



# Securing the Global Supply Chain

Customs-Trade Partnership Against Terrorism (C-TPAT)  
Strategic Plan



U.S. Customs and  
Border Protection

## Prologue

The Customs-Trade Partnership Against Terrorism (C-TPAT) is, beyond question, the largest and most successful government-private sector partnership to emerge from the ashes of 9/11. C-TPAT was launched in November 2001, with just seven companies – seven major importers. Today, over 7,400 companies are enrolled, and these companies – critical players in the global supply chain – include United States importers, customs brokers, terminal operators, carriers and foreign manufacturers.

Since the beginning, the guiding principles for C-TPAT have been voluntary participation and jointly developed security criteria, best practices and implementation procedures. C-TPAT partners have worked with CBP to protect their supply chains from concealment of terrorist weapons, including weapons of mass destruction, and global supply chains are more secure today as a result of C-TPAT. In exchange, CBP provides reduced inspections at the port of arrival and expedited processing at the border. C-TPAT is one of several CBP initiatives implemented after 9/11 to achieve CBP's twin goals: security and facilitation.

To ensure the success of C-TPAT, this strategic plan conveys CBP's vision and goals for the future. To achieve CBP's twin goals, the C-TPAT strategic plan is designed to:

- 1) Improve security of a significant percentage of shipments to the United States;
- 2) Provide benefits and incentives to private sector companies that meet or exceed C-TPAT supply chain security criteria and best practices; and
- 3) Concentrate CBP's inspectional resources and capabilities on higher risk shipments.

And, by working with the international community, CBP will strive to internationalize the principles of C-TPAT, while supporting other CBP and Department of Homeland Security (DHS) initiatives designed to secure and facilitate global trade.

In addition, as we expand C-TPAT and establish a dynamic, flexible framework for the future, we will take C-TPAT to the next level. This means protecting America and the global supply chain while moving commerce across our borders even more efficiently – more efficiently than before 9/11. Just as we have built FAST at our land borders, we will establish a true "green lane" that speeds C-TPAT shipments across and through all our ports of entry, including our seaports and airports.

As CBP carries out its priority Homeland Security mission, partnerships such as C-TPAT will prove more vital than ever before. Indeed, C-TPAT is a model program for the security and facilitation of commerce and trade in this era of global terrorism. I am proud of the partnership between CBP and so many members of the trade community and am heartened by the commitment and cooperation that I have seen. This strategic plan ensures that we continue this successful partnership well into the future.

All of us reap the benefits of these shared efforts. As we enhance supply chain security using a positive, proactive approach to global trade, together we build a more secure and more efficient worldwide trade environment.



Commissioner Robert C. Bonner



# Securing the Global Supply Chain

## Customs-Trade Partnership Against Terrorism (C-TPAT) Strategic Plan



### Contents

4	CBP Mission Statement / Priority Mission
7	Executive Summary
10	Introduction
12	Background / C-TPAT Benefits
14	External Factors
15	C-TPAT Approach and Guiding Principles
18	Meeting Program Expectations (Strategic Goal Number 1)
23	Providing C-TPAT Benefits (Strategic Goal Number 2)
26	Internationalizing C-TPAT (Strategic Goal Number 3)
29	Supporting CBP Initiatives (Strategic Goal Number 4)
32	Expanding C-TPAT (Strategic Goal Number 5)
35	Cost to the Public
36	Performance Measures / Looking to the Future
39	Conclusion



## CBP Mission Statement

We are the guardians of our nation's borders.

We are America's frontline.

We safeguard the American homeland at and beyond our borders.

We protect the American public against terrorists and the instruments of terror.

We steadfastly enforce the laws of the United States while fostering our nation's economic security through lawful international trade and travel.

We serve the American public with vigilance, integrity, and professionalism.

## Priority Mission

***As the border agency of the United States, CBP's priority mission is preventing terrorists and terrorist weapons, including weapons of mass destruction, from entering the United States.***



6 New York skyline pre-9/11



## Executive Summary

On September 11, 2001, combating the threat of terrorism became CBP's number one priority. 9/11 required CBP to understand that the United States is not immune to terrorist attacks carried out by global terrorists. One of the best means to prevent further terrorist attacks is to use border authorities to make it more difficult for terrorists or terrorist weapons to enter the United States to carry out attacks.

Under CBP's layered, defense-in-depth strategy against terrorism, C-TPAT is the CBP initiative that partners, on a voluntary basis, with members of the trade community. CBP and willing members of the trade community collaborate to better secure the international supply chain to the United States in support of CBP's priority Homeland Security mission. C-TPAT is one of CBP's initiatives that helps the agency achieve its twin goals: security and facilitation of trade moving into the United States.

This section summarizes essential features of CBP's C-TPAT strategy designed to address elements of the terrorist threat involving the global trade community. CBP's strategy relies on a multi-layered approach consisting of the following five goals:

### **Goal 1**

Ensure that C-TPAT partners improve the security of their supply chains pursuant to C-TPAT security criteria.

### **Goal 2**

Provide incentives and benefits to include expedited processing of C-TPAT shipments to C-TPAT partners.

### **Goal 3**

Internationalize the core principles of C-TPAT through cooperation and coordination with the international community.

### **Goal 4**

Support other CBP security and facilitation initiatives.

### **Goal 5**

Improve administration of the C-TPAT program.

Further, this strategy aligns with and supports CBP's Strategic Plan, CBP's Strategy for Preventing Terrorist Weapons from Entering the United States, the DHS Strategic Plan, the Department's efforts to develop a national strategy for cargo security and the President's Strategy for Homeland Security.

**Goals 1 and 2: Ensure that C-TPAT partners improve the security of their supply chains pursuant to C-TPAT security criteria while providing incentives and benefits to include expedited processing of C-TPAT shipments to C-TPAT partners.**

To better secure and facilitate the flow of goods into the United States, CBP will ensure that existing and new C-TPAT partners fulfill their commitments by verifying that agreed security measures have been implemented. CBP will also work with its C-TPAT partners to further finalize minimum, applicable supply chain security criteria and security best practices. CBP will send teams of supply chain specialists around the globe, to visit members, their vendors, and vendors' plants to validate that supply chain security meets C-TPAT minimum security criteria and best practices and that procedures used are reliable, accurate, effective and meet the agreed upon security standards. CBP will continue providing tools and creating incentives for the private sector to join C-TPAT, which is a prerequisite for the Free and Secure Trade (FAST) program and other CBP expedited processing programs.

CBP's goals – to ensure that C-TPAT partners improve security of their supply chains while providing incentives and benefits to C-TPAT partners – includes nine key objectives:

**Goal 1**

1. Certify security profiles and security information provided by C-TPAT partners.
2. Enhance validation selection approach using risk factors, and expand the scope and volume of C-TPAT validations.
3. Formalize the requirements for C-TPAT self-policing tool, and implement the process for the submission of the C-TPAT periodic self-assessment.
4. Require participants to engage and leverage all business partners within their supply chains.

**Goal 2**

1. Develop the C-TPAT secure communication platform.
2. Conduct antiterrorism training seminars and targeted outreach for certified partners and the trade community.
3. Share information and security best practices with the membership.
4. Develop minimum security criteria, especially applicable to point of origin, point of stuffing and smarter, more secure cargo containers.
5. Provide expedited processing benefits to C-TPAT partners.

**Goal 3: Internationalize the core principles of C-TPAT through cooperation and coordination with the international community.**

C-TPAT builds upon relationships with all segments of the supply chain, both foreign and domestic, to secure the entire supply chain of goods entering the United States. More broadly, it is in the interest of the United States, and the protection of global trade more generally, to internationalize C-TPAT's core principles to the extent possible. This assures greater overall security of global trade, while also facilitating trade from the United States to other nations. Thus, internationalizing C-TPAT will promote supply chain security and facilitate global trade moving to and between all nations. C-TPAT engages many facets of the international trade community and will continue partnering with these multi-national corporations. In addition, C-TPAT will develop global security standards while working with other nations and their customs administrations, the international law

enforcement community, international organizations and the international trade community.

CBP's goal – to internationalize C-TPAT through cooperation and coordination with the international community – includes four key objectives:

1. Partner with the international trade community to help secure global supply chains.
2. Partner with individual customs administrations to improve the coordination of mutual antiterrorism efforts.
3. Support the work of the World Customs Organization (WCO) to develop a WCO sponsored framework to secure and facilitate global trade that recognizes customs-private sector partnerships.
4. Coordinate with international organizations to improve the security and integrity requirements of their membership.

**Goal 4: Support other CBP security and facilitation initiatives.**

There are a number of programs and initiatives, within CBP and DHS, that C-TPAT supports either directly or indirectly. CBP will continue to assist programs and initiatives that help secure and speed the flow of goods into our country.

CBP's goal – to support CBP and DHS security initiatives – includes four key objectives:

1. Support the implementation and expansion of the Free and Secure Trade (FAST) program.
2. Support the development and implementation of a more secure and smarter container.
3. Support and complement CBP's Container Security Initiative.
4. Support other CBP and DHS antiterrorism initiatives.

**Goal 5: Improve the administration of the C-TPAT program.**

C-TPAT will continue building a strong, modern management infrastructure. This includes effective utilization of human resources, training, information technology, financial management and performance measures.

CBP's goal – to modernize and expand the C-TPAT program – includes three key objectives:

1. Implement the C-TPAT human capital plan.
2. Expand the structured training program for C-TPAT supply chain specialists.
3. Coordinate with the CBP Modernization Office to enhance C-TPAT's data collection and information management capabilities.



## Introduction

CBP's priority mission is to prevent terrorists and terrorist weapons from entering the United States. That extraordinarily important mission means improving security, at not only physical borders and ports of entry, but globally in collaboration with the international trade community.

CBP must do this while continuing to perform our traditional missions. These include apprehending individuals attempting to enter the United States illegally, stemming the flow of illegal drugs and other contraband, protecting our agricultural and economic interests from harmful pests and diseases, protecting American businesses from theft of their intellectual property, regulating and facilitating international trade, collecting import duties, and enforcing United States trade laws. In FY 2003, CBP processed 26.1 million trade entries, collected \$24.7 billion in import duties, seized 2.2 million pounds of narcotics, and processed 412.8 million pedestrians and passengers and 132.2 million conveyances.

We must perform this important security and border-related work while speeding the flow of legitimate trade and travel that is so important to our nation's economy. In other words, we have "twin goals": building more secure and more efficient borders.

In protecting our borders against the threat of terrorism and promoting global supply chain security, CBP applies a "layered defense" strategy. This multi-layered approach includes using information analysis and targeting, employing advanced inspection technologies, engaging the private sector to increase supply chain security and expanding our borders by pre-screening shipments that pose a potential terrorist risk prior to arrival in the United States.

Since 9/11, CBP has redirected its focus and used its border authority to intercept any threat to national security. CBP's border authority is unsurpassed in defense of national interests, since examinations of cargo or persons do not require search warrants. In order to allow for the movement of legitimate travel and trade, CBP uses all resources at its disposal to target high-risk travel and cargo. One such resource is C-TPAT, which allows CBP to designate certain companies as low risk and therefore less likely to be examined. This designation is based on the company's past Customs compliance history, security profile and the validation of a sample international supply chain. C-TPAT has been innovative and conducted domestic and foreign site visits to physically review companies' security best practices and weaknesses along their international supply chains. By extending our zone of security to point of origin, it allows for better risk management and targeting, allowing CBP to appropriately allocate inspectional resources throughout United States ports and at CSI locations.

C-TPAT – a partnership with the trade community for securing global supply chains and facilitating legitimate cargo and conveyances – is a crucial part of CBP's layered strategy.

## Background

In direct response to 9/11, the U.S. Customs Service, now U.S. Customs and Border Protection (CBP) challenged the trade community to partner with CBP to design a new approach to supply chain security focused on protecting the United States against acts of terrorism by improving security while simultaneously speeding the flow of compliant cargo and conveyances. The result was the Customs-Trade Partnership Against Terrorism (C-TPAT) – an innovative, voluntary government/private sector partnership program.

C-TPAT builds on the best practices of CBP/industry partnerships to strengthen supply chain security, encourage cooperative relationships and to better concentrate CBP resources on areas of greatest risk. It is a dynamic, flexible program designed to keep pace with the evolving nature of the terrorist threat and the changes in the international trade industry, thus ensuring the program's continued viability, effectiveness and relevance. Flexibility and customization are important characteristics of C-TPAT.

This partnership between CBP and the trade is built on Customs border authority and cooperative relationships. It is built on knowledge – that the trade partner has demonstrated a commitment to supply chain security, and trust – that the company will continue to do so with minimal CBP examination. To uphold this relationship, accountability is required. The trade partner must be willing to assume responsibility for keeping his supply chain secure to agreed upon security standards through self policing and implementing changes as needs arise.

The current security guidelines for C-TPAT program members address a broad range of topics including personnel, physical and procedural security; access controls; education, training and awareness; manifest procedures; conveyance security; threat awareness; and documentation processing. Companies that apply to C-TPAT must sign an agreement with CBP that commits their organization to the program's security guidelines. These guidelines offer a customized solution for the members, while providing a clear minimum standard that approved companies must meet.

CBP's ability to leverage its customs authority and C-TPAT's unprecedented innovation enables the United States government to positively impact security practices throughout the global supply chain on a broad scale. This influence on security behavior overseas goes well beyond the conventional expectations or the reach of United States regulators. This is because private companies operating in the global supply chain, that choose to participate in C-TPAT, agree to implement increased levels of security throughout their international supply chains, in exchange for benefits that only CBP can provide.

In addition, C-TPAT members must agree to leverage their service providers and business partners to increase their security practices. This requirement enables C-TPAT to improve the security practices of thousands of companies located around the globe that are not enrolled in the program. In fact, many companies are demanding that their business partners enroll in C-TPAT or adhere to its security guidelines, and they are conditioning their business relationships on these requirements.

C-TPAT also enables trade by improving supply chain security and increasing supply chain performance. The program helps companies optimize management of their assets and functions while enhancing security. Together, enhanced security practices and increased supply chain performance, reduces the risk of loss, damage and theft, and lessens the threat that terrorists will attack the global supply chain.

The successful integration of increased security and enhanced supply chain efficiency is one of the great successes of C-TPAT. Through the collaborative work of CBP and the trade community, C-TPAT has become the focal point for all United States government and private sector supply chain security efforts.

As of November 2004, C-TPAT has over 7,400 enrolled partners. The current membership includes over 86 of the top 100 United States importers by containerized cargo volume. Current membership represents over 40% of all the imports by dollar value into this country and over 96% of all the United States bound maritime container carrier traffic.

That means these 7,400 companies have performed, or are in the process of performing, comprehensive security reviews of their supply chains, enhancing security procedures and requiring their business partners and/or service providers to do the same. And, C-TPAT has driven enhanced supply chain security practices well beyond the 7,400 companies enrolled in the program to thousands of other supply chain businesses, due to the program's design and implementation.

## C-TPAT Benefits

C-TPAT offers businesses an opportunity to play an active role in the war against terrorism. By participating in this first worldwide supply chain security initiative, companies will ensure a more secure supply chain for their employees, suppliers and customers. In addition, CBP offers the following benefits to C-TPAT members:

- A reduced number of inspections and reduced border wait times.
- A C-TPAT supply chain specialist to serve as the CBP liaison for validations, security issues, procedural updates, communication and training.
- Access to the C-TPAT members through the Status Verification Interface.
- Self-policing and self-monitoring of security activities.
- In the Automated Commercial System (ACS), C-TPAT certified importers receive reduced selection rate for Compliance Measurement Examinations (-3X in FY 2003) and exclusion from certain trade-related local and national criteria.
- C-TPAT certified importers receive targeting benefits (-7X in FY 2003) by receiving a "credit" via the CBP targeting system.
- Certified C-TPAT importers are eligible for access to the FAST lanes on the Canadian and Mexican borders.
- Certified C-TPAT importers are eligible for the Office of Strategic Trade's (OST) Importer Self-Assessment Program (ISA) and have been given priority access to participate in the Automated Commercial Environment (ACE).
- C-TPAT certified highway carriers, on the Canadian and Mexican borders, benefit from their access to the expedited cargo processing at designated FAST lanes. These carriers are eligible to receive more favorable mitigation relief from monetary penalties.
- C-TPAT certified Mexican manufacturers benefit from their access to the expedited cargo processing at the designated FAST lanes.
- All certified C-TPAT companies are eligible to attend CBP sponsored C-TPAT supply chain security training seminars.

CBP provided benefits are not the only benefits that companies realize by joining C-TPAT. Companies have found that joining C-TPAT often results in discovering outdated procedures and/or discov-

ering areas that need improved security and efficiency. While performing the required supply chain assessment for C-TPAT membership, companies are able to streamline their operations. C-TPAT aids companies in optimizing their internal and external management of assets and functions while at the same time enhancing security. When administered together, enhanced security practices and procedures, and increased supply chain performance will mitigate the risk of loss, damage and theft, and reduce the likelihood of the introduction of potentially dangerous elements into the global supply chain.

Other benefits companies have realized by participating in C-TPAT include:

- The incorporation of good sound security practices and procedures into existing logistical management methods and processes.
- Greater supply chain integrity.
- Reduced risk mitigation.
- Reduced cargo theft and pilferage.
- Stronger brand equity.
- Improved asset utilization.
- Greater efficiency between internal and external functions.
- Improved security for their workforce.
- Improved marketability.
- Understanding the end to end process, including knowing each entity along the supply chain.

The successful integration and alignment of increased security and enhanced supply chain efficiency is one of the great successes of C-TPAT. Through the collaborative work of CBP and the trade community, C-TPAT enhances the security and efficiency of legitimate trade.

## External Factors

C-TPAT continuously monitors how internal and external factors affect the achievement of goals and ultimately the success of the program. Monitoring these factors, and developing strategies for mitigating them, is accomplished through an analysis of stakeholders, as well as internal and external strengths, weaknesses, opportunities and threats in the C-TPAT program and its operating environment. These analyses served as the starting point for the C-TPAT strategic planning process and are addressed in the strategic plan.

Strengths identified in the C-TPAT program include the voluntary nature of the partnerships, shared CBP/industry responsibility for supply chain security and the trust engendered by external stakeholders as a result of the partnerships. In addition, C-TPAT offers the ability to influence and leverage entities in the supply chain that regulations often can't reach and allows for customization of security needs by the trade community. Finally, the vast knowledge and experience of C-TPAT personnel, and the access to information not previously available to CBP, were also seen as program strengths.

Opportunities include the ability to enhance internal and external communication with stakeholders, to provide continuing education for supply chain specialists and to hire additional highly quali-

14



fied people into the C-TPAT program. Other opportunities are anticipated from the automation of C-TPAT, as well as additional information sharing and training for the trade community and within CBP. Through this strategic plan, CBP will continue to leverage the opportunities and strengths and to mitigate the weaknesses and threats.

## C-TPAT Approach and Guiding Principles

C-TPAT is a supply chain security program for international cargo and conveyances. It increases security measures, practices and procedures throughout all sectors of the international supply chain. Central to the security vision of C-TPAT is the core principle of increased facilitation for legitimate business entities that are compliant traders. All C-TPAT benefits are privileges offered to only the most secure and compliant program participants.

The following three principles define the approach of the C-TPAT program. CBP will develop and implement the C-TPAT program of the future consistent with these principles.

### **1. C-TPAT will continue to develop as a voluntary government/private sector partnership.**

At times, mandatory requirements for security may be both necessary and efficient – but may not always be the most effective. For example, CBP has extensive experience and knowledge as to



how voluntary cooperative partnerships between industry and government guide the development and implementation of robust security measures. These measures have directly led to hundreds of narcotics seizures by carriers and law enforcement entities throughout the world.

Additionally, security requirements that allow for customized application by the individual and/or organization often result in that entity meeting the expectations of the requirement and, in most cases, even exceeding the minimal standard. Developing supply chain security standards while maintaining flexibility is critical to the C-TPAT program, since one size does not fit all.

**2. As C-TPAT evolves, the program will continue to work in partnership with the stakeholders of the international supply chain and cooperatively develop improved systems of security and efficiency.**

In the past, increased trade security and facilitation were viewed as mutually exclusive. Many felt that taking the necessary steps to secure the United States borders against the ongoing terrorist threat would only add another barrier to free trade and the efficient movement of cargo. However, the success of C-TPAT clearly demonstrates that increased security can lead to a more efficient and cost effective flow of trade.

C-TPAT is a cooperative endeavor, which calls upon the trade community to enhance their existing security practices and those of their business partners involved in their supply chains. Once these procedures are in effect, imports of C-TPAT members qualify for expedited CBP processing and reduced inspections at United States ports of entry.

C-TPAT builds upon the best practices of pre-existing CBP anti-smuggling industry partnership pro-

grams to bolster supply chain security, encourage cooperative relationships and focus resources on areas of greatest vulnerability.

**3. C-TPAT will continue to take an integrated approach to supply chain security – focusing on improving systems of security and supply chain efficiency.**

C-TPAT is flexible and constantly evolving to ensure its continued viability, effectiveness and relevance, as the terrorist threat and the nature of international trade evolves. Moreover, C-TPAT enables trade; it improves supply chain security and increases supply chain performance. C-TPAT aids companies in optimizing their internal and external management of assets and functions while at the same time enhancing security. Taken together, enhanced security practices and increased supply chain performance reduces the risk of loss, damage, and theft and lessens the likelihood that terrorists will attack the global supply.

The integration and alignment of increased security and enhanced supply chain efficiency is one of the great successes of C-TPAT. Through the collaborative work of CBP and the trade community, C-TPAT has become the focal point for all government and private sector supply chain security efforts.

# Meeting Program Expectations

## Strategic Goal Number 1

Ensure that C-TPAT partners improve the security of their supply chains pursuant to C-TPAT security criteria.

### Objective 1.1

#### Certify security profiles and security information provided by C-TPAT partners.

In joining C-TPAT, companies sign an agreement to work with CBP to protect the supply chain, identify security gaps and implement specific security measures and best practices. Additionally, C-TPAT partners provide CBP with a security profile outlining the specific security measures the company has in place. C-TPAT applicants must address a broad range of security topics including personnel security; physical security; procedural security; access controls; education, training and awareness; manifest procedures; conveyance security; threat awareness; document processing; business partners and relationships; vendors; and suppliers. Security profiles also list action plans that companies implement to align security throughout their supply chain.

A certified partner is a participant that has had their security profile reviewed and deemed



A review of security



acceptable. The review process entails a rigorous review of the C-TPAT participant's security profile, and upon certification an internal vetting process reviews the compliance and violation history of the company. A C-TPAT participant is not able to receive program benefits (e.g. reduced inspections) until they become a "certified partner" and are fully vetted by CBP.

In the future, the security information requirements for applicants and members will become more demanding and require more specific detail. As C-TPAT best practices increase in number and scope, more stringent criteria for security practices and information submitted to CBP will be required.

### Objective 1.2

#### Enhance validation selection approach using risk factors, and expand the scope and volume of C-TPAT validations.

To achieve timely interdiction and enforcement actions, we will immediately pass tactical, perishable information and intelligence to all border operational units. In order to provide value-added reports to our operational units, we will continue systematically reviewing, analyzing and exploiting all-source intelligence. We will identify trends and patterns on a local, regional and national level to assist in targeting and detecting terrorists and terrorist activities. We intend to aggressively engage the intelligence community, ensuring that they are aware of our intelligence collection requirements, and facilitating the rapid exchange of terrorism related intelligence that can influence border security actions.

Photo: C-TPAT validation process (Greg Friedrich) 19



Once a company is certified, it begins enjoying the benefits associated with C-TPAT. The next step is validation, which allows CBP to verify that the company's security plans are effective and accurate.

C-TPAT validations enable CBP to review the security measures and procedures of the member's supply chain for effectiveness, efficiency and accuracy. Through the validation process, CBP and the C-TPAT participant jointly review the participant's security procedures to ensure that security measures are effectively executed. The validation process also promotes an exchange of information on security issues by both CBP and the company, and the sharing of "best practices", with the ultimate goal of strengthening the partnership and the security of the international supply chain.

A C-TPAT participant is selected for validation based on risk management principles. Validations are initiated on the basis of strategic threat posed by geographic regions, security related anomalies, import volume and value, participation in expedited release programs (e.g. FAST), a relative sampling of industry sectors (e.g. carriers, brokers, forwarders and importers) and/or other risk related information. Alternatively, a validation may be performed as a matter of routine program oversight.

Validations will continue to be conducted jointly by CBP personnel and the C-TPAT member. Each will continue to be customized based on the member's business model and according to the security profile approved by CBP.

C-TPAT validations continue to expand and adapt in scope. Initially, validations focused on specific portions of the supply chain. Today the scope includes manufacturing sites, foreign logistics providers and foreign ports. C-TPAT continues to expand incorporating IT security and workplace secu-



ity – all targets of supply chain security. Fortunately, C-TPAT is a flexible program able to adapt in scope. It addresses areas of vulnerability and works cooperatively with businesses to eliminate security weaknesses. Since C-TPAT is a voluntary program based on partnership, companies have brought issues to the forefront during meetings that originally the program did not foresee as part of supply chain security.

### Objective 1.3

#### Formalize the requirements for C-TPAT self-policing tool and implement the process for the submission of the C-TPAT periodic self-assessment.

To ensure supply chain integrity, and meet the obligations and standards established under the C-TPAT program, it is essential that member's security practices and procedures are reviewed on a regular basis and updated or enhanced as events warrant. C-TPAT will require members to provide CBP with a periodic review of their company's security practices and procedures, both enacted and proposed. C-TPAT supply chain specialists will be responsible for coordinating the submission and execution of these periodic self-assessments.



**Objective 1.4**

**Require participants to engage and leverage all business partners within their supply chains.**

The trade community has made C-TPAT participation a requirement for doing business to ensure a minimum standard of security along their supply chain. While participation is touted as good "corporate citizenry" many companies also realize inherent business benefits of ensuring that all parts of the supply chain are secure. Therefore, participants and future participants in C-TPAT will continue to be required to engage and leverage all business partners throughout their supply chain to improve security.

# Providing C-TPAT Benefits

## Strategic Goal Number 2

Provide incentives and benefits to include expedited processing of C-TPAT shipments to C-TPAT partners.



U.S.–Mexico border (Tourtelotte)

**Objective 2.1**

**Develop the C-TPAT secure communication platform.**

Providing certified members with the necessary tools to effectively develop and implement their internal C-TPAT programs is critical to enhancing overall supply chain security. CBP will create a secure communication platform to provide certified members with the ability to verify the program status of other certified members. It will also provide access to threat assessments and appropriate intelligence, as well as bulletin and message boards.

**Objective 2.2**

**Conduct supply chain security training seminars and targeted outreach for certified partners and the trade community.**

Effective outreach and training are critical tools that CBP can offer the business community so they can gain a better understanding of the C-TPAT program. The local supply chain specialist will coordinate outreach and training initiatives. This will provide a better understanding of program expectations and build relationships with C-TPAT partners fostering greater cooperation and responsiveness.

Supply chain specialists will deliver training to reinforce the goals and objectives of the C-TPAT program. Specialists will explain the C-TPAT agreement and its provisions to provide a clearer understanding of the responsibilities of both the participant and CBP. The training will also outline the benefits of C-TPAT to the trade community and CBP.

### Objective 2.3

#### Share information and security best practices with the membership.

C-TPAT is cataloging best practices reported either through security profile submissions or in the validation process. As the catalog increases, examples of both successful and extraordinary security practices, relevant to a particular industry, will be made available to participants. Best practices will compliment and enhance the current C-TPAT supply chain security criteria, set C-TPAT "best practice" criteria and categorize the criteria by company size and industry.

C-TPAT shares information with its membership in a variety of ways. The Internet is utilized to inform members of alerts, upcoming conferences, changes and other bulletins. The C-TPAT Web site is used to answer frequently asked questions and highlight security criteria.

C-TPAT personnel routinely make presentations to the trade community regarding requirements, best practices and the future of the program. Conferences provide training and offer a forum for the trade to share information, experiences and security issues. The conferences provide access to CBP personnel including C-TPAT, CSI and the Importer Self-Assessment (ISA) staff.

C-TPAT benefits are emphasized to the trade community through direct marketing in presentations for FAST, C-TPAT and ISA. The Web site also contains information on C-TPAT benefits. Additionally, the C-TPAT office is developing a "Benefits Statement" for distribution to members. This report will include a variety of program benefits information and will quantify the reduced inspection benefits realized by program participants.

### Objective 2.4

#### Develop minimum security practices, especially applicable to point of origin, point of stuffing and smarter, more secure cargo containers.

C-TPAT will develop and disseminate updated program security requirements and criteria based upon the processes, procedures and best practices cultivated through review and approval of security profile submissions and/or through the validation process. These requirements/criteria will focus on foreign manufacturers and container point of stuffing, through the CBP clearance process – and eventually will include the use of more secure maritime containers.



### Objective 2.5

#### Provide expedited processing benefits to C-TPAT partners.

C-TPAT will continue to extend facilitation benefits to certified partners. Partners will enjoy continued and increased expedited processing benefits through reduced inspections and FAST lane clearance, as well as through the development of additional practices appropriate to facilitate secure and legitimate trade. C-TPAT will also explore options for providing tiered-benefits to members.

Establishment of the "green lane" concept will be based upon the following security and facilitation principles: FAST, smarter containers, the use of CSI ports and the recently adopted WCO framework for international cargo security standards. These all contribute to the expedited processing of C-TPAT partners. In addition, C-TPAT is working with international organizations and foreign governments to improve the secure and efficient movement of cargo providing further business benefits.

# Internationalizing C-TPAT

## Strategic Goal Number 3

Internationalize the core principles of C-TPAT through cooperation and coordination with the international community.

### Objective 3.1

#### Partner with the international trade community to help secure global supply chains.

C-TPAT membership is primarily comprised of companies operating in the United States. However, today's world embraces a global economy that requires companies to import and outsource in order to remain competitive. Through partnership in C-TPAT, it became obvious that companies could leverage their overseas manufacturers, suppliers, vendors and service providers to improve security.

Many C-TPAT companies are now contractually requiring businesses to improve security in order to meet C-TPAT guidelines. As a result, C-TPAT extends its reach well beyond our borders and impacts the security of companies both here and overseas.

Examples of how C-TPAT companies leverage their foreign suppliers to tighten security in the supply chain include:

- C-TPAT members are conducting regular audits of their vendors to ensure compliance with C-TPAT security guidelines.



Supply chain specialists travel overseas to review security within supply chains



- C-TPAT members are conditioning contractual business relationships with their service providers and vendors based on C-TPAT participation and/or adherence to C-TPAT security guidelines.
- C-TPAT companies are leveraging existing internal inspection teams. They have obtained cargo security training for quality assurance personnel or non-security related auditors who visit foreign vendors and factories on a regular basis.

The partnership approach has earned C-TPAT support and positive responses from the international trade community. Since the certification process is a self-assessment tool, and the validation highlights best practices, weaknesses and education, it is well received by overseas manufacturers, suppliers and vendors. As a result, C-TPAT positively impacts the international business community.

### Objective 3.2

#### Partner with individual customs administrations to improve the coordination of mutual antiterrorism efforts.

CBP will continue working with individual customs administrations to better align existing supply chain security and trade facilitation programs to improve the coordination of mutual antiterrorism efforts between the United States and other nations. CBP will work with our international counterparts to establish common supply chain security standards at the global level, share program processes by working with foreign customs administrations and help to identify both potentially vulner-

Photo: Vessel off-load operations (Nino) 27

able and secure supply chains. The Container Security Initiative (CSI) is one such joint venture.

Additionally, customs administrations find the success of C-TPAT appealing and are implementing similar programs. CBP will continue to work with these programs to better secure the supply chain. The trade community embraces these programs as they result in the more efficient movement of their freight. The trade community and customs administrations, working with C-TPAT, are developing an environment where concerns are shared, training relating to both sides is provided and a heightened awareness of weaknesses and strengths is recognized. The result is improved supply chain efficiency for the trade community and increased security along the supply chain reaching far beyond the customs administrations' borders.

### Objective 3.3

**Support the work of the World Customs Organization to develop a WCO sponsored framework to secure and facilitate global trade that recognizes customs-private sector partnerships.**

Creating international standards for cargo security and cargo processes will improve world security and add an additional layer of defense to homeland security. International trade partners have been monitoring the progress of C-TPAT since its inception to determine pitfalls and benefits. The feedback the international trade community has received from its United States trade partners is that the program has many necessary business benefits and assists in maintaining secure and open global trade routes.

The C-TPAT office supported CBP's efforts at the World Customs Organization's (WCO's) Task Force on Supply Chain Security. The Task Force was mandated by the June 2002 WCO "Resolution on Security and Facilitation of the International Trade Supply Chain", in developing High Level Guidelines on Customs-Business Partnerships. The C-TPAT office will continue to participate on WCO working groups to develop sector-specific supply chain security guidelines and standards.

C-TPAT is also supporting CBP's efforts emanating out of the June 2004, WCO Resolution that established a WCO High-Level Strategic Group (HLSG) designed to provide further guidance on global border security issues. The primary focus of the HLSG will be developing international security standards.

### Objective 3.4

**Coordinate with international organizations to improve the security and integrity requirements of their membership.**

CBP will continue to engage private and public international organizations to exchange lessons learned and best practices identified through the application and validation processes. The future of C-TPAT lies in engaging these private and public international organizations and helping them improve the security requirements of their membership. In doing so, these international organizations assist their membership in engaging secure trade partners or business associates.

By utilizing best practices and lessons learned identified through C-TPAT, these organizations and their membership are able to be aware of, and adapt to, emerging security concerns. And, since security concerns are constantly changing, remaining flexible and adaptable is critical to maintaining a secure global trade system.

# Supporting CBP Initiatives

## Strategic Goal Number 4

Support other CBP security and facilitation initiatives.

### Objective 4.1

**Support the implementation and expansion of the Free and Secure Trade (FAST) program.**



Demonstration of FAST processing in El Paso, TX (Nino)

The Free and Secure Trade (FAST) program provides for expedited cargo processing at the border for carriers, importers and commercial drivers that are recognized as securing themselves against terrorist vulnerabilities. It is a bilateral initiative, between the United States, Canada and Mexico, designed to ensure security and safety while enhancing the economic prosperity of all three countries. FAST promotes free and secure trade by using common risk-management principles, supply chain security, industry partnership and advanced technology to improve the efficiency of screening and clearing commercial traffic at the shared United States, Mexican and Canadian borders.

FAST provides the operational platform that allows eligible C-TPAT members to use an expedited cargo release system that speeds the flow of low-risk cargo and conveyances. In other words, C-TPAT is the supply chain security program that gives eligible, low-risk members the ability to use FAST and speed through the green lane.



#### Objective 4.2

##### Support the development and implementation of a more secure and smarter container.

To secure all aspects of the supply chain, one area that must be addressed is the container itself. Containers provide importers/exporters with the ability to secure and protect their merchandise. However, smugglers intent on piggybacking on the excellent logistics of companies are developing unique and imaginative means of compromising containers. Therefore, in partnership with the trade community, CBP and other entities within DHS are exploring a variety of security measures that will lead to a smarter container.

Presently, DHS maintains three distinct research programs to evaluate short, medium and long term solutions. The Operation Safe Commerce pilot has been DHS's effort to evaluate supply chain security technologies including medium term container security devices. More recently, the Science and Technology Directorate launched its Advanced Container Security Device program. Through C-TPAT, CBP is actively engaged in this effort by exploring a near term solution to detect intrusion or tampering with the shipment through the container doors through the use of a container security device. A similar concept device is already being used by C-TPAT members using the FAST lanes at the land border with Mexico. This type of device is already being used by C-TPAT members. C-TPAT members who participate in the oceangoing smart box pilot testing of these devices must also adhere to sealing standards and procedures. They include adopting a standard for high security seals applied to the container in tamper resistant locations, and incorporating a tamper evident device. Concurrently, CBP is leading the Department's efforts to set minimum

regulatory requirements for high security seals on all in-bound ocean containers. This effort builds on the revised security criteria for C-TPAT.

Each of these efforts is designed to detect evidence of tampering of ocean cargo containers during the in-transit process, which will ultimately enhance container security and the integrity of containerized cargo.

#### Objective 4.3

##### Support and complement CBP's Container Security Initiative.

The Container Security Initiative (CSI) is a government to government antiterrorism effort that allows governments to share information and target high-risk shipments. In conjunction with C-TPAT, CSI adds another layer of security while facilitating the movement of legitimate cargo. The results of this collaboration by governments and the private sector include establishing best practices and determining immediate and future security standards, while securing global trade routes.

C-TPAT complements CSI by adding another layer of security to the supply chain. C-TPAT, in conjunction with CSI, is integral to the development and implementation of the green lane concept in the maritime environment during normal operating periods as well as periods of heightened threat. C-TPAT members have been instrumental in the development of the Smart Container and the testing of this container. C-TPAT has assisted CSI by identifying and certifying companies that have improved security along their supply chain and pose a lower risk. While C-TPAT companies are not exempt from examinations, membership assists in determining those companies that have made the effort to improve their security and rewards them with reduced number of examinations.

#### Objective 4.4

##### Support other CBP and DHS antiterrorism initiatives.

CBP's multi-layered strategy for protecting the nation from terrorism and other threats also involves building upon existing programs and enhancing these programs to meet the current threats. One such example is the Industry Partnership Programs (IPP).

The IPP underscores the importance of employing best business practices and enhanced security measures to eliminate the trade's exposure to criminals and the use of legitimate trade for smuggling. Even though these programs were created to combat the narcotics trade, many of the same principles are used to counter the use of legitimate trade by terrorists. The IPP works with foreign manufacturers, exporters, importers, carriers and many other industry sectors emphasizing a seamless security conscious environment throughout the entire commercial process.

The Carrier Initiative Program (CIP), Business Anti-Smuggling Coalition (BASC) and Americas Counter Smuggling Initiative (ACSI) are among the programs CBP uses to enhance partnerships with the business community. C-TPAT will be expanded to encompass and enhance these IPP's so that it covers the entire supply chain for goods imported into the United States.

C-TPAT also supports several initiatives within the Office of Strategic Trade. For instance, certified C-TPAT importers are eligible for the Importer Self-Assessment Program (ISA) and are given priority access to participate in the Automated Commercial Environment (ACE). In addition, C-TPAT supports several DHS initiatives, including maritime and air cargo and air security programs. C-TPAT will continue to support and enhance security programs that assist in protecting our nation's borders and the global supply chain.

# Improving C-TPAT Administration

## Strategic Goal Number 5

Improve administration of the C-TPAT program.

### Objective 5.1

#### Implement the C-TPAT human capital plan.

To strategically project future human capital requirements in support of C-TPAT's goals and objective, a human capital plan is being developed. The plan analyzes current workload, the projected annual growth rate of the program, the time it takes to complete the average validation and the number of validations a supply chain specialist (SCS) can complete annually. The plan outlines SCS workforce and duties, areas of responsibility and current workload, current and future C-TPAT application rates, C-TPAT validation time frames, the SCS validation formula used and SCS staffing required for current and future workload.

CBP developed and implemented the new C-TPAT SCS position to assist with key C-TPAT program requirements and institutionalize supply chain security expertise throughout the agency. The primary duty of the SCS is to conduct validations. The SCS also serves as principle advisor and primary point of contact for certified partners in the C-TPAT program.



C-TPAT validation meeting (Friedrich)



The SCS' are strategically located in four field locations (New York, Miami, Los Angeles and Washington DC). This allows them to more effectively conduct C-TPAT validations, provide antiterrorism/anti-smuggling training and awareness programs and offer general program guidance. There are currently over 40 SCS positions filled, and CBP expects to fill additional positions during fiscal years 2005 to 2006.

CBP will continue to develop, refine and adjust all aspects of the human capital plan in order to achieve C-TPAT goals and objectives. This will include an ongoing assessment of the program's need for specialized skills and expertise, evaluations of the roles and responsibilities of C-TPAT staff and adjustment of training requirements to account for changes in industry practices.

### Objective 5.2

#### Expand the structured training program for C-TPAT supply chain specialists.

Ensuring that C-TPAT personnel are prepared to meet the challenges of this dynamic program and the global threat of terrorism, CBP's Office of Field Operations and the Office of Training and Development created a comprehensive training plan. The training comprises a two-week formal session complete with industry specialists, instructors and training manuals.

In addition to classroom training, specialists receive on the job training, which exposes them to an extensive array of information, experiences and locations. The specialists benefit from actual experiences that assist them in understanding the multifaceted environments they will operate within. The classroom training, coupled with experiences in different business and cultural envi-

Photo: Cargo arrives at seaport by truck to be loaded onto outbound ships (Tourtellotte)



ronments, supports them in formulating the best approach to promoting changes in security procedures to the C-TPAT partner. In the end, through classroom training and on the job training, the employee becomes a specialist in his/her field.

C-TPAT is also coordinating with the Office of Training and Development in engaging leading universities to create a college-level curriculum to train the supply chain specialists. The curriculum will consist of a multi-disciplinary approach to logistics management and supply chain security and will incorporate a continuing education format.

### Objective 5.3

#### Coordinate with the CBP Modernization Office to enhance C-TPAT's data collection and information management capabilities.

C-TPAT is working with the CBP Modernization Office (CBPMO) in the Automated Commercial Environment (ACE) selectivity and targeting redesign process to enhance our data collection and information management capabilities. This effort focuses on collecting more substantive information related to C-TPAT activities (e.g. validations, security profiles, etc.) The CBPMO is working to develop a prototype system, which encompasses supply chain validation selectivity management and measurement capabilities. In addition, the CBPMO is working to develop the overall C-TPAT program system requirements for account processing in ACE.



### Cost to the Public

At the onset of the C-TPAT program, the desire was to protect our nation against another terrorist attack by securing the trade routes into the United States. However, it quickly became obvious that an attack on a trade route anywhere in the world, whether to the United States or not, could have a devastating impact on the Western world. C-TPAT was actually assisting in protecting the global economy. Therefore, the cost to the public may be calculated by a review of the devastating impact that 9/11 had on our economy.

C-TPAT reaches well beyond the United States borders to promote security from the point of manufacture to the point of distribution using imaginative means to achieve its goals. Today with over 7,400 members, C-TPAT spans across borders, across industries, across politics to improve security and awareness against potential terrorist threats around the globe.

The cost to the public is taken seriously within the C-TPAT program because sufficient funding is vital to maintain the success of this program. CBP's fiscal year 2005 President's budget includes \$18.7 million base funds and \$15.2 million new funds for a total C-TPAT funding of \$33.9 million to increase supply chain security and expedite the clearance of legitimate trade. These funds will help CBP fulfill its priority mission and the goals and objectives of the C-TPAT program as outlined in this strategic plan.



## Performance Measures

Through its strategic plans and other planning and budget documents, CBP strives to maintain the purpose of the Government Performance and Results Act – improving program efficiency and effectiveness, while at the same time maintaining a results-oriented focus that clearly describes program goals and objectives. Developing an integrated planning approach supported by meaningful performance measures is a primary way to demonstrate business results.

It is often difficult to measure quantitatively how well a law enforcement organization is meeting its challenges. CBP is no exception. Measuring program effectiveness in terms of “deterrence” is complicated. And, although traditional workload measures are a valuable indicator of the challenges CBP faces, they do not necessarily reflect the success or failure of the agency’s efforts. The direct impact being made on unlawful activity is often unknown. Because of these and other unidentified variables, the traditional economics and approaches used to measure performance can be challenging.

To mitigate this challenge, C-TPAT is working with CBP’s Office of Strategic Trade (OST) to quantitatively measure existing information and data collection processes. The program focuses on collecting more substantive information related to C-TPAT activities. In addition, C-TPAT partners with CBP’s Modernization Office and OST to automate collection of all data associated with C-TPAT activities. C-TPAT is working to create a model of current workflow processes and associated data that will allow for base line measurements and data.

To automate and consistently capture validation information, C-TPAT partnered with the CBP Modernization Office to develop a prototype to collect C-TPAT security validation information. The intent

of the prototype is to create more substantial data collection methods and measures of supply chain security.

C-TPAT recognizes the need for effective measures to determine the success of the program. While new measures are under development, C-TPAT currently uses three measures to determine the scope of the C-TPAT program. These measures help gauge success of C-TPAT partnership efforts. They include the percent of sea container cargo transported by C-TPAT carriers, the percent of value imported by C-TPAT importers and the percent of C-TPAT importer entry volume.

In addition, reduced cargo inspections are a benefit importers receive for joining C-TPAT. To determine if members receive reduced inspections, a ratio of targeted inspections of C-TPAT shipments versus non C-TPAT shipments is calculated. Since C-TPAT benefits include reduced compliance inspections the ratio of C-TPAT entry inspection compared to non-C-TPAT entry inspections is also calculated.

Finally, validations verify the effectiveness, efficiency and accuracy of a C-TPAT member’s security. The validation report results are used to determine the ratio of recommendations included in the report. Validation reports are also used to determine passed versus failed validation reviews.

To manage CBP’s commercial import cargo targeting and examination workload, C-TPAT uses a risk management approach. C-TPAT works with members of the trade community to identify, verify and improve supply chain security. As a result of the cooperative effort, C-TPAT minimizes cargo targeting and inspections for the participating low risk C-TPAT members. This enables CBP to shift cargo targeting and examination resources from the low risk C-TPAT companies to those import transactions of high or unknown risk.

CBP’s goal is to accurately and efficiently screen and separate transactions involving known low risk trade from the unknown high risk. C-TPAT’s success may be measured by quantifying the impact of C-TPAT members on the import supply chain and measuring CBP’s ability to shift import cargo targeting and inspection resources from low risk supply chains to unknown or high risk supply chains.

In addition, new measures have been developed for use in the FY ’06 FYHSP. They include: compliance rate for C-TPAT members with the established C-TPAT security guidelines, C-TPAT validation labor efficiency rate, average CBP exam reduction ratio for C-TPAT member importers compared to non-C-TPAT importers, and time savings to process U.S./Mexico Border FAST lane transactions.

## Looking to the Future

This strategic plan sets a clear direction for the C-TPAT program. CBP anticipates that implementation of the goals, objectives and strategies contained in this plan will lead the program to one day become the domestic and international supply chain security/cargo security platform all others are judged by. At the core of this vision resides the concept of a green lane to speed secure low-risk shipments across United States borders and through the ports of entry.

The green lane represents enhanced security along the supply chain, from a foreign manufacturer to the United States port of entry. Additional efforts underway within DHS may extend this green lane concept to the domestic portion of shipments as well. It also represents expedited processing at the port of entry and will play a vital role in contingency planning for periods of increased threat or following a terrorist attack. Although the implementation of FAST has contributed to development of a green lane at the land borders, CBP will be working closely with the trade com-



munity, and others within DHS and the federal government, to develop and implement expedited facilitation in conjunction with specific security measures across other modes of transport.

As a result of current and future C-TPAT modernization efforts, minimum standards for cargo security will be in place, along with a fully automated system requiring only electronic documents from the trade community. These automated systems will provide CBP with better data for analyzing supply chain strengths and weaknesses, more robust validation selection criteria and more complete targeting capabilities.

CBP's goal is to automate every aspect of the C-TPAT program, both internally and externally. Trade partners will submit information through a web application. The information will be processed against internal risk criteria and accepted or denied, immediate responses generated and validation time frames established. Internally, information will be easily stored, reports generated and risk analysis conducted. Externally, response time will decrease, since information will be readily available.

C-TPAT implemented the Status Verification Interface, a small part of the secure communication platform that will allow CBP to communicate more effectively with members. This platform will provide relevant intelligence information, best practices, potential weaknesses and enable companies to share information.

Through hiring, training and continuing education programs, CBP expects to have an adequate number of supply chain specialists (SCS) stationed around the United States. These SCS' will be knowledgeable, versatile and experienced personnel viewed by both the private sector and United States government as experts in supply chain security.

## Conclusion

Since 9/11, combating terrorism has become the number one priority for this nation and for CBP. This objective must remain CBP's top priority because the threat of another terrorist attack remains real. We face a determined adversary that will stop at nothing to harm Americans and the American way of life. C-TPAT provides an effective tool to oppose this threat.

As a result, C-TPAT has gained global recognition and support. Aside from many companies' belief in corporate good citizenry, participants find that assessing supply chain security procedures and practices improves business efficiency. Through partnerships, CBP educates and has been educated, has heightened awareness of weaknesses and has gained the trust of the trade. C-TPAT has a positive effect throughout international business as companies are now requesting security information from their service providers, vendors, suppliers and manufacturers. Many C-TPAT companies are contractually requiring businesses to improve security to meet C-TPAT guidelines.

Perhaps the greatest success of C-TPAT is that although participant companies join voluntarily, members have made participation and/or compliance with C-TPAT security standards by their business partners a requirement for doing business. Ultimately, these partnerships will help CBP create a true green lane that speeds low risk shipments across all our borders and through our ports of entry and preserve global trade in this time of global terrorism.

This C-TPAT strategic plan provides a sound framework for enhancing the program and for continuing to leverage these successes well into the future. Using solid performance measures to track progress, C-TPAT will be in a position to clearly demonstrate its long-term, positive impact on establishing a true global green lane that protects America and the global supply chain.



U.S. Customs and  
Border Protection

PUBLISHED BY  
US CUSTOMS & BORDER PROTECTION  
WASHINGTON, DC 20229  
[WWW.CBP.GOV](http://WWW.CBP.GOV)

THIS DOCUMENT WAS PREPARED BY  
THE OFFICE OF FIELD OPERATIONS AND  
THE OFFICE OF POLICY AND PLANNING  
NOVEMBER, 2004