

No single path to maritime security: Using layered risk-based policies and programs to secure critical infrastructure

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What is in a Name?

- Maritime Homeland Security
- Ports, Waterways and Coastal Security
- Maritime Transportation Security - U.S. Coast Guard Ports, Waterways and Coastal Security (PWCS) Strategy
- Maritime Security



U. S. Coast Guard's Accomplishments in Maritime Security

- Finished comprehensive security reviews of all waterside nuclear power plants
- Created formal processes for addressing security concerns and requirements involving the siting of new shore-side Liquefied Natural Gas facilities
- Established a new Area Maritime Security Exercise program requiring annual local exercises, designed to assess the effectiveness of the Area Maritime Security Plans and the port community's preparedness to respond to security threats and incidents
- Established a National Maritime Security Advisory Committee to provide a strategic public forum on critical maritime security topics;
- Launched *America's Waterways Watch*, a citizen involvement program that leverages the Coast Guard's relationship with the maritime public
- Deployed the *Homeport* information sharing internet web portal, which allows for collaboration and communication in a controlled security environment for sensitive but unclassified material among Area Maritime Security Committee members and port stakeholders



Maritime Security activities performed by the U.S. Coast Guard in budget year 2006

- Conducted more than 268,000 port security patrols, 5,800 air patrols and 26,000 at sea security boardings
- Provided security escorts to over 10,000 vessels, a large portion of these escorts being devoted to the protection of vessel carrying oil and gas products
- Maintained an active patrol presence in the Arabian Gulf in support of the U.S. Navy and allied naval units, protecting in particular offshore oil export infrastructure and tank vessels



United States Coast Guard achieved the following in budget year 2006

- Seized 300 thousand pounds of drugs
- Interdicted nearly 8,000 illegal migrants at sea
- Responded to 23,904 reports of water pollution or hazardous material releases from the National Response Center, resulting in 4,015 response cases



U.S. Coast Guard's Layered Maritime Security

“Layered Maritime Security: [a] system of diverse activities designed to provide multiple opportunities to prevent successful terrorist attacks.”



Maritime Security Risk Assessment Model (MSRAM)

The MSRAM is a risk analysis tool used to analyze risk at strategic, operational & tactical levels across all U.S. ports. It allows key decision makers at the national, regional, and local levels to understand the geographic density of risk at every level.



Maritime Security Risk Assessment Model (MSRAM)

- Creates a tool that is intuitive to the user and maximizes efficiency
- Creates controls within the tool that ensure consistency of field-level input by establishing ranges for factor scoring and providing target-relevant benchmark examples
- Creates a tool that ensures that accurate and precise location information of potential targets is captured, and that the information can be displayed geographically
- Creates a tool that ensures consistency in analysis across ports by providing a baseline of terrorist attack scenarios that must be considered



$$\text{Risk} = \text{Threat} \times \text{Vulnerability} \times \text{Consequence}$$

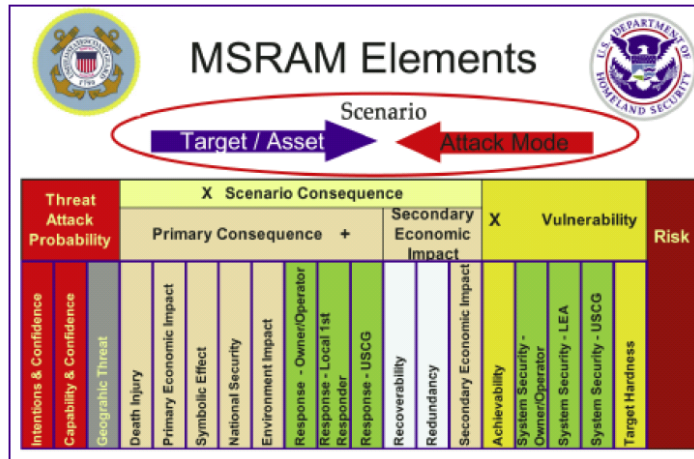


Figure 1: The MSRAM risk model illustrates all of the factors considered in the evaluation.



International Ship and Port Facility Security (ISPS) Code & U.S. Coast Guard Port State Control Program

- Ship's management company
- Ship's classification societies
- Ship's flag state
- U. S. Coast Guard's previous experience with a particular types of ships
 - oil and chemical tankers
 - gas carriers
 - passenger ships
 - bulk freighters more than ten years old



ISPS/MTSA Security Compliance Targeting Matrix

I	II	III	IV	V
SHIP MANAGEMENT	FLAG STATE	RECOGNIZED SECURITY ORGANIZATION	SECURITY COMPLIANCE HISTORY	PORT OF CALL HISTORY
ISPS II Owner/Operator, if new owner/operator since last ISPS exam	ISPS II If new flag since last ISPS exam	ISPS I 5 or more RSO related major control actions in the past twelve months	ISPS I Vessel with an ISPS related denial of entry/expulsion from port in past 12 months ⁽³⁾	ISPS I Vessels having called upon, in their last 3 ports of call, ports listed in the Federal Register as not compliant with the ISPS code. Also refer to CG-3PCV monthly targeting update
5 POINTS Owner, operator, or charterer associated with one ISPS related denial of entry or ISPS related expulsion from port in the past 12 months, or 2 or more ISPS/MTSA control actions in a twelve month period.	7 POINTS SOLAS Vessels ⁽¹⁾ Flag State has a CAR 2 or more times the overall CAR average for all flag States	5 POINTS 2 RSO related major control actions in the past twelve months	ISPS II If matrix score does not result in ISPS I priority & no ISPS compliance exam within the past 12 months	ISPS II If matrix score does not result in ISPS I priority above and if the port or country is designated ISPS II per the CG-3PCV monthly targeting update
	2 POINTS SOLAS Vessels ⁽¹⁾ Flag State has a CAR between the overall CAR average and up to 2 times overall CAR average for all flag States	2 POINTS 1 RSO related major control action in the past twelve months	5 POINTS Vessel with an ISPS/MTSA related detention in the past twelve months	ISPS II If matrix score does not result in ISPS I priority above and if the port or country is designated ISPS II per the CG-3PCV monthly targeting update
	7 POINTS Non-SOLAS Vessels ⁽²⁾⁽⁴⁾ Flag State has a CAR 2 or more times the overall CAR average for all flag States		2 POINTS Vessel with 1 or more other ISPS/MTSA control actions in the past twelve months ⁽⁴⁾	CONDITIONS OF ENTRY PRIOR TO ENTERING U.S. For last 3 ports, list of countries and/or port facilities, as specified by Federal Register, found without effective anti-terrorism measures
TOTAL TARGETING SCORE				
Vessels that score 17 points or higher are ISPS I vessels examined at sea prior to entering port. Vessels that score between 7-16 points are ISPS II vessels are examined in port. Vessels scoring fewer than 7 points are ISPS III vessels usually not subject to examination unless selected randomly.				

- (1) Pertains solely to flag States with more than one major control action in a 12 month period.
- (2) Includes vessels from non-SOLAS signatory countries and non-SOLAS vessels from signatory countries.
- (3) COTP or OCMI may downgrade a vessel's priority from ISPS I to ISPS II, or ISPS II to ISPS III depending upon circumstances surrounding a denial of entry. If denial of entry is solely from failure to provide a Notice of Arrival prior to entry into the U.S., assign 2 points.
- (4) Includes vessel delays, restriction of operations, and restriction of movement related to vessel security deficiencies. Does not include routine examination of the ship or lesser administrative actions.

Navigation and Vessel Inspection Circular No. 05-05 entitled "Guidance on Assessing the Suitability of a Waterway for LNG Marine Traffic"

- Provides detailed guidance to applicant and COTP on how both safety and security risks should be identified, analyzed, and mitigated when assessing the suitability of a waterway
- Establishes timeline and process for integrating Waterway Suitability Assessment into FERC EIS and shore-side permitting procedures
- Incorporates conclusions of Sandia Labs Study: "Zones of Concern"
- Provides guidance to COTP for incorporating Waterway Suitability Assessment into Letter of Recommendation (LOR) decision process



WSA require the following activities:

- Coordination with U.S. Coast Guard personnel responsible for approval of the waterway usage
- Access to U.S. Coast Guard area maritime security assessment and security plan information
- Inventory of critical infrastructure along the proposed carrier route
- Involvement of appropriate stakeholders (e.g., local and state law enforcement personnel) in the WSA development
- Identification of credible threats to LNG marine transportation and the risk mitigation measures necessary to address those threats, including the identification of resources required to provide those mitigation measures



Protocols for the Expeditious Recovery of Trade

No single government agency or private sector organization possesses the authority necessary, the resources required, or the awareness needed to manage the recovery of the Marine Transportation System (MTS) following a maritime incident alone this protocol establishes a process for collaborative recovery of maritime trade.



Protocols Guiding Principles

- Have agencies exercise their unique authorities and fulfill their responsibilities using their own organizational structures, procedures, and chains of command, while coordinating decisions and activities at the national, regional, and field levels
- Facilitate the optimum balance between the nation's security and the free flow of trade
- Minimize disruptions to the U.S. economy from unnecessarily constrained cargo flow
- Avoid unnecessary interference with normal commercial processes



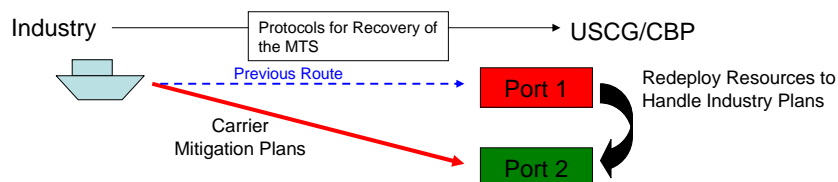
Purpose of the Protocols

- Provide a forum for joint intergovernmental dialogues and joint government/private sector dialogues to identify and act on important issues to facilitate rapid MTS recovery and resumption of commerce
- Assist senior-level decision makers by providing a process to collect and disseminate information to understand the status of the national MTS and to facilitate joint decision-making
- Assist senior-level decision makers by providing recommendations for national-level priorities for recovery of the MTS and resumption of trade. The priorities may include cargo or vessel priorities, or strategic actions necessary to facilitate rapid recovery of the MTS and resumption of trade



U.S. Coast Guard and Customs and Border Protection as Facilitators

- Facilitate private sector actions to manage the impacts of the incident on the flow of trade
- Collect information regarding the shift of commercial maritime traffic so that we can plan federal asset shifts



In Conclusion

There is no single program or policy that can provide overall maritime security. It is only through the use of multiple approaches, continuous evaluation, and improvements that governments can be successful. The U.S. Coast Guard is currently using a multi-layered approach to security to ensure that the United States is meeting its obligations under the ISPS Code to meet its own security needs as well as those of our international partners.



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