

CRS Report for Congress

Received through the CRS Web

Maritime Security: Overview of Issues

John F. Frittelli
Transportation Analyst
Resources, Science, and Industry Division

Summary

In the wake of the terrorist attacks of September 11, 2001, port security has emerged as a significant part of the overall debate on U.S. homeland security. Many port areas have vulnerabilities to terrorist attack because of their size, easy accessibility by water and land, proximity to urban areas, and the tremendous amount of cargo they handle. To raise port security standards, Congress passed the Maritime Transportation Security Act of 2002 (P.L. 107-295) in November 2002. In the 108th Congress, implementation issues involving various security provisions in the Act may be addressed. Some of the provisions in the Act raise broad policy issues, such as finding the right balance between security and commerce, and between standard versus port-specific security measures. Congress may give consideration to assigning roles and responsibilities to the various government agencies and private stakeholders that engage in port activity. Congress may also continue debate on how to generate funds for further improving the security infrastructure of ports. This report will be updated periodically.

Concerns for Port Security

Government leaders and security experts worry that the maritime transportation system could be used by terrorists to smuggle personnel, weapons of mass destruction, or other dangerous materials into the United States.¹ They are also concerned that ships in U.S. ports, particularly large commercial cargo ships or cruise ships, could be attacked by terrorists. A large-scale terrorist attack at a U.S. port, experts warn, could not only cause widespread death and damage, but also paralyze the maritime trading system, which could quickly disrupt U.S. and global commerce.

Even before the terrorist attacks of September 11, 2001, government officials and security experts were concerned about the security of U.S. ports. In the fall of 2000, the Interagency Commission on Crime and Security in U.S. Seaports noted the vulnerability of U.S. seaports to terrorism. The report noted that while the FBI then considered the

¹ Other CRS Reports on this topic are: CRS Report RL31733, *Port and Maritime Security: Background and Issues for Congress*; and CRS Report RS21293, *Terrorist Nuclear Attacks on Seaports: Threat and Response*.

threat of terrorist attacks on U.S. seaports to be low, their vulnerability to such attacks was high.² To address the concerns raised in the report, Senator Hollings introduced S. 1214, the Maritime Transportation Security Act of 2001 on July 20, 2001. On November 14, 2002, Congress passed S. 1214, as amended, the Maritime Transportation Security Act of 2002 (MTSA), and the President signed it into law as P.L. 107-295 on November 25, 2002.

Features of the U.S. Maritime System

The U.S. maritime system includes more than 300 sea and river ports with more than 3,700 cargo and passenger terminals and more than 1,000 harbor channels spread along thousands of miles of coastline.³ Transportation firms tend to concentrate traffic through major cargo hubs because of their greater investment in infrastructure.⁴ The top 50 ports in the United States account for about 90% of all cargo tonnage and 25 U.S. ports account for 98% of all container shipments.⁵ In 2001, approximately 5,400 commercial ships made more than 60,000 U.S. port calls. Most ships calling U.S. ports are foreign owned and foreign crewed; less than 3% of U.S. overseas trade is carried on U.S.-flag vessels.⁶

Container ships are a growing segment of maritime commerce – and the focus of much of the attention on seaport security. While they carry only 11% of annual tonnage, they account for 66% of the total value of U.S. maritime overseas trade. A large container ship can carry more than 3,000 containers, of which several hundred might be offloaded at a given port. A marine container is similar to a truck trailer without wheels; standard sizes are 8x8x20 feet or 8x8x40 feet. More than 6 million cargo containers enter U.S. seaports each year. The Customs Service analyzes cargo manifest information for each container to decide which to target for closer inspection. Only about 2% currently have their contents physically inspected by the Customs Service – a statistic that has played a key role in heightening concerns for U.S. port security.⁷

Ships are the primary mode of transportation for world trade. Ships carry more than 95% of the nation's non-North American trade by weight and 75% by value, and 100% of the foreign oil imported by the United States. Waterborne cargo contributes about

² *Report of the Interagency Commission on Crime and Security in U.S. Seaports*, Fall 2000, p. 63.

³ For a more detailed description of the U.S. maritime system, see U.S. DOT, Maritime Admin., *An Assessment of the U.S. Marine Transportation System*, Sept. 1999. Available at [<http://www.marad.dot.gov/>].

⁴ The U.S. Army Corps of Engineers' Navigation Data Center ranks U.S. ports by dollar value and tons of cargo imported and exported. See [www.iwr.usace.army.mil/ndc/].

⁵ U.S. Congress, House of Representatives, Maritime Transportation Security Act of 2002, Conference Report, H.Rept. 107-777, p. 4.

⁶ "The Maritime Component," *Sea Power*, August 2001.

⁷ *Making the Nation Safer: The Role of Science and Technology in Countering Terrorism*, Washington, D.C., National Academy Press, 2002, p. 216.

7.5% to the U.S. gross domestic product.⁸ Given the importance of maritime trade to the U.S. economy, disruptions to that trade can have immediate and significant economic impacts.

In addition to its economic significance, the marine transportation system is vital for national security. The Departments of Defense and Transportation have designated 17 U.S. seaports as strategic because they are necessary for use by DOD in the event of a major military deployment. Thirteen of these ports are commercial seaports. As the GAO has reported, “If the strategic ports (or the ships carrying military supplies) were attacked, not only could massive civilian casualties be sustained, but DOD could also lose precious cargo and time and be forced to rely heavily on its overburdened airlift capabilities.”⁹

Recent Port Security Initiatives by Federal Authorities

Leading federal agencies involved in port security include the Coast Guard, the Customs Service, and the Transportation Security Administration (TSA), all of which are scheduled for transfer by March 2003 to the newly established Department of Homeland Security (DHS). The Coast Guard and Customs Service are the two federal agencies with the strongest presence at seaports. To counter the terrorist threat, the Coast Guard and the Customs Service have sought to improve the quality and advance the timing of information submitted to them by shippers and carriers so that they can better evaluate the terrorist risk of ships, cargo, passengers or crew destined for the United States. By increasing their knowledge of the various parties in the marine environment, it is hoped that federal inspectors will be better able to separate the bad from the good without impeding the flow of legitimate travel and commerce.

Coast Guard. The Coast Guard is the nation’s principal maritime law enforcement authority and the lead federal agency for the maritime component of homeland security, including port security.¹⁰ Among other things, the Coast Guard is responsible for evaluating, boarding, and inspecting commercial ships as they approach U.S. waters, for countering terrorist threats in U.S. ports, and for helping to protect U.S. Navy ships in U.S. ports. A high-ranking Coast Guard officer in each port area serves as the Captain of the Port (COTP), who is lead federal official responsible for the security and safety of the vessels and waterways in his or her geographic zone. Under the terms of the Ports and Waterways Safety Act of 1972 (P.L. 92-340) and the recently enacted Maritime Transportation Security Act of 2002, the Coast Guard has responsibility to protect vessels and harbors from subversive acts.

⁸ Admiral Thomas H. Collins, Commandant, U.S. Coast Guard, speech before the International Maritime and Port Security Conference, Singapore, Jan. 21, 2003.

⁹ GAO, *Combating Terrorism, Actions Needed to Improve Force Protection for DOD Deployments through Domestic Seaports*, GAO-03-15, Oct. 2002.

¹⁰ The Navy and the Coast Guard agree that the Coast Guard is the lead federal agency for the maritime component of homeland security, and that the Navy’s role is to support the Coast Guard in areas where the Coast Guard’s capabilities are limited or lacking, such as air defense or antisubmarine warfare. For more on the Coast Guard’s and Navy’s role in homeland security, see CRS Report RS21230, *Homeland Security: Navy Operations – Background and Issues for Congress*, and CRS Report RS21125, *Homeland Security: Coast Guard Operations - Background and Issues for Congress*.

The Coast Guard has instituted new reporting requirements for ships entering and leaving U.S. harbors. The former 24-hour advance Notice of Arrival (NOA) has been extended to a 96-hour NOA. The NOA includes detailed information on the crew, passengers, cargo, and the vessel itself. The NOA is evaluated to select certain high-interest vessels for boarding by Coast Guard port security teams. Coast Guard sea marshals may also escort certain ships transiting the harbor.

Customs Service. The Customs Service is the federal agency with principal responsibility for inspecting cargoes, including cargo containers, that commercial ships bring into U.S. ports. Among the programs the Customs Service has initiated to counter the terrorist threat are the Container Security Initiative (CSI) and the Customs-Trade Partnership Against Terrorism (C-TPAT). CSI is stationing U.S. Customs inspectors at major foreign transshipment ports to pre-screen U.S.-bound containers. In order to give inspectors the data and time they need to pre-screen containers, the Customs Service recently issued a new rule requiring that information about an ocean shipment be transmitted to Customs 24 hours *before* the cargo is loaded at a foreign port onto a U.S.-bound vessel.¹¹ Previously, ocean carriers did not submit this information until the ship arrived at a U.S. port.

C-TPAT, initiated in April 2002, offers importers expedited processing of cargo if they comply with Customs requirements for securing their entire supply chain. Businesses that sign up for the program are required, among other things, to conduct a comprehensive self-assessment of their supply chain and submit a completed questionnaire to Customs that describes their current security practices. If Customs certifies an applicant, they may benefit from a reduced number of cargo inspections, thus reducing the risk of shipment delay.

Transportation Security Administration. TSA is a new agency created by the Aviation and Transportation Security Act of 2001 (P.L. 107-71). Its focus to date has been the security of air transportation, but it is responsible for the security of all modes of transportation, cargo and passenger. TSA in conjunction with the Customs Service, is conducting a pilot project called Operation Safe Commerce (OSC).¹² The goal of OSC is to verify the contents of sea containers at their point of loading, ensure the physical integrity of containers in transit, and track their movement through each mode of transport from origin to final destination. TSA is also conducting studies on credentialing port workers, and on developing a threat assessment center.¹³

Issues for Congress

Some Members of Congress have expressed concern that MTSA does not go far enough in its requirements for increasing port security. In addition to debating additional proposals for enhancing port security, Congress may renew debate on an issue that some Members believe was unresolved in the last Congress – the issue of how to pay for port

¹¹ The Customs Service is developing similar regulations for other transportation modes.

¹² Federal Register, Nov. 2, 2002, p. 70110-70112.

¹³ GAO, *Combating Terrorism, Actions Needed to Improve Force Protection for DOD Deployments through Domestic Seaports*, GAO-03-15, Oct. 2002.

security. In its oversight responsibilities, Congress may also consider implementation issues regarding various maritime security provisions established under MTSA.

Addressing the Threat. A major concern for Congress is determining whether the nation is doing enough to deter a terrorist attack in the maritime domain. For example, some observers have criticized MTSA because it does not establish firm deadlines, similar to those contained in recent airport security legislation, for implementing certain uniform security measures at all seaports. A related issue for Congress is judging the effectiveness of federal programs for deterring future acts of terrorism. For instance, terrorists can be expected to go to great lengths to appear as “legitimate” shippers. How effective is the Customs Service’s red-flagging system for targeting high-risk shipments?

Funding Issues. Congress is debating whether the nation is spending enough on port security and whether the nation is directing funds to the areas with the highest consequence and greatest vulnerability to a terrorist attack. Proponents for more spending argue that the \$200 million in federal grants provided for seaport security thus far is only one-fifth of the amount that the Coast Guard estimates is needed in first year costs.¹⁴ Skeptics argue that, like the nation’s attempt to prevent drug smuggling, the nation could devote enormous resources to port security but achieve limited success in interdicting terrorist activity.

A debate over how to pay for port security arose during conference committee on MTSA. Senator Hollings proposed creating user fees on cargo and passengers as a means of generating funds for port security upgrades required in the legislation. Other conferees opposed this proposal, calling such fees a tax. Some policymakers contend that without providing a dedicated funding source, the Act amounts to an unfunded mandate.

At issue is whether the general taxpayer should pay for port security through general revenues or if the maritime industry should pay through user fees. Port authorities, carriers, and shippers argue that port security is a public good - a benefit shared by the entire nation - and therefore the whole nation should share in the cost. Others argue that port security primarily benefits the maritime industry because it reduces the cost of cargo theft and other economic damage. They argue that user fees should be imposed on the industry to pay for port security.

Balancing Security and Commerce. The issue for Congress is finding the right balance between increasing port security to desired levels while at the same time not unduly impeding the legitimate flow of commerce and travel. The future balance between security and commerce will depend to a significant degree on how the Customs Service implements and enforces new rules regarding the timing and accuracy of shipment information. As mentioned earlier, the Customs Service has recently issued a new rule requiring vessel manifests to be transmitted to Customs 24 hours before cargo containers are loaded on a U.S. bound ship.¹⁵ Policymakers are likely to consider whether the new rule has any long-term economic impact on the flow of trade.

¹⁴ The Coast Guard estimates that first year costs for enhancing facility security are \$963 million and \$535 million annually for the succeeding decade. See *Fed. Reg.*, Dec. 30, 2002, p.79745.

¹⁵ See 19 CFR Parts 4, 113 and 178 or Federal Register: Oct. 31, 2002 v. 67, no. 211, p. 66318.

International Considerations. A consensus has emerged among experts that an effective solution for securing maritime trade requires an international maritime security regime. This regime would rely not on a single solution, such as increasing the number of container inspections at the border, but rather on a layered approach with multiple lines of defense from the beginning to the final destination of a shipment. The first security perimeter in this “defense in depth” strategy would be at the overseas point of origin.¹⁶ This raises the issue of how the United States should pursue higher standards for port security abroad. Key questions include whether the United States should pursue a unilateral or a multilateral approach, whether higher standards of port security should be written into international trade agreements, and whether the United States should be prepared to provide financial support to developing countries to improve their ports’ security.

Standard vs. Site Specific Measures. An additional issue for Congress is determining what elements of port security might be best addressed through across-the-board requirements that establish common standards and practices to be applied at all seaports, versus those elements of port security that might be best addressed through a tailored, bottom-up approach that employs measures that are designed to fit the specific circumstances and meet specific needs of each seaport. The debate over how much cargo the Customs Service should physically inspect at seaports is an example of this issue. Some legislation introduced in the 107th Congress would have established a benchmark for cargo inspection at all ports. MTSA does not designate a specific percentage of cargo that the Customs Service should physically inspect. Rather, the Customs Service has adopted a risk-management approach by evaluating cargo manifest data to target specific shipments for closer examination.

Roles and Responsibilities. There are many public and private stakeholders operating in a port environment, some motivated by conflicting agendas. A major concern for U.S. policymakers is assigning roles and responsibilities for maritime security among federal agencies; among federal, state, and local agencies; and between government agencies and private industry. Clear roles and responsibilities are needed to prevent overlap and duplication of effort. One policy issue is to define more clearly the role of the TSA in the marine environment. What should be the mission of the TSA in maritime security? Are there too many federal agencies involved in port security?

Another question for Congress is determining the role of private industry in maritime security. Some industry observers contend that carriers and shippers will always place speed and efficiency above security matters. On the other hand, most experts acknowledge that there are just too many cargo movements for the government to monitor on its own. A key question is to what extent government authorities should rely on the due diligence of private companies in tightening control over maritime commerce.

¹⁶ A leading spokesperson for point of origin security is Stephen Flynn, see “Beyond Border Control,” *Foreign Affairs*, Nov./Dec. 2000.