

extends the assessment to a 15-year period.

Security Benefits

This interim rule is one of six interim rules that implement national maritime security initiatives concerning general provisions, Area Maritime Security (ports), vessels, facilities, Outer Continental Shelf (OCS) facilities, and AIS. The Coast Guard used the National Risk Assessment Tool (N-RAT) to assess benefits that would result from increased security for vessels, facilities, OCS facilities, and ports. The N-RAT considers threat, vulnerability, and consequences for a host of maritime entities in various security-related scenarios. For a more detailed discussion on the N-RAT and how we employed this tool, refer to

“Applicability of National Maritime Security Initiatives” in the interim rule titled “Implementation of National Maritime Security Initiatives” (USCG–2003–14792) published elsewhere in today’s **Federal Register**. For this benefit assessment, the Coast Guard used a team of experts to calculate a risk score for each entity and scenario before and after the implementation of required security measures. The difference in before and after scores indicates the benefit of the proposed action.

We recognize that the interim rules are a “family” of rules that will reinforce and support one another in their implementation. We have ensured, however, that risk reduction that is credited in one rulemaking is not also credited in another. For a more detailed

discussion on the benefit assessment and how we addressed the potential to double-count the risk reduced, refer to “Benefit Assessment” in the interim rule titled “Implementation of National Maritime Security Initiatives” (USCG–2003–14792) published elsewhere in today’s **Federal Register**.

We determined annual risk points reduced for each of the six interim rules using the N-RAT. The benefits are apportioned among the Vessel, Facility, OCS Facility, AMS, and AIS requirements. As shown in Table 3, the implementation of AIS for the affected population reduces 1,553 risk points annually through 2012. The benefits attributable for part 101—*General Provisions*—were not considered separately since it is an overarching section for all the parts.

TABLE 3.—ANNUAL RISK POINTS REDUCED BY THE INTERIM RULES

Maritime entity	Annual Risk Points Reduced by Rulemaking				
	Vessel security plans	Facility security plans	OCS facility security plans	AMS plans	AIS
Vessels	778,633	3,385	3,385	3,385	1,448
Facilities	2,025	469,686	.....	2,025	.....
OCS Facilities	41	.....	9,903	.....	.....
Port Areas	587	587	.....	129,792	105
Total	781,285	473,659	13,288	135,202	1,553

Once we determined the annual risk points reduced, we discounted these estimates to their present value (7 percent discount rate, 2003–2012) so that they could be compared to the costs. We presented cost effectiveness,

or dollars per risk point reduced, in two ways: first, we compared the first-year cost and first-year benefit because first-year cost is the highest in our assessment as companies develop security plans and purchase equipment.

Second, we compared the 10-year PV cost and the 10-year PV benefit. The results of our assessment are presented in Table 4.

TABLE 4. FIRST-YEAR AND 10-YEAR PV COST AND BENEFIT OF THE INTERIM RULES.

Item	Interim Rule				
	Vessel security plans	Facility security plans	OCS facility security plans	AMS plans	AIS ¹
First-year cost (millions)	\$218	\$1,125	\$3	\$120	\$41
First-year benefit	781,285	473,659	13,288	135,202	1,553
First-year cost effectiveness (\$/risk point reduced)	279	2,375	205	890	26,391
10-year PV cost (millions)	1,368	5,399	37	477	42
10-year PV benefit	5,871,540	3,559,655	99,863	1,016,074	11,671
10-year PV cost effectiveness (\$/risk point reduced)	233	1,517	368	469	3,624

¹ Cost less monetized safety benefit.

Although we have quantified these security benefits relative to AIS, the N-RAT is limited in its ability to measure benefits attributable to intelligence or information gathering. These limitations are discussed in the *Assessment Limitations* section in the preamble of the interim rule titled “Implementation of National Maritime Security Initiatives” (USCG–2003–14792)

published elsewhere in today’s **Federal Register**.

Congress mandated an AIS carriage requirement on domestic (non-SOLAS) vessels in 46 U.S.C. 70114, and provided an explicit phase-in schedule for AIS in section 102(e) of the MTSA. Strictly upon consideration of monetized safety benefits, as measured through decreased collisions and the resulting decrease in injuries,

mortalities, and pollution incidents, the cost of AIS installation for the domestic fleet far outweighs the benefit over a 15-year period (0.26 benefit-cost ratio). This ratio results from the high costs of purchasing and installing the unit (an estimated \$9,330 per vessel), and the types of marine casualties that AIS is expected to mitigate, where damage is not usually severe nor is there significant loss of life. In view of the