for three tiers of participation and benefits for C-TPAT members, CBP officials told us that they interpret the benefit tiering provisions of the act to apply mainly to importers who use their international supply chains, consisting of the other trade sectors, to bring goods into the United States. Thus, although CBP acknowledges the act's tiered benefit structure, it believes the structure does not necessarily apply to all participants.

¹⁹ [GAO-05-404](#).

²⁰ Highway carriers and manufacturers who participate in CBP's Free and Secure Trade (FAST) initiative are the exception. The initiative is between the United States, Canada, and Mexico and allows known low-risk highway carriers and manufacturers that are C-TPAT certified to receive expedited border processing.

When the SAFE Port Act established the statutory framework for the C-TPAT program, it set forth tiered benefits for all C-TPAT members, but provided examples of tiered benefits that apply only to importers. Specifically, as shown in table 3, the act established three tiers for granting C-TPAT members benefits and gave examples that describe the reduced likelihood of scrutiny or expedited processing of an importer’s containerized cargo.

Table 3: Summary of C-TPAT Tiered Benefits Structure from the SAFE Port Act

C-TPAT benefit level	When benefits are awarded	Time frame for benefits determination	Benefit examples
Tier 1	Upon CBP’s certification of applicant as a C-TPAT member	Within 90 days of CBP’s receipt of an application for C-TPAT membership, to the extent practicable	May include: <ul style="list-style-type: none"> • a maximum 20 percent reduction in Automated Targeting System score for an importer
Tier 2	Upon validation of member’s security measures and supply chain security practices	Within 1 year of a member’s certification into C-TPAT, to the extent practicable	May include: <ul style="list-style-type: none"> • reduced scores in Automated Targeting System for importers • reduced cargo examinations^a • priority cargo searches^b
Tier 3	Upon validation that member demonstrates sustained commitment to maintaining measures and practices that exceed Tier 2 guidelines	No time frame specified, but may be done as part of Tier 2 validation	May include: <ul style="list-style-type: none"> • expedited release of cargo in U.S. ports at all threat levels designated by the Secretary, Homeland Security • further reduction in cargo examinations • priority cargo examinations • further reduction in the Automated Targeting System risk score for importers • inclusion in joint incident management exercises, as appropriate

Source: GAO.

^aAn examination is an inspection of cargo to detect the presence of misdeclared, restricted, or prohibited items that utilizes nonintrusive imaging such as x-ray and detection technology.

^bA search is an intrusive examination in which a container is opened and its contents are unloaded and visually inspected for the presence of misdeclared, restricted, or prohibited items.

Tier 1 benefits are to be limited and may include a reduction in the score assigned a shipment through CBP’s Automated Targeting System of not greater than 20 percent of the high-risk threshold established by the

Secretary of Homeland Security.²¹ CBP is to determine, by comparing the applicant's security profile to established minimum security criteria or guidelines, whether a C-TPAT applicant is to be certified and granted benefits within 90 days of receiving the application, to the extent practicable. CBP must also vet the C-TPAT applicant by reviewing the applicant's compliance with customs laws and regulations and any violation history. If CBP gives the applicant a favorable review, the applicant is certified as a C-TPAT member and limited benefits can begin.

Tier 2 or 3 benefits are to be determined based on CBP's validation results. After certifying a member into C-TPAT and granting limited Tier 1 benefits, CBP is to conduct the validation process to verify the member's security measures and practices. The SAFE Port Act provides that all C-TPAT participants undergo validation, including on-site assessments, within 1 year of certification as a Tier 1 participant, to the extent practicable. CBP is to extend benefits to each validated Tier 2 participant, which may include, in contrast to limited Tier 1 benefits, further reductions in Automated Targeting System scores, reduced examinations of cargo, and priority searches of cargo. The act also provides for validation of C-TPAT members as Tier 3 participants if they demonstrate a sustained commitment to maintaining security measures and supply chain security practices that exceed Tier 2 guidelines, but there is no deadline for making this determination. Upon Tier 3 validation, participants are to receive Tier 3 benefits, which may include further reductions in Automated Targeting System scores or cargo examinations, among other benefits. See appendix IV for data on C-TPAT members who have received tiered benefits through December 2007.

²¹ As discussed earlier in this report, the Automated Targeting System is a computerized targeting model that CBP uses in the targeting and inspection of cargo that arrives at U.S. ports. ATS uses hundreds of targeting rules to check available data on every arriving container and assigns each container a risk characterization or score.

CBP Has Taken Steps to Improve Data Collected for Validation, but Still Faces Limitations to Assure Consistent Program Decisions and Effective Security

The SAFE Port Act mandated that the C-TPAT program have sufficient internal controls to support C-TPAT management, including a standardized work program for validations. Standards for internal control in the federal government call for policies and procedures to ensure that the findings from audits and other reviews are promptly resolved. While CBP developed a personal-computer-based (PC-based) electronic instrument to help security specialists ensure that validation information is consistently collected, documented, and uniformly applied to decisions regarding the awarding of benefits to C-TPAT members, design problems with the instrument limit its effectiveness. Also, while the validation instrument allows specialists an opportunity to collect data on the results of members' internal or third-party audits and inspections of their supply chain security practices, CBP does not require security specialists to use these data in validating members' security practices as an alternative to direct testing, even though CBP views direct testing as impractical. Further, our work shows that CBP lacks a systematic process to ensure appropriate actions are taken in response to security specialists' recommendations in validation reports. Without such a key internal control, CBP does not have reasonable assurance that companies implement its recommendations to enhance supply chain security practices in accordance with CBP criteria.

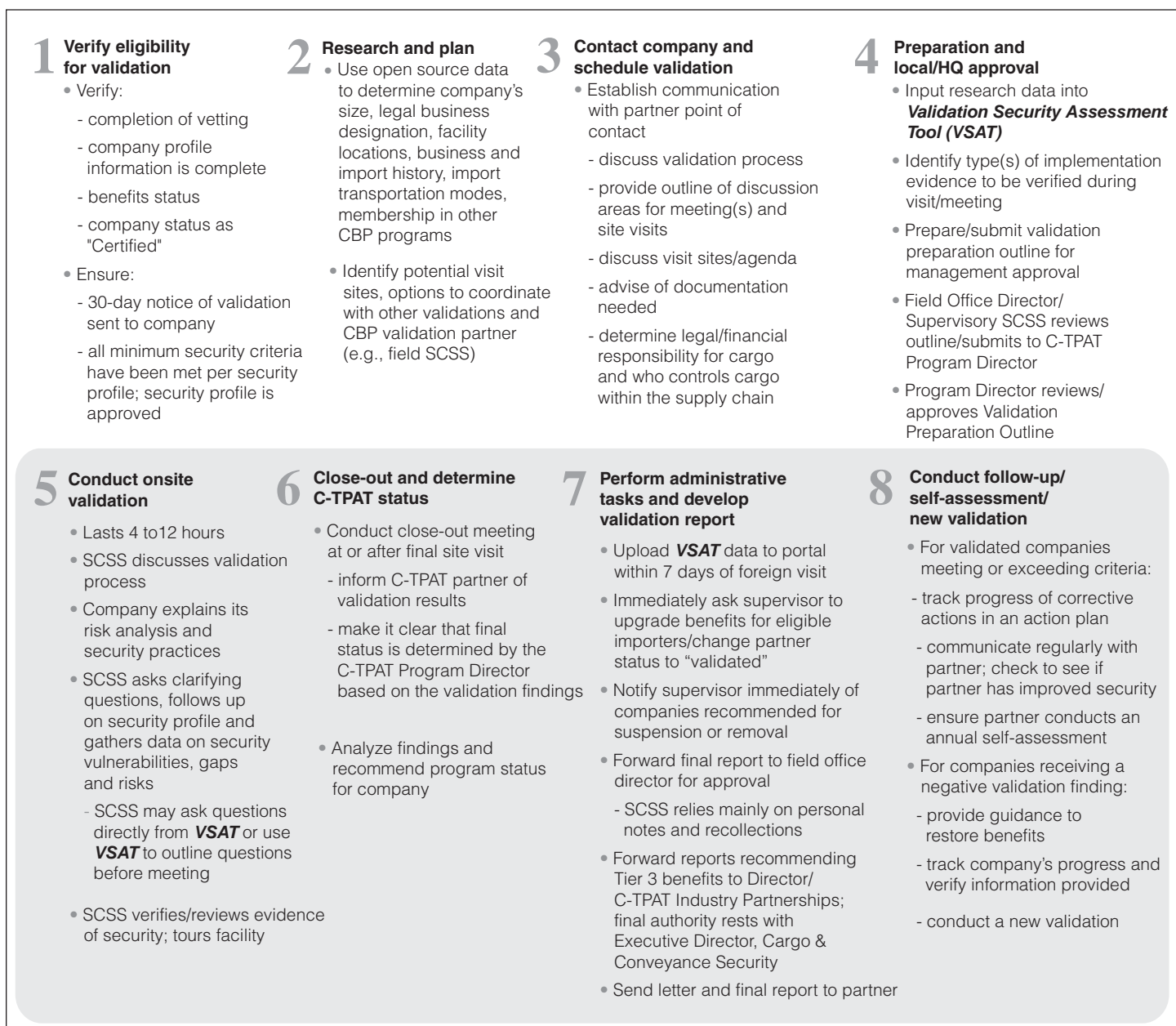
CBP Has Developed an Instrument to Collect Validation Data

In addition to its efforts to enhance the C-TPAT program's policies with minimum security criteria and tiered benefits, CBP has developed a portable, PC-based electronic instrument to help improve its process for collecting information during the validation process. In March 2005, we recommended that CBP strengthen the validation process by providing appropriate guidance to security specialists conducting validations. CBP, partly in response to our recommendation, developed and implemented the Validation Security Assessment Tool (VSAT) to guide security specialists in performing validations, including data gathering and documentation.²² Prior to implementation of the VSAT in March 2006, C-TPAT did not have a consistent way to collect validation information.

²² In December 2004, C-TPAT management issued requirements for an automated risk assessment and validation tool to the contractor in CBP's Automated Commercial Environment project—a multiyear effort to modernize CBP's business processes, information technology, and infrastructure. The VSAT is a result of the contractor's effort. Per CBP's requirement's statement, the initial purpose of the tool was to provide C-TPAT validation capability, but information gathered using the tool would ultimately serve as input to CBP's Automated Targeting System, used in selecting containerized shipments for inspection.

Rather, it was up to individual security specialists to determine how to verify supply chain security. With VSAT, security specialists are provided an electronic, PC-based instrument that contains a series of uniform questions within seven defined security areas that can be asked of C-TPAT member companies and their foreign supply chain partners during the validation process. Figure 4 provides an overview of the validation process and describes how security specialists are to use the VSAT in conducting validations.

Figure 4: C-TPAT Validation Overview—Key Processing Steps Used by Supply Chain Security Specialists (SCSS)



Source: GAO and CBP.

According to CBP, the VSAT was developed to help security specialists collect validation information in a consistent and uniform way and to measure the C-TPAT members' security from the foreign point where

cargo is loaded into the container to the port where the container is loaded onto a vessel. The development of an instrument such as VSAT also helps CBP carry out the SAFE Port Act requirement that C-TPAT establish internal controls to help ensure that a standardized work program is used to execute validations and other C-TPAT management processes. Further, according to the VSAT requirements statement that initiated its development, CBP planned to eventually use the VSAT data, as they relate to C-TPAT member benefits, for direct input to its Automated Targeting System for identifying containerized shipments for inspection based on risk.

CBP's VSAT Design Limits Its Usefulness for Providing a Standardized Validation Process

The VSAT, as envisioned by CBP, has the potential to strengthen C-TPAT processes. CBP officials see the VSAT as a way of addressing our earlier concerns with the adequacy and consistency of validations, as discussed in our March 2005 C-TPAT report.²³ However, CBP's use of the VSAT to ensure that validation information is consistently collected, documented, and uniformly applied is limited.

CBP's design of the VSAT does not provide for reliable analysis of data regarding verification of C-TPAT members' security practices. Specifically, the VSAT uses a binary format that requires security specialists to answer questions in a "yes/no" format with "no" being the default response. With this format, one cannot determine whether a "no" response denotes an intentional "no," "not applicable," or that the security specialist simply skipped or failed to complete the item. Determining the meaning of a "no" response is especially challenging considering that the VSAT consists of three electronic questionnaires that include a list of validation steps and questions that range from about 250 to more than 900 lines. Security specialists select the appropriate questionnaire to use in a validation and, even when the shortest questionnaire applies, the number of validation steps and questions posed is extensive. Further, the security specialists use their discretion to answer or not answer individual questions based on their assessment of the relevance of those questions to the companies' security practices. The reason for a "no" response is not accurately recorded unless the security specialist provides an explanatory note. While a "yes" response should mean that a security practice is in place or effective, overall analysis of VSAT data is not possible because of the uncertainty associated with the "no" responses. Consequently, the

²³ See [GAO-05-404](#).

accuracy and reliability of the data associated with CBP's validation of C-TPAT members' security practices are unknown.

CBP's Security Specialists Validate C-TPAT Members' Security Practices Based on Information Other than Testing Results

CBP accepts a company as a C-TPAT member and initiates benefits based on a CBP security specialist's favorable review of the security profile submitted by the company. The security specialist verifies only that the self-reported information meets C-TPAT's minimum security criteria. During the validation process, CBP security specialists gather information on security vulnerabilities, gaps, and risks through activities that include (1) asking questions about the company's security practices, (2) gathering information by observing physical security and reviewing policies and procedures, (3) identifying accountability for security, and (4) identifying any requirements the member may have for audits (or testing to be conducted) of its security measures to determine if the measures are working as intended. However, because of the voluntary nature of the C-TPAT program, limited resources, and limits to CBP's jurisdiction over international trade partners, it is impractical for CBP to directly test members' supply chain security practices. Without such testing, CBP is challenged to know that members' security measures are reliable, accurate, and effective—the stated purpose of the validation process.

In addition to information CBP collects during the validation process, C-TPAT companies may perform ongoing monitoring of their supply chain security in the course of normal operations. The VSAT includes a variety of questions regarding member companies' actions to monitor security, including whether a company: (1) periodically inspects its security measures and documents the results, (2) has documented procedures to review the effectiveness of security, (3) performs security audits, or (4) monitors the security practices of contractors. Specialists are not required to use this information in making security assessments and, according to the 11 specialists that we interviewed, are not doing so. However, without using such information, CBP lacks assurance that C-TPAT is meeting its goal to enhance supply chain security.

Consistent with Operating Procedures, CBP May Grant C-TPAT Benefits Before Members Implement Recommended Security Enhancements and Does Not Systematically Follow Up on Actions Taken

The SAFE Port Act mandated that the C-TPAT program have sufficient internal controls to support C-TPAT management systems, including a standardized work program to execute validation and other program processes. Once validation data collection is completed, the security specialist is to analyze the validation findings and formulate a recommendation on the C-TPAT program status for the company. However, at the conclusion of a validation site visit, CBP may award a company benefits before recommended actions to enhance security are implemented. This practice is within the scope of CBP's operating procedures for C-TPAT. The transmittal letter for the subsequently prepared validation report is to inform the importer of its eligibility for the new benefits status, even if the validation report includes required actions to meet minimum security requirements. The letter encourages the importer to comment on its plans to adopt the validation report's recommendations; however, the eligibility for benefits is not stated as being contingent upon the importer implementing the required actions.

We examined three validation reports and their transmittal letters provided by CBP's Executive Director, Cargo and Conveyance Security, as typical examples. Two of the letters advised the C-TPAT member of Tier 2 or Tier 3 eligibility, but also noted required actions to enhance security such as (1) having documentation that business partners are meeting C-TPAT security criteria or (2) having a system in place to identify abuse of the company's information technology system. Because the validation data provided by CBP did not include all items needed to analyze C-TPAT member processing, such as the date a company was selected for a security validation, we could not determine how often these situations have occurred or whether Tier 2 or Tier 3 benefits had been provided to members who had not yet implemented required actions to meet C-TPAT minimum security requirements. However, CBP's lack of systematic procedures to follow up and verify that validation recommendations are implemented is inconsistent with CBP's validation purpose to ensure that members' security practices meet or exceed C-TPAT minimum security criteria.

Besides granting benefits before ensuring recommended actions are implemented, CBP's policy does not require its security specialists to systematically follow up to ensure that companies implement validation report recommendations to make their security practices consistent with minimum security criteria. Instead, security specialists are encouraged, for example, to track the progress of corrective actions a member is required to take, communicate regularly with the member, and check back occasionally to see if the member's security has changed or improved.

Security specialists are also to ensure that C-TPAT members conduct an annual self-assessment and update their security profiles, but are not required to verify these profile changes. Further, when planning revalidations, security specialists are to consider sites visited during the previous validation that were the source of recommendations or required actions. However, the security specialists are not required to visit problem areas. Without requiring its security specialists to verify and document that C-TPAT members implement validation recommendations, CBP does not have sufficient internal controls to ensure member security consistent with minimum security criteria. Specifically, standards for internal control in the federal government call for policies and procedures to ensure that the findings audits and other reviews are promptly resolved. We addressed this issue with CBP officials. CBP's Executive Director, Cargo and Conveyance Security, agreed that CBP could do more to follow up on validation recommendations, but noted that security specialists use their discretion and take into account the severity of the security shortfall when making validation decisions.

CBP Has Improved C-TPAT Management with Better Human Capital Planning and Record Keeping, but Establishing C-TPAT Program Performance Measures for Security Enhancement Remains a Challenge

Since our March 2005 report, CBP has implemented human capital planning, a records management system, and performance measures to strengthen C-TPAT program management in response to prior recommendations.²⁴ In particular, CBP developed a human capital plan that addressed long-term staffing needs and described how the program will recruit, train, and retain staff to achieve program goals. CBP also implemented a records management system for documenting key program decisions, but the system does not include key dates to monitor C-TPAT processes. Further, CBP increased the number of performance measures for some aspects of the C-TPAT program, but CBP does not yet have performance measures to determine whether the program meets its security goals. While these efforts have helped to improve C-TPAT management, the challenges that remain limit CBP's ability to monitor C-TPAT program operations and to ensure that the program enhances the supply chain security of C-TPAT members.

²⁴ See [GAO-05-404](#).

CBP Has Developed a Human Capital Plan and Has Increased the Number of Supply Chain Security Specialists to Address C-TPAT Staffing Challenges

In 2005, CBP implemented a C-TPAT human capital plan to systematically address long-term staffing needs. In our July 2003 and March 2005 reports, we noted CBP’s lack of a systematic plan to address the long-term staffing resources necessary to conduct C-TPAT program activities such as conducting validations, reviewing company security profiles, and vetting company histories.²⁵ In addition to the human capital plan, CBP developed a formula for determining the number of validations that a security specialist can complete within 1 year, which it used for its workforce planning. Since implementation of the plan, CBP increased the C-TPAT staff by 280 percent—from 41 specialists in 2005 to a total of 156 specialists as of September 2007. CBP officials reported that the increase in staff will allow C-TPAT to continue with current and future certification, validation, and revalidation workloads based on projected growth in program membership. Table 4 shows CBP’s projected staffing and validation workload for 2007 through 2009.²⁶

Table 4: CBP’s Projected C-TPAT Staffing and Validation Workload for 2007-2009

Year	Supply chain security specialist staff	Validations per staff per year	Total validations based on staffing	Initial validations	Revalidations	Annual validations for Mexican highway carriers	Total validations based on workload
2007	150	20	3,000	2,200	420	286	2,906
2008	150	20	3,000	1,500	1,080	400	2,980
2009	200a	20	4,000	1,500	2,400	400	4,300

Source: GAO analysis of data provided by CBP.

^aExpected total staff includes an additional 50 specialists authorized by the SAFE Port Act.

The human capital plan also describes how the program will recruit, train, and retain staff to achieve program goals. CBP has expanded the program’s recruitment process to target candidates with experience in intelligence and investigations since specialists hired in 2003 and 2004 possess previous experience in supply chain security. New employees

²⁵ See [GAO-03-770](#) and [GAO-05-404](#).

²⁶ The information on projected staffing and validation workload in this report is based mainly on interviews with CBP officials. To the extent possible, we corroborated the information provided by CBP officials with agency documentation. Although CBP officials presented the data as their official numbers, we cannot attest to their reliability. However, in the context in which the data were presented, we determined the usage to be appropriate because the data did not constitute the sole support of our findings, conclusions, and recommendations.

undergo a 2-week initial training program and also have opportunities for recurring training. In 2007, CBP issued an annual plan update for the C-TPAT program to address SAFE Port Act requirements. The act requires, among other things, that CBP (1) review all new applications for certification within 90 days, to the extent practicable; (2) conduct initial validation of all new certified members within 1 year of acceptance into the program, to the extent practicable; and (3) conduct revalidation of all members within 4 years of initial validation. CBP, however, plans to conduct revalidations every 3 years. The SAFE Port Act also authorized an additional 50 specialists for CBP to meet additional workload requirements mandated by the SAFE Port Act. According to CBP officials, the agency's human capital plan and current program staffing level are sufficient to meet SAFE Port Act requirements for projected validation and revalidations for 2007 and 2008. CBP anticipates the additional 50 specialists will be available in the latter part of 2008 and will allow C-TPAT to meet its projected workload and remain compliant with SAFE Port Act requirements.

CBP Has Implemented a Records Management System for Documenting Key Program Decisions, but Certain Key Dates Are Needed to Monitor C-TPAT Processes

In our March 2005 report, we recommended that CBP implement a records management system that accurately documents key decisions and significant operational events in a timely manner, including a reliable system for documenting and maintaining records of all decisions in the C-TPAT application through validation processes.²⁷ In response to our recommendation, CBP has developed and implemented C-TPAT Portal, a centralized electronic records management system, to facilitate information storage, and secure interaction and communication with C-TPAT companies. According to CBP officials, C-TPAT Portal is the official records management system for the C-TPAT program. C-TPAT Portal provides real-time access to C-TPAT information, tools, and databases for C-TPAT members and staff. For example, the system enables CBP to track and ascertain the status of C-TPAT applicants and member companies to ensure that they are certified, validated, and revalidated within time frames specified in the SAFE Port Act.

The SAFE Port Act requires CBP to maintain a records management system to document determinations on the reviews of each C-TPAT member, including certifications, validations, and revalidations. Standards for internal control in the federal government also require that all

²⁷ See [GAO-05-404](#).

transactions be clearly documented in a manner that is complete, accurate, and useful to managers and others involved in evaluating operations. Prior to implementing C-TPAT Portal in May 2006, CBP lacked a basic records management system to document key decisions and to regularly and accurately update programmatic information.²⁸ C-TPAT Portal is a substantial improvement in providing a framework for capturing data on C-TPAT members and core program activities. However, it does not contain certain data, including important processing dates.

During our review, we obtained data from C-TPAT Portal on a sample of 419 validations completed during March through September 2006.²⁹ We attempted to analyze CBP's time frames for processing the companies—from their application for C-TPAT membership through validation of their security profiles and the granting of C-TPAT benefits—but could not complete the analysis because CBP did not record certain key data elements in C-TPAT Portal. Specifically, based on our review of the C-TPAT membership processes and the data items in C-TPAT Portal, we found that 13 of the 27 data items needed for our analysis were not available in Portal. In particular, we found that while many key dates for core C-TPAT program activities were completed, other interim processing dates that reflect the internal process requirements were not available. The absence of such information from Portal not only prevents analysis by external agencies, but also limits CBP management's ability to monitor compliance with its requirements, assess the efficiency of C-TPAT operations, and determine that its processes are facilitating meeting time frames specified in the SAFE Port Act. For example, our analysis showed that Portal does not include data to determine whether security specialists are meeting the requirement to notify a company at least 30 days prior to a validation visit. The date of the initial validation meeting is captured in Portal, but the date that the security specialist sends the 30-day validation notification letter is not in Portal, making it impossible for CBP or reviewing agencies to determine whether C-TPAT is being run in accordance with the 30-day notice policy. Further, while Portal captures the date that VSAT data are uploaded to the Portal system, the date that a security specialist returns to his office after a foreign site validation visit is

²⁸ CBP used C-TPAT tracker—an Access database—to record some information about C-TPAT members—as an interim measure prior to Portal and subsequently, the agency migrated C-TPAT tracker data into Portal.

²⁹ As previously mentioned, CBP migrated data from C-TPAT tracker including information on validations completed into the Portal system.

not captured. As a result, management is precluded from knowing whether security specialists are meeting CBP's requirement to complete the VSAT within 7 days of returning to their office from a foreign site visit. Without key data being available in Portal, we were not able to complete our assessment and CBP is limited in assessing the efficiency and effectiveness of C-TPAT.

CBP Continues to Refine Performance Measures for the C-TPAT Program, but Challenges Remain

CBP has greatly expanded its C-TPAT program performance measures to focus on program participation, program administration, and the internationalization of C-TPAT principles.³⁰ CBP has not yet, however, developed performance measures for efforts aimed at ensuring improved supply chain security of C-TPAT members—a goal of the program. CBP's activities to develop performance measures have focused on the areas mentioned and not on data collected during C-TPAT member processing activities that could support the development of performance measures for enhanced supply chain security. In our July 2003 and March 2005 reports, we commented that CBP was developing performance measures with which to measure the program's success in achieving agency goals and inform decisions for process improvement.³¹ We recommended that CBP complete the development of performance measures, to include outcome-based measures and performance targets, to track the program's status in meeting its strategic goals.³² Furthermore, under the Government Performance and Results Act of 1993 (GPRA), federal agencies are to prepare an annual performance plan that establishes performance indicators to be used in measuring or assessing the relevant outputs, service levels, and outcomes of each of its program activities.

CBP's November 2004 strategic plan identified seven performance measures that CBP developed for the C-TPAT program, consistent with recommendations in our 2003 and 2005 reports on the program. These

³⁰ CBP seeks to internationalize C-TPAT principles to promote supply chain security and to facilitate trade moving to and between nations.

³¹ See [GAO-03-770](#) and [GAO-05-404](#).

³² The Government Performance and Results Act (GPRA) provides the following definitions: Outcome-based measure refers to an assessment of the results of a program activity compared to its intended purpose; performance target means a target level of performance expressed as a tangible, measurable objective, against which actual achievement shall be compared, including a goal expressed as a quantitative standard, value, or rate; strategic goals explain what results are expected from the agency's major functions and when to expect those results.

measures, shown in table 5, reflect CBP's efforts in developing performance measures at the time the C-TPAT strategic plan was issued and are currently in effect. Table 5 also shows the performance data that CBP included for two of the seven measures in its fiscal year 2006 performance and accountability report.³³

Table 5: Performance Measures Identified in the C-TPAT 2004 Strategic Plan

Performance measure	Program element or operational aspect addressed	Performance data			
		Target/actual	FY 2005	FY 2006	FY 2007
Percent of sea container cargo transported by C-TPAT members	Program partnership				
Percent of value imported by C-TPAT importers	Program partnership				
Percent of C-TPAT importer volume	Program partnership				
Validation labor efficiency	Internationalization efforts				
Exam reduction ratio between C-TPAT and non-C-TPAT importers	Internationalization efforts	Target	3.5 times less	3.5 times less	3.5 times less
		Actual	4.1 times less	3.4 times less	3.5 times less
Compliance rate for C-TPAT members with program security guidelines	Internationalization efforts	Target	98%	90%	95%
		Actual	97%	98%	98%
Time savings to process US/Mexico FAST lane transactions	Internationalization efforts				

Source: CBP.

Note: The targets for FY 2008 remained the same as for FY 2007. Performance data were not available for FY 2008.

C-TPAT officials have, as part of actions to revise the strategic plan, begun tracking additional measures of program partnership, program administration, and the internationalization of C-TPAT principles. As of October 1, 2007, the C-TPAT Director began requiring field directors and supervisors to collect data on 16 proposed measures, as shown in table 6.

³³ Executive agencies must file an annual performance and accountability report in accordance with the GPRA, Reports Consolidation Act, Homeland Security Act, and as required by Office of Management and Budget Circular A-11.

Table 6: Performance Measures Tracked for Evolving C-TPAT Strategic Plan Used by CBP, as of October 1, 2007

	Performance measure	Performance category	Target
1	Reduced member examinations	Program partnership	34.4%
2	Members' perceived faster or equal border crossing times	Program partnership	85.9%
3	Members' intent to stay in C-TPAT	Program partnership	91.5%
4	Members perceived timeliness of security specialists' responsiveness to questions	Program partnership	83.8%
5	Members' perceptions of security specialists' knowledge level	Program partnership	51.4%- very knowledgeable; 34.4% - knowledgeable; and 9.8 % somewhat knowledgeable
6	Examination rate reduction ratio for C-TPAT importers compared to non C-TPAT importers	Program partnership	No fewer than 3.5 times less exams
7	Compliance measurement rate of C-TPAT importers compared to non C-TPAT importers	Program partnership	No significant deviation
8	Percentage of validations performed which result in suspension or removal of the member	Program partnership	95% or higher compliance rate
9	Percentage of members suspended or removed as a result of a supply chain security breach	Program partnership	95% or higher compliance rate
10	Percentage of applications reviewed within 90 days of receipt	Program administration	100% compliance
11	Percentage of validations performed within 1 year of certification	Program administration	100% compliance
12	Percentage of revalidations performed within 3 years of original validation completion date	Program administration	100% compliance
13	Percent of postincident analyses completed within 30 days of actual incident	Program administration	100% compliance
14	Random selection and review of two validations per security specialist and VSAT to ensure information is complete, timely, and is uploaded in the Portal	Program administration	100% compliance
15	Number of foreign customs administrations' capacity building training activities supported annually	Internationalization efforts	CBP supports no fewer than 4 trainings per year
16	Number of countries that enter into formal mutual recognition arrangements with CBP annually	Internationalization efforts	CBP enters into mutual recognition arrangements with no fewer than 2 countries per year

Source: GAO analysis of CBP data.

CBP developed these measures to address various aspects of the C-TPAT program—including management oversight, program benefits and costs, member satisfaction, and internationalization of C-TPAT principles—and to record program activity. The absence of performance measures for enhanced security indicates that CBP has yet to develop measures that assess C-TPAT's progress toward achieving its strategic goal to ensure that

its members improve the security of their supply chains pursuant to C-TPAT security criteria.

As part of its effort to develop additional performance measures, CBP—in response to one of our 2005 recommendations—funded a university research initiative to identify how C-TPAT has affected the operations of member companies and the perceived membership incentives and benefits. The University of Virginia Center for Survey Research conducted a survey of certified C-TPAT members as of December 1, 2006, and 1,756 of nearly 6,000 companies (29 percent) responded. The survey respondents provided their perceptions about costs, benefits, and impacts of participation in the C-TPAT program. However, given that the response rate was only 29 percent, and absent any additional data that would suggest that the respondents were representative of the C-TPAT membership, we cannot determine whether the results of the survey are truly representative of the views of the C-TPAT membership as a whole.

The report that the University of Virginia issued in August 2007 in response to this survey affirmed that a majority of C-TPAT members responding stated they would remain in the program. The report also stated that a majority of the C-TPAT members identified as importers said that an extremely important motivation for joining the C-TPAT program is reducing disruptions in the supply chain. In addition, all businesses responding stated that they joined the C-TPAT program to reduce the time and cost of cargo getting released by CBP and viewed implementation and maintenance of physical security and maintenance of in-house education, training, and awareness as significant costs of program membership. Additionally, nearly one-third of the C-TPAT members who responded believed the program benefits outweighed costs and nearly a quarter of members who responded believed costs were roughly the same as benefits. Also, at a minimum, about one-quarter of C-TPAT member survey respondents noted that tangible benefits included improvements in workforce security, time of release and inspection of cargo by CBP, and predictability in moving goods. Further, over one-half of C-TPAT members responding identified enhanced cargo security, demonstration of corporate citizenship, and improved risk management as extremely important intangible benefits. In contrast, more than half of nonimporters that responded indicated that they joined the C-TPAT program because their business members required them to be C-TPAT certified. While these study results indicated the benefits and costs of C-TPAT membership as expressed by survey respondents, the study was not designed to assess C-TPAT's impact on supply chain security.

CBP collects information in its C-TPAT member processing activities that may provide direction for developing performance measures of enhanced supply chain security. For example, during the course of a company's membership in C-TPAT, CBP security specialists observe the company's security practices from the filing of the company's initial security profile through validation of its practices and the filing of annual company security profile updates. Thus, CBP is in a position to identify security changes and improvements that could provide a measure of enhanced supply chain security. The recommendations in validation reports represent opportunities for companies to improve their supply chain security and could point to areas where C-TPAT has a measurable impact. With an appropriate recommendation follow-up system to document companies' security improvements, CBP could develop measures of improved supply chain security. Similar opportunities occur with revalidations and C-TPAT members' annual security profile updates. If CBP does the appropriate follow up and review to determine that proposed or stated security actions have actually been implemented, supply chain security could be enhanced. For example, if security data collected using VSAT show that a periodic company inspection identified a security weakness that the company resolved, CBP could track and summarize such examples over time as measures of the extent to which C-TPAT has contributed to enhanced supply chain security.

We acknowledge and accept CBP's assessment that the challenge to develop outcome-based performance measures for C-TPAT is a difficult one given that effectiveness is difficult to measure in terms of deterrence because the direct impact of a program on unlawful activity is generally unknown. However, CBP remains subject to the GPRA requirement that federal agencies develop outcome-based measures to assess the results of a program activity compared to its intended purpose. Without outcome-based performance measures on which to base program evaluations, CBP will not be able to assess the effectiveness of C-TPAT as it contributes to homeland security.

Conclusions

CBP has taken valuable steps in developing partnerships within the trade community to improve supply chain security while maintaining the flow of commerce. Developing partnerships is particularly challenging given the international nature of the trade community and the resulting limits on CBP's jurisdiction and activities. While the benefits offered through C-TPAT make membership worthwhile for many companies, it is vital that CBP maintain adequate internal controls to ensure that member companies deserve these benefits. CBP has been responsive to our prior

concerns but still needs to take several important steps to provide Congress with further assurance that C-TPAT is working as intended.

CBP developed the VSAT to conduct more consistent validations, but the VSAT is limited in its effectiveness. CBP also does not follow up on validation report recommendations to determine if members are actually implementing measures to enhance supply chain security. This represents another lost opportunity to fulfill the very purpose of validations. Moreover, data from validations are not being routinely used to inform CBP about strengths and vulnerabilities in C-TPAT members' supply chain security. Collectively, these data could make it possible for CBP to move closer to establishing performance measures for supply chain security.

Further, a review of selected records in C-TPAT Portal showed that security specialists often omitted entering interim processing dates into the system—dates which would document processing times and company waiting periods. Without these dates, CBP cannot determine whether its processes are facilitating the meeting of time frames specified in the SAFE Port Act or ensuring it is meeting its own standards. Finally, without outcome-based performance measures on which to evaluate the program, CBP will not be able to assess the effectiveness of C-TPAT as it contributes to homeland security.

Recommendations for Executive Action

To improve CBP's implementation of SAFE Port Act provisions and to strengthen C-TPAT program management, ensure adequate internal controls to manage the program, provide management with complete program data for decision making, and establish indicators of the program's impact on supply chain security, we recommend that the Secretary of Homeland Security direct the Commissioner of U.S. Customs and Border Protection to take the following five actions:

- (1) Continue to improve the consistency with which validations are conducted and documented by revising the electronic instrument used in validations to include appropriate response options and eliminate the use of default "no" responses.
- (2) Strengthen the evaluation of security during validations by requiring validations to include the review and assessment of any available results from audits, inspections, or other reviews of a member's supply chain security.

-
- (3) Ensure that C-TPAT validation report recommendations are implemented by establishing a policy for security specialists to follow up with member companies when CBP requires them to make security enhancements to ensure that the necessary steps are taken.
 - (4) Ensure that the C-TPAT Portal records management system completely documents key data elements needed to track compliance with SAFE Port Act and other CBP internal requirements.
 - (5) Identify and pursue opportunities in information collected during C-TPAT member processing activities that may provide direction for developing performance measures of enhanced supply chain security.

Agency Comments

We provided a draft of this report to the Secretary of Homeland Security for review and comment. We received comments from DHS and CBP that are reprinted in appendix III. DHS and CBP agreed with our recommendations and outlined actions that CBP plans to take to implement them. CBP also provided technical comments, which we have incorporated into the report as appropriate.

We plan no further distribution of this report until 30 days after its issue date. At that time, we will provide copies of this report to appropriate departments and interested congressional committees. We will also make copies available to others upon request. In addition, the report will be available at no charge on GAO's Web site <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-9610 or at caldwells@gao.gov. Key contributors to this report are listed in appendix V.



Stephen L. Caldwell
Director, Homeland Security and Justice Issues

List of Congressional Requesters

The Honorable Daniel K. Inouye, Chairman
The Honorable Ted Stevens, Vice Chairman
Committee on Commerce, Science, and Transportation
United States Senate

The Honorable Joseph I. Lieberman, Chairman
The Honorable Susan M. Collins, Ranking Member
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Carl Levin, Chairman
The Honorable Norm Coleman, Ranking Member
Permanent Subcommittee on Investigations
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable John D. Dingell, Chairman
Committee on Energy and Commerce
House of Representatives

Appendix I: Objectives, Scope, and Methodology

Objectives

This appendix discusses the objectives, scope and methodology of our review of the U.S. Customs and Border Protection's (CBP) Customs-Trade Partnership Against Terrorism (C-TPAT) program. In our March 2005 report on C-TPAT,¹ we made several recommendations to help CBP achieve C-TPAT objectives and address the challenges associated with its continued development, including recommendations to (1) strengthen the validation process by providing appropriate guidance to security specialists conducting validations; (2) implement a records management system that accurately and timely documents key decisions and significant operational events; and (3) complete the development of performance measures, to include outcome-based measures and performance targets. Recognizing the importance of the C-TPAT program, congressional requesters asked GAO to conduct another review. The following discussion addresses our objectives and how we performed the review.

We addressed the following questions regarding C-TPAT:

- What has CBP done to strengthen its policies for awarding benefits to companies that participate in C-TPAT in response to our 2005 report?
- What progress has CBP made in addressing challenges in its processes for validating C-TPAT companies' security processes that we identified in our 2005 report?
- What actions has CBP taken since 2005 to address overall management and staffing challenges of the C-TPAT program and ensure that the program operates as intended?

Scope and Methodology

To address the three questions or objectives, we discussed C-TPAT program operations with officials from CBP headquarters in Washington, D.C. and the five C-TPAT field locations: (1) Washington, D.C.; (2) Los Angeles, California; (3) Miami, Florida; (4) Newark, New Jersey; and (5) New York, New York. We reviewed current federal laws and regulations including the Security and Accountability for Every Port (SAFE Port) Act of 2006. We also reviewed pertinent GAO reports.

More specifically, to address our first objective on policies for awarding benefits to C-TPAT participants, we reviewed CBP's minimum security

¹ [GAO-05-404](#).

criteria that had been issued as of November 2007. We discussed the criteria's development with CBP and C-TPAT program officials. We also reviewed CBP's tiered benefits structure for C-TPAT importers and subsequent requirements under the SAFE Port Act for tiering the benefits awarded C-TPAT participants. The tiered benefits concept involves providing limited benefits initially and delaying additional benefits until validation of the C-TPAT member's security practices.

To address our second objective on CBP's progress in addressing challenges in its process for validating the security practices of companies in the C-TPAT program, we reviewed a sample of 419 validations completed from March 1, 2006, through September 30, 2006. In addition, we selected a nonprobability sample of 25 validation cases and conducted a more detailed review that included examining hard-copy records and other data, such as notes taken by the security specialists during validation visits to members' facilities, not available for the broader sample. The results of this review are not generalizable beyond the subset examined. However, because we selected the validation cases based on the variety of their field office location, role in the supply chain, use and nonuse of CBP's automated validation instrument, and type of validation questionnaire used, they provided us with an overall understanding of validation activities and documents collected during validation site visits. We selected these cases because they represented validations of the following trade sectors in the supply chain: (1) foreign logistic service providers; (2) foreign manufacturers; (3) foreign port or terminal operators; (4) non-U.S. importers; (5) U.S. importers; and (6) others, such as sea carriers. At the CBP field locations where we performed the detailed reviews, we also discussed the validation process with 11 supply chain security specialists who conduct C-TPAT validations. These specialists provided descriptive information about their data collection, documentation, and report preparation practices for C-TPAT validations. They were selected by CBP based on their availability and their views are not generalizable beyond those interviewed. Nonetheless, because the specialists were selected nonsystematically and by chance and included a wide range of experience in the specialist position, their interview statements provided broad-based, realistic personal descriptions of what occurs in CBP's validation process for C-TPAT members.

We also reviewed GAO' and Office of Management and Budget guidance on internal controls to assess the extent to which CBP has incorporated them into the C-TPAT program. We also obtained information on the automated instrument that CBP developed for use in the validation process and reviewed the instrument's application in our sample of cases.

Finally, we reviewed the items in the automated instrument and compared them with the minimum security criteria for U.S. importers. Although our sample of 419 validations included 329 validations using the automated instrument, analysis of the instrument's use was not possible due to data reliability issues concerning flaws in the instrument's design (see below). We also compared the C-TPAT minimum security criteria for importers to the three questionnaires that comprise the automated instrument.²

To address our third objective on CBP's actions since 2005 to address management and staffing challenges to ensure that the C-TPAT program operates as intended, we interviewed officials from CBP headquarters in Washington, D.C. In addition, we reviewed documentation on C-TPAT Portal, which is CBP's records management system. In reviewing our sample of 419 validations, we reviewed the information in Portal that provides C-TPAT management with the internal control to manage the program. CBP sent the original Portal data of the 419 validation cases in February 2007 and then sent updated Portal data for the same cases in August 2007 to provide us with current information on the cases. In addition, we obtained and reviewed the 2005 human capital plan and 2007 annual plan for information on how CBP plans to meet its staffing requirements to achieve C-TPAT program goals. In addition, we reviewed the 2004 C-TPAT strategic plan, CBP strategic plan for fiscal years 2005-2010, and the fiscal year 2006 CBP Performance and Accountability Report for conformance with Government Performance and Results Act of 1993 (GPRA) structural requirements and for performance measures that show how well the program is meeting its goals. Finally, we obtained and reviewed CBP's 2007 C-TPAT study of members' program participation benefits and costs, conducted by the University of Virginia Center for Survey Research, to assess how CBP plans to use the results in the development of performance measures.

We conducted this performance audit from May 2006 to April 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

² CBP issued its first minimum security criteria for importers in March 2005 and, according to CBP officials, the criteria are representative of C-TPAT criteria in general.

Data Reliability

To assess the reliability of CBP's data on member status in C-TPAT—management data in Portal and validation data in VSATs—we (1) reviewed existing documentation related to the data sources, (2) electronically tested the data to identify apparent problems with completeness or accuracy, and (3) questioned knowledgeable agency officials about controls over the integrity of the data. Initial reliability testing of the databases and interviews of staff with responsibility for the program led us to conclude that data used to track participant status and VSAT information had some weaknesses that could cause concerns with the reliability of the data. In particular, in the Portal database, certain key data, such as interim processing dates needed to calculate processing time frames, were missing that did not permit a complete analysis. We determined that the data from Portal were sufficiently reliable for the limited use of describing the program status, such as the approximate numbers of participants and number of validations, since our analysis and discussions with CBP officials assured us that those data fields were reasonably complete and accurate.

For the VSAT database, an analysis of much of the data collected through the use of the instrument was not possible due to reliability issues with the data resulting from limitations in the design of the instrument. For example, the automated instrument is designed to yield responses in a binary format (i.e., “yes/no” responses), with “no” as an automatic default response. Therefore, if a response is marked “no,” it is unclear whether the question was intentionally answered “no” or whether the response was an automatic default. Furthermore, completion of many items on the VSAT questionnaire is optional (not mandatory); therefore, it is not possible to determine the validity of the responses to the questions that cover the C-TPAT criteria in the seven defined security areas. As a result, we deemed the VSAT data insufficiently reliable for analytical purposes, though since nearly all the VSATs had at least one completed numerical assessment score, we deemed these scores sufficiently reliable to use to select our 25 validation cases for more in depth review.

Appendix II: CBP's Implementation of C-TPAT Third Party Validation Pilot

This appendix provides information on U.S. Customs and Border Protection's (CBP) efforts to use third parties to conduct validations in China, where CBP currently lacks full access. The Chinese government does not allow CBP personnel access to conduct supply chain security validations in China. The Security and Accountability for Every Port (or SAFE Port) Act of 2006 requires CBP to develop a plan to implement a 1-year voluntary pilot program to test and assess the feasibility, costs, and benefits of using third party entities to conduct validations of Customs-Trade Partnership Against Terrorism (C-TPAT) program participants. CBP established the program in May 2007. This appendix discusses the pilot's initiation and its policies and procedures.

CBP's third party validation pilot program provides the opportunity for qualified contractors to validate C-TPAT member international supply chain participants in China. CBP recognized its inability to validate the security of C-TPAT members' supply chains in China as an opportunity (1) to conduct the pilot as mandated by the SAFE Port Act and (2) for C-TPAT members importing solely from China to be validated and possibly receive Tier 2 or 3 benefits. According to CBP, C-TPAT members that import solely from China are not receiving the highest C-TPAT benefits to which they may be entitled because CBP's security specialists are prohibited by the Chinese government from validating foreign supply chains in their country. CBP compiled a list of importers eligible for the pilot—those who source 75 percent or more of their imports from China—and identified 11 contractors qualified to perform the validations. The pilot program is voluntary, and as outlined in the SAFE Port Act, any C-TPAT member wishing to participate must agree to validation by a third party contractor and pay all costs for this service. Also, CBP retains the authority to make validation findings and tier status determinations based on the data gathered and submitted by third party validators in their electronic checklist or questionnaire. Of 304 C-TPAT member companies eligible to participate in the pilot, as of December 2007, 14 had expressed an interest in doing so and 1 had actually gone through validation with a third party validator.

CBP developed standard operating procedures as guidelines for ensuring that third party contractors follow necessary procedures in validating a C-TPAT member. In March 2007, CBP posted an announcement of the pilot on the Federal Business Opportunities website that included third party requirements, duties to be performed by the third party firm, and standard operating procedures for the pilot. Specifically, third party validation firms selected were required to sign confidentiality agreements, maintain liability insurance, apply for protections under the Support Anti-terrorism

by Fostering Effective Technologies Act of 2002, and remain free from conflicts of interest, including having any direct or indirect control over the company which is being validated. Also, third party firms must provide CBP with documentation of their training procedures for validators, including information on the scope of the training and type of material presented to sufficiently establish the validator's knowledge of the C-TPAT program, the international supply chain, and the transportation and logistics industry. In completing and reporting on validations, third parties are required to:

- (1) perform the validations in accordance with C-TPAT importer minimum security criteria;
- (2) properly document all validation findings, recommendations, and actions required in an electronic checklist or questionnaire format, consistent with all CBP importer minimum security criteria;
- (3) acknowledge to CBP that written procedures were on hand and reviewed by the validator to verify the information provided by the company being validated; and
- (4) submit the electronic security checklist or questionnaire and other associated validation information to CBP within 15 working days after completion of the validation.

CBP has not provided the Validation Security Assessment Tool (VSAT) that its security specialists use in validations for third party validators to use when validating C-TPAT members as part of the pilot program. Validation information, developed separately by the 11 selected validator companies, will likely vary among the validators and differ from the VSAT used by the CBP security specialists. CPB plans to transfer the electronic information provided by third party validators onto a VSAT questionnaire and follow up as necessary with the third party validator and the C-TPAT member, but CBP has not established a standard operating procedure for reviewing the electronic information and, according to CBP officials, has no plans to do so given the low number of members that have used the third-party validator option. As of December 14, 2007, only 1 of 304 C-TPAT members eligible to use a third party validator had actually done so and CBP had not yet received the electronic results of the validation.

**Appendix II: CBP's Implementation of
C-TPAT Third Party Validation Pilot**

In October 2007, the Department of Homeland Security Assistant Secretary for Policy said interest in the pilot program had been minimal.¹ According to the Assistant Secretary, the primary concerns expressed by C-TPAT members involve sharing proprietary and business data with a third party and the costs associated with the validation, which, as outlined in the SAFE Port Act, must be incurred by C-TPAT members.

¹ Statement of Stewart Baker, Assistant Secretary for Policy, DHS, at a hearing before the Committee on Homeland Security and Governmental Affairs, U.S. Senate, October 16, 2007.

Appendix III: Comments from the Department of Homeland Security

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



**Homeland
Security**

April 8, 2008

Mr. Stephen L. Caldwell
Director, Homeland Security and Justice Issues
U.S. Government Accountability Office
Washington, D. C. 20548

Dear Mr. Caldwell:

Thank you for providing us with a copy of the draft report entitled "SUPPLY CHAIN SECURITY: U.S. Customs and Border Protection Has Enhanced Its Partnership with Import Trade Sectors, but Challenges Remain in Verifying Practices" (GAO-08-240), which examines U.S. Customs and Border Protection's (CBP) Customs-Trade Partnership Against Terrorism (C-TPAT) program. This report assessed the progress CBP has made since 2005 in 1) improving its benefit award policies for C-TPAT members, 2) addressing challenges in validating members' security practices, and 3) addressing management and staffing challenges.

The Department of Homeland Security (DHS) and CBP concur with GAO's observations that CBP continues to improve the consistency with which validations are conducted, strengthen the evaluation of security during validations, ensuring that C-TPAT validation report recommendations are implemented, ensure that the C-TPAT Portal records management system completely documents all decision making and identifies and pursues opportunities in information collected during C-TPAT member processing activities.

CBP would like to emphasize that C-TPAT is an integral part of the CBP multi-layered strategy through which CBP works in partnership with the trade community to better secure goods moving through the international supply chain. C-TPAT has enabled CBP to leverage supply chain security throughout international locations where CBP has no regulatory reach.

In Fiscal Year 2009, C-TPAT will focus its efforts on strengthening the partnership with member companies at both the macro and micro levels and leveraging corporate influence throughout the international supply chain. In doing so, C-TPAT will continue to ensure compliance with the requirements of the SAFE Port Act to include certifying security profiles within 90 days of submission and conducting validations within one year of certification and revalidations within 4-years of initial validation. C-TPAT projects that 3800-4500 validations will be required during FY 2009, requiring on site visits at facilities throughout the world.

In strengthening this successful program, CBP will also continue to review its performance and, where needed, enhance the minimum security criteria for each enrollment sector.

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Additionally, CBP will continue to conduct informational and training sessions for various internal/external audiences to improve knowledge of cargo security procedures and provide the latest information regarding terrorism trends and conveyance breaches.

Another important effort to note is the potential mutual recognition of other countries' customs-to-business partnership programs. The World Customs Organization has developed a global standard for trusted partnerships with the trade, known as the Authorized Economic Operator, or AEO, program. This concept is similar to the C-TPAT program. Mutual Recognition Arrangements reduce costs and simplify these programs for both industry and government. CBP is engaged in mutual recognition discussions with several governments and is following a very methodical process to achieve recognition. These programs must meet three requirements: they must be security-based; they must be operational; and they must have a minimum level of validation to verify the company has done what it claims to have done.

Creating an international network to exchange information about trusted traders and knowing that those participants are observing specified security standards in the secure handling of goods and relevant information is a win-win for both government and business. In June 2007, CBP signed its first mutual recognition arrangement with New Zealand and CBP is beginning to see several positive outcomes and challenges taking form as the work to implement that arrangement continues.

Attached are comments specific to the recommendations. Please note that CBP understands that GAO has made changes to recommendations 4 and 5. CBP requested that GAO reword the recommendations and it is our understanding that the changes agreed to will be captured in the final report. CBP's corrective action plans are based upon the revised recommendations.

With regard to the classification of the draft report, CBP has not identified information within the report requiring restricted public access based on a designation of "For Official Use Only."

Recommendation 1: Continue to improve the consistency with which validations are conducted and documented by revising the electronic instrument used in validations to include appropriate response options and eliminate the use of default "no" responses.

Response: Concur. CBP is developing a second generation automated tool which will eliminate the use of default "no" response and will address all security criteria.

Due Date: Phased in approach on a sector-by-sector basis over the next 12 months.

1. Phase 1 to be completed by June 30, 2008.
2. Additional sectors will be identified and roll-out scheduled determined by August 30, 2008.
3. Additional automated reports to be operational by December 31, 2008.

Recommendation 2: Strengthen the evaluation of security during validations by requiring validations to include the review and assessment of any available results from audits, inspections, or other reviews of a member's supply chain security.

Response: Concur. CBP will issue a policy memo to the Security Specialists instructing them to request from the partner company any available internal audits, inspections or reviews which will serve as additional information to consider during the validation process.

Due Date: C-TPAT Headquarters will issue the policy memorandum by June 30, 2008 and will include this topic at its fall 2008 internal training session.

Recommendation 3: Ensure that C-TPAT validation report recommendations are implemented by establishing a policy for security specialists to follow-up with member companies when CBP requires them to make security enhancements to ensure that the necessary steps are taken.

Response: Concur. CBP will issue a policy memorandum and revise Standard Operating Procedures to the extent necessary to ensure that all actions required / recommendations are implemented and will explore ways to capture and quantify this information either in the Portal records management system or via other means.

Due Date: C-TPAT Headquarters will implement the policy change by June 30, 2008 and immediately begin to identify Portal enhancements with the goal of accomplishing system changes by December 31, 2008.

Recommendation 4: Ensure that the C-TPAT Portal records management system completely documents key data elements needed to track compliance with SAFE Port Act and other CBP internal requirements.

Response: Concur. GAO cites two specific examples of data elements (dates) which it believes C-TPAT managers and 3rd party reviewer(s) need to ensure compliance with certain aspects of the program e.g. the date the validation letter is sent to the member and the date the VSAT information is uploaded into the portal.

CBP believes that priority should be placed on capturing those dates / milestones which will establish compliance with the performance measures identified in Table 6 of the report with specific emphasis on SAFE Port Act mandates, i.e. certify within 90 days, initiate validation within 1 year of the date of validation and revalidate within 3 years of the date of initial validation.

C-TPAT Headquarters will ensure the data elements needed to ensure compliance with the performance indicators stated in the October 1, 2007 memorandum and as identified Table 6 are available in the Portal records system.

Due Date: June 30, 2008

Recommendation 5: Identify and pursue opportunities in information collected during C-TPAT member processing activities that may provide direction for developing performance measures of enhanced supply chain security.

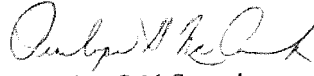
**Appendix III: Comments from the Department
of Homeland Security**

Response: Concur. CBP agrees that the C-TPAT program must continue to strive to develop outcome based measures and CBP will conduct an analysis.

Due Date: December 31, 2008.

We thank you again for the opportunity to review this important report and provide comments.

Sincerely,



Penelope G. McCormack
Acting Director
Departmental GAO/OIG Liaison Office

Appendix IV: Data on C-TPAT Members Receiving Tiered Benefits

This appendix provides information on C-TPAT members receiving tiered benefits. Beginning with C-TPAT's inception in November 2001 through December 31, 2007, CBP validated 79.1 percent (6,290) of C-TPAT's certified member companies. As shown in table 7, 39.9 percent (2,512) of the validated members were importers, of which 88.3 percent (2,219) were awarded Tier 2 benefits, 9.3 percent (233) were awarded Tier 3 benefits, and 2.4 percent (60) were suspended or removed from the program. Importers receiving Tier 1 benefits made up 60.4 percent (1,001) of certified CTPAT members that were awaiting initial validation, as of December 31, 2007. The remaining 39.6 percent (657) of members certified and awaiting validation were non-importers. Non-importers represented 60.1 percent (3,778) of C-TPAT's validated membership. While 97.7 percent (3,692) of non-importers validated received a positive result, no additional benefits were awarded.

Table 7: Analysis of C-TPAT Member Status as of December 31, 2007

Member status	Number	Percent
Certifications		
(1) Certified members from program's inception	7,948	
(2) Certified members awaiting validation	1,658	20.9
• Certified Tier 1 importers	1,001	60.4
• Certified nonimporters	657	39.6
Initial validations		
(1) Initial validations completed from program's inception	6,290	79.1
(2) Importers' initial validations completed	2,512	39.9
• Importers awarded Tier 2 benefits	2,219	88.3
• Importers awarded Tier 3 benefits	233	9.3
• Importers suspended or removed	60	2.4
(3) Nonimporters' initial validations completed	3,778	60.1
• Nonimporters' positive validation result	3,692	97.7
• Nonimporters suspended or removed	86	2.3

Source: GAO analysis of CBP data.

Appendix V: GAO Contacts and Staff Acknowledgments

GAO Contact

Stephen L. Caldwell, Director, (202) 512-9610, caldwells@gao.gov.

Staff Acknowledgments

This report was prepared under the direction of Christine A. Fossett and Christopher Conrad, Assistant Directors. Key contributions to this report also included Amy Bernstein, Fredrick Berry, Yecenia Camarillo, Frances Cook, Katherine Davis, Wendy Dye, Nkenge Gibson, Valerie Kasindi, Stanley Kostyla, Frederick Lyles, Michael Pose, Robert Rivas, and Beverly Ross.

Related GAO Products

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