

next 10 years, the cost would be present value \$1.368 billion.

Facility Security

Implementing the final rule will affect about 5,000 facilities. The first-year cost of purchasing and installing equipment, hiring security officers, and preparing paperwork is an estimated \$1.125 billion. Following initial implementation, the annual cost is approximately \$656 million. Over the next 10 years, the cost would be present value \$5.399 billion.

OCS Facility Security

Implementing the final rule will affect about 40 OCS facilities under U.S. jurisdiction. The first-year cost of purchasing equipment and preparing paperwork is an estimated \$3 million. Following initial implementation, the annual cost is approximately \$5 million. Over the next 10 years, the cost would be present value \$37 million.

Area Maritime Security

Implementing the final rule will affect about 47 COTP zones containing 361 ports. The initial cost of the startup period (June 2003–December 2003) is estimated to be \$120 million. Following the startup period, the first year of implementation (2004) is estimated to be \$106 million. After the first year of implementation, the annual cost is approximately \$46 million. Over the next 10 years, the cost would be present value \$477 million.

Automatic Identification System (AIS)

Implementing the final rule will affect about 3,500 U.S. flag SOLAS vessels, domestic (non-SOLAS) vessels in Vessel Traffic Service (VTS) areas, and foreign flag non-SOLAS vessels. The first-year cost of purchasing equipment and training for U.S. vessels (SOLAS and domestic) is approximately \$30 million. Following initial implementation, the annual cost is approximately \$1 million. Over the next 10 years, the cost for these vessels would be present value \$50 million (with replacement of the units occurring 8 years after installation).

MARSEC Levels 2 and 3

MARSEC Level 2 is a heightened threat of a security incident, and intelligence indicates that terrorists are likely to be active within a specific target or class of targets. MARSEC Level 3 is a probable or imminent threat of a security incident. MARSEC Levels 2 and 3 costs are not included in the above summaries because of the uncertainty that arises from the unknown frequency of elevation of the MARSEC Level and the unknown duration of the elevation.

The costs to implement MARSEC Levels 2 and 3 security measures in response to these increased threats do not include the costs of security measures and resources needed to meet MARSEC Level 1 (summarized above) and will vary depending on the type of security measures required to counter the specific nature of higher levels of threat. Such measures could include additional personnel or assigning additional responsibilities to current personnel for a limited period of time.

We did not consider capital improvements, such as building a fence, to be true MARSEC Levels 2 or 3 costs. The nature of the response to MARSEC Levels 2 and 3 is intended to be a quick surge of resources to counter an increased threat level. Capital improvements generally take time to plan and implement and could not be in place rapidly. Capital improvement costs are estimated under MARSEC Level 1 costs.

We did not calculate MARSEC Level 2 cost for the AMS rule because this will be primarily a cost to the Coast Guard for coordinating the heightened MARSEC Level in port and maritime areas.

To estimate a cost for MARSEC Level 2, we made assumptions about the length of time the nation's ports can be expected to operate at the heightened MARSEC Level. For the purpose of this assessment only, we estimate costs to the nation's ports elevating to MARSEC Level 2 twice a year, for 3 weeks each time, for a total period of 6 weeks at MARSEC Level 2. Again, this estimate of 6 weeks annually at MARSEC Level 2 is for the purposes of illustrating the order of magnitude of cost we can expect. Our estimate should not be interpreted as the Coast Guard's official position on how often the nation's ports will operate at MARSEC Level 2.

We estimated that there are Vessel Security Officers aboard all U.S. flag SOLAS vessels and most domestic vessels. We estimated that there will also be key crewmembers that can assist with security duties during MARSEC Level 2 aboard these vessels. We assumed that both Vessel Security Officers and key crewmembers will work 12 hours a day (8 hours of regular time, 4 hours of overtime) during the 42 days that the ports are at MARSEC Level 2. We then estimated daily and overtime rates for Vessel Security Officers and key crewmembers. Given these assumptions, we estimated that elevating the security level to MARSEC Level 2 twice a year each for 21 days will cost vessel owners and operators approximately \$235 million annually.

We estimated that every regulated facility will have a Facility Security Officer assigned to it. We also estimated that there will also be a key person that can assist with security duties during MARSEC Level 2 at each facility. We assumed that both Facility Security Officers and key personnel will work 12 hours a day (8 hours of regular time, 4 hours of overtime). For facilities that have to acquire security personnel for MARSEC Level 1, we assumed that during MARSEC Level 2 the number security guards would double for this limited time. For the facilities for which we did not assume any additional guards at MARSEC Level 1, we assumed that during MARSEC Level 2 these would have to acquire a minimal number of security guards. Given these assumptions, we estimated that elevating the security level to MARSEC Level 2 twice a year each for 21 days will cost facility owners and operators approximately \$424 million annually.

We estimated that elevating the security level to MARSEC Level 2 twice a year each for 21 days will cost the regulated OCS facility owners and operators approximately \$4 million annually. This cost is primarily due to increased cost for OCS Facility Security Officers and available key security personnel.

Other costs that we did not attempt to quantify include possible operational restrictions such as limiting cargo operations to daylight hours or greatly limiting access to facilities or vessels.

MARSEC Level 3 will involve significant restriction of maritime operations that could result in the temporary closure of individual facilities, ports, and waterways either in a region of the U.S. or the entire nation. Depending on the nature of the specific threat, this highest level of maritime security may have a considerable impact on the stakeholders in the affected ports or maritime areas. The ability to estimate the costs to business and government for even a short period at MARSEC Level 3 is virtually impossible with any level of accuracy or analytical confidence due to the infinite range of threats and scenarios that could trigger MARSEC Level 3.

The length and the duration of the increased security level to MARSEC Level 3 will be entirely dependent on the intelligence received and the scope of transportation security incidents or disasters that have already occurred or are imminent. While we can reasonably expect MARSEC Level 3 to increase the direct costs to businesses attributable to increased personnel or modified operations, we believe the indirect costs to society of the "ripple effects"