

**REGULATORY IMPACT REVIEW
FOR THE
INITIAL IMPLEMENTATION
OF THE
CONVENTION ON THE CONSERVATION AND
MANAGEMENT OF HIGHLY MIGRATORY FISH
STOCKS IN THE WESTERN AND CENTRAL
PACIFIC OCEAN**

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1. BACKGROUND

This document is a regulatory impact review (RIR) prepared under Executive Order 12866, “Regulatory Planning and Review.” An initial regulatory flexibility analysis (IRFA) prepared under the Regulatory Flexibility Act is included in the proposed rule published in the Federal Register.

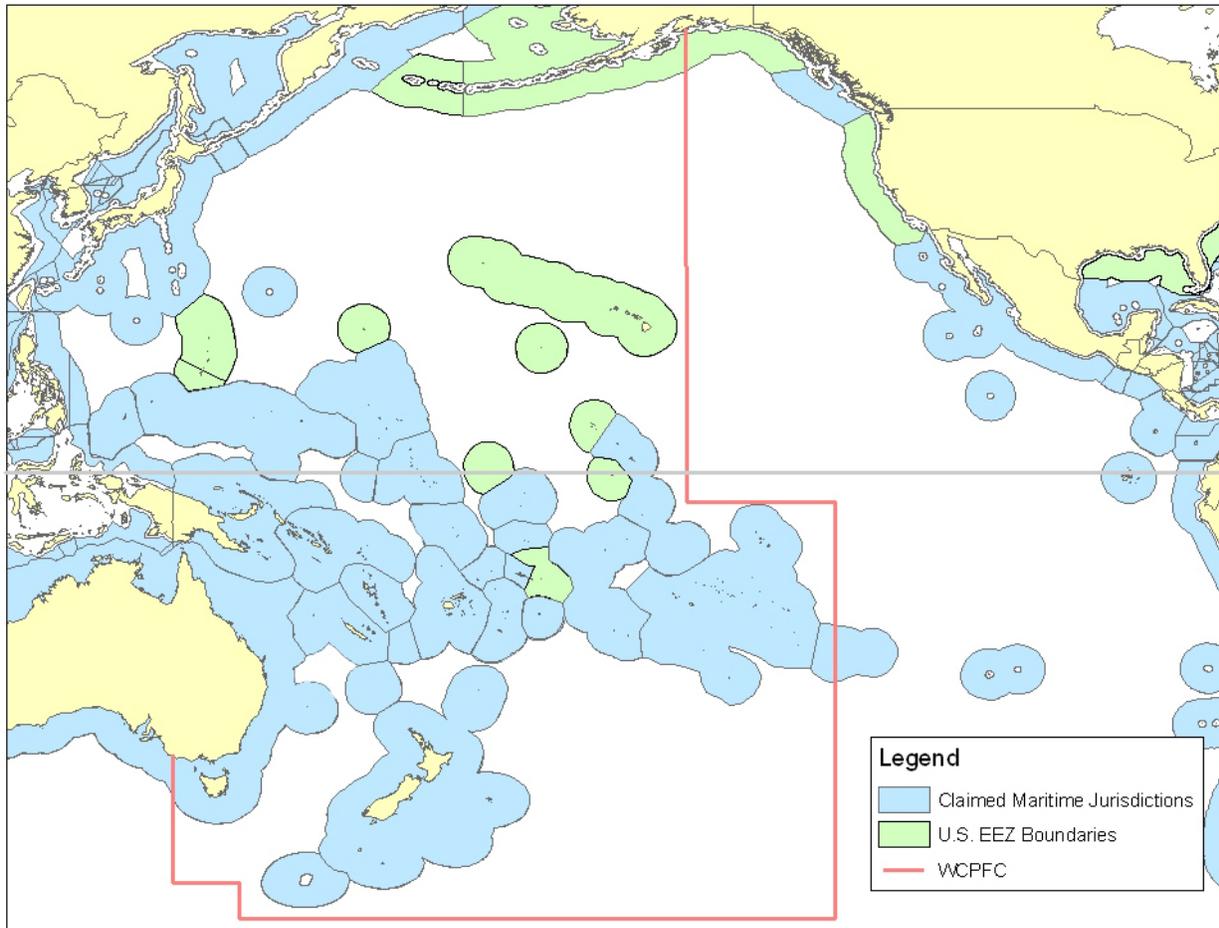
The RIR is for a proposed regulatory action on the part of the National Marine Fisheries Service (NMFS) to provide for the initial implementation of the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (“the Convention”), pursuant to NMFS’ responsibilities under the Western and Central Pacific Fisheries Convention Implementation Act (Public Law 109-479, Sec 501, et seq., codified at 16 U.S.C. § 6901 et seq.; hereafter, “the Act”).

Two main types of economic impacts may occur as a result of this action. The first is changes to the net economic value (or “net benefits”) of the activities and functions affected by the measures. The second is changes to the indirect economic benefits (or “economic impacts”) stemming from an activity, such as those associated with employment in a fishing industry and related sectors, and expenditures from the fishery and their actual or potential multiplier effects as they move through local economies. Net economic value is a measure of the value of a resource, activity, or function, net of all inputs, to the nation as a whole. Indirect benefits describe economic activity generated in particular regions, sectors, and communities. Shifts in these benefits are often referred to as “distributional economic impacts.” Direct economic impacts are addressed in this RIR. Indirect and distributional economic impacts are addressed in the RIR, and they are addressed with particular respect to small entities in the IRFA.

1.1. The Convention and the Act

The Convention was opened for signature in Honolulu on September 5, 2000, and entered into force in June 2004. The full text of the Convention can be obtained from the Commission’s website at: <http://www.wcpfc.int/convention.htm>. The area of application of the Convention (“the Convention Area”) is shown in Figure 1. The Convention is focused on highly migratory species and fish stocks within the Convention Area, except sauries. The Convention also provides for the conservation and management of non-target, associated and dependent species.

Figure 1. The Convention Area (the exclusive economic zone of the United States is depicted in green, and those of foreign jurisdictions are in blue)



The Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPFC), established under the Convention, is comprised of the Contracting Parties to the Convention and fishing entities that have agreed to be bound by the regime established by the Convention. Other entities that participate in the WCPFC include Participating Territories and Cooperating Non-Members. Cooperating Non-Members are admitted on a year-to-year basis. The current Contracting Parties and Participating Territories to the Convention are: Australia, Canada, China, Cook Islands, European Community, Federated States of Micronesia, Fiji, France (extends to French Polynesia, New Caledonia and Wallis and Futuna), Japan, Kiribati, Korea, Marshall Islands, Nauru, New Zealand (extends to Tokelau), Niue, Palau, Papua New Guinea, Philippines, Samoa, Solomon Islands, Tonga, Tuvalu, United States (extends to the Territory of American Samoa, the Commonwealth of the Northern Mariana Islands and the Territory of Guam) and Vanuatu. Chinese Taipei (Taiwan), as a fishing entity, has agreed to be bound by the regime established by the Convention.

The Convention was ratified by, and came into force for, the United States in 2007. The United States thereby became a full Member of the WCPFC (after having been a Cooperating Non-Member since the WCPFC's establishment in 2004).

The United States will, in general and for this rule in particular, implement the provisions of the Convention and the decisions of the WCPFC under authority of the Act, but other authorities could be used in future rulemakings to implement the Convention, such as the High Seas Fishing Compliance Act of 1995 (HSFCA; 16 U.S.C. 5501 *et seq.*), the Magnuson-Stevens Fishery Conservation and Management Act (MSA; 16 U.S.C. 1801 *et seq.*), and the South Pacific Tuna Act of 1988 (SPTA; 16 U.S.C. 973-973r).

Authority to administer and enforce the Act, including the authority to promulgate regulations, is given to the Secretary of Commerce ("the Secretary"). The Secretary is directed to consult with the Secretary of State, the agency in which the Coast Guard is operating, and other appropriate departments and agencies of the United States in promulgating regulations.

1.2. Proposed regulatory action and its objectives and basis

The proposed action would involve the promulgation of new fisheries regulations under the authority of the Act, to be issued in Part 300, International Fisheries Regulations, of Title 50 of the Code of Federal Regulations.

The rule would establish requirements primarily related to the operation of U.S. fishing vessels that are used for commercial fishing (where "fishing" also includes receiving fish from another fishing vessel and bunkering or otherwise supplying another fishing vessel) for highly migratory species (HMS) on the high seas in the Convention Area. The rule would also include requirements applicable to owners and operators of U.S. vessels used to fish for HMS anywhere in the Pacific Ocean and to owners and operators of U.S. vessels used to fish (for any species) on the high seas in the Convention Area. The proposed requirements, described below in more detail, relate to obtaining fishing authorizations, submitting vessel information, carrying and using vessel monitoring system (VMS) units; accepting observers; accepting transshipment inspectors; accepting boarding and inspection; vessel marking; maintaining and submitting information about fishing effort and catch; and at-sea transshipments of HMS from purse seine vessels. The rule would also include procedures intended to preserve the confidentiality of information submitted in compliance with the Act and its implementing regulations.

NMFS has determined that this action is necessary in order for the United States, as a Contracting Party to the Convention, to fulfill its international obligations under the Convention. It would have the effect of requiring that all relevant U.S. fishing vessels are operated in conformance with the provisions of the Convention.

The rule would implement only those provisions of the Convention that are fully specified. For example, the WCPFC has adopted procedures for boarding and inspection of fishing vessels on the high seas in the Convention Area, as called for in Article 26 of the Convention. Consequently, the Convention's provisions on high seas boarding and inspection, including the

procedures adopted by the WCPFC, would be implemented via this rule. Certain Convention provisions will require further elaboration by the WCPFC before they can be implemented. As an example, Article 29 of the Convention calls for the WCPFC to develop procedures to monitor transshipments in the Convention Area. Those procedures have not yet been adopted by the WCPFC; therefore regulations to implement them are not included in this rule.

The proposed rule is described below in terms of its 10 main elements.

1. Authorization to fish

Owners or operators of U.S. vessels used for commercial fishing for HMS on the high seas in the Convention Area would be required to obtain a new NMFS-issued fishing authorization, called a “WCPFC Area Endorsement.” Fishing would be defined to include receiving fish from another fishing vessel and bunkering or otherwise supplying or supporting a vessel that engages in fishing. Thus, carriers that receive HMS from another vessel, vessels that bunker vessels used to fish for HMS, and vessels that engage in operations at sea directly in support of, or in preparation for, fishing or transshipping by other vessels would be subject to this and other requirements of the proposed rule. This new authorization would be issued supplemental to, and as an endorsement on, the permits issued under the authority of the HSFCA (hereafter, “high seas fishing permits”; see 50 CFR 300.13). The prerequisites to obtaining a WCPFC Area Endorsement would be: having a valid high seas fishing permit (or simultaneously applying for one), submitting a complete application (see the next item, “vessel information”), and paying the required fee. The application form would be designed as a supplement to the application for a high seas fishing permit. The WCPFC Area Endorsement would become void upon expiration, suspension, or revocation of the underlying high seas fishing permit. Holding a WCPFC Area Endorsement would trigger a number of other requirements, as described in the elements that follow.

2. Vessel information

Vessel owners and operators that apply for WCPFC Area Endorsements would be required to submit to NMFS specified information about the vessel and its owner and operator (i.e., the master on board and in charge of the vessel) that is not already collected via the high seas permit application. This includes the nationality of the vessel operator; the fishing methods used; the communication types used on the vessel and their identifying numbers; and the vessel’s carrying capacity, including freezer types, capacities and numbers and the fish hold capacity. A photograph of the vessel, in either paper or electronic format, would also have to be submitted to NMFS. This information would be collected via the application for a WCPFC Area Endorsement, and Endorsement holders would have to submit to NMFS any subsequent changes to the submitted information within 15 days of the change.

In addition, owners or operators of any U.S. vessel used for commercial fishing for HMS in the Convention Area in areas under the jurisdiction of other nations (i.e., vessels that do not necessarily have or need a high seas fishing permit) would be required to submit to NMFS information about the vessel, its owners and operators and any fishing authorizations issued by such other nations. Copies of any such fishing authorizations also would have to be submitted to

NMFS. This information would be collected via a new form (hereafter, “Foreign EEZ Form”) designed for this purpose, and vessel owners/operators would have to submit to NMFS any subsequent changes to the submitted information within 15 days of the change.

All of the collected information would be incorporated by NMFS into a record of U.S. fishing vessels authorized to be used for commercial fishing for HMS in the Convention Area beyond areas of U.S. jurisdiction. In accordance with the Convention, NMFS would keep this record updated and share it with the WCPFC, which would combine it with the records of its other Members and Cooperating Non-Members and make it publicly available via its website and other means.

3. Vessel monitoring system

Owners and operators of vessels with WCPFC Area Endorsements would be required to have installed, activate, carry and operate NMFS-approved VMS units, and authorize the WCPFC and NMFS to receive and relay transmissions (also called “position reports”) from the VMS unit to the WCPFC and to NMFS. Activation of a VMS unit would be required any time the unit is installed or reinstalled, any time the mobile communications service provider has changed, and if directed by NMFS. It would involve submitting to NMFS a report via mail, facsimile or email with information about the vessel, its owner or operator, and the VMS unit, as well as receiving confirmation from NMFS that the VMS unit is transmitting position reports properly. The VMS unit would have to be turned on and operating (i.e., transmitting automated position reports) at all times while the vessel is at sea, both inside and outside the Convention Area. The VMS unit may be turned off while the vessel is at port, but only if the vessel operator notifies NMFS via mail, facsimile or email prior to such shut-down. In such cases, NMFS must also be notified when the VMS unit is subsequently turned back on (these two types of notifications are called “on/off reports”), and the vessel operator must receive confirmation from NMFS that the VMS unit is functioning properly prior to leaving port. In the case of failure of the VMS unit while at sea, the vessel operator would have to contact NMFS and follow the instructions provided by NMFS, which might include submitting position reports at specified intervals by other means, ceasing fishing, stowing fishing gear, and/or returning to port; and repairing or replacing the VMS unit and ensuring it is operable before starting the next trip.

To facilitate communication with management and enforcement authorities about the functioning of the VMS unit and other purposes, operators of vessels with WCPFC Area Endorsements would be required to carry on board and continuously monitor while at sea a two-way communication device capable of real-time communication with NMFS in Honolulu. For the purpose of submitting position reports that might be required in the case of VMS unit failure, vessel operators must also carry on board a communication device capable of transmitting, while the vessel is on the high seas in the Convention Area, communications by telephone, facsimile, email, or radio to the WCPFC in Pohnpei, Micronesia.

The vessel owner and operator would be responsible for all costs associated with the purchase, installation and maintenance of the VMS unit, and for all charges levied by the mobile communications service provider as necessary to ensure the transmission of automatic position reports to NMFS. The vessel owner and operator would not be responsible for the costs of

transmitting the automatic position reports to the WCPFC. If the VMS unit is being carried and operated in compliance with the requirements in 50 CFR Part 300, 50 CFR Part 660, or 50 CFR Part 665 relating to the installation, carrying, and operation of VMS units, the vessel owner and operator would not be responsible for costs that are the responsibility of NMFS under those regulations.

The regulations would be worded so as to avoid duplication with other VMS requirements, such as those established under the MSA and the SPTA. Compliance with the existing VMS requirements at 50 CFR Part 300, 50 CFR Part 660, and 50 CFR Part 665 would satisfy this new requirement, provided that the VMS unit is type-approved by NMFS specifically for fisheries governed under the Act, the VMS unit is operated continuously and at all times while the vessel is at sea, the vessel owner and operator have authorized the WCPFC and NMFS to receive and relay transmissions from the VMS unit, and the proposed requirements in case of VMS unit failure are followed.

In accordance with the Convention, the vessel position information transmitted from the VMS unit would be sent directly to the WCPFC as well as to NMFS, but in accordance with the requirements of the Convention, it would be sent to, or be accessible by, the WCPFC only when the vessel is on the high seas in the Convention Area.

4. Vessel observer program

When in the Convention Area, the operator of a vessel with a WCPFC Area Endorsement or a vessel used in areas under the jurisdiction of another Member of the WCPFC would be required to accept on board and accommodate observers deployed as part of the WCPFC Regional Observer Programme (ROP). Such observers could include persons designated by the WCPFC Secretariat, by other Members of the WCPFC, or by the United States. Persons would be designated as WCPFC ROP observers by the United States or other WCPFC Members only if the national or sub-regional observer program that deploys such observers has been authorized by the WCPFC to be a part of the WCPFC ROP. Once an observer program of NMFS is determined by the WCPFC to meet specified minimum standards and incorporated into the WCPFC ROP, relevant data collected in the NMFS program would be submitted to the WCPFC and maintained and used by the WCPFC as data in its larger WCPFC ROP.

It is anticipated that the NMFS Pacific Islands Region Observer Program, operating out of Honolulu, Hawaii, and Pago Pago, American Samoa, will be among the first national observer programs to be authorized to be part of the WCPFC ROP (it has already received interim authorization until July 1, 2012; full authorization would be granted subsequent to a successful audit of the program). Consequently, there would be little, if any, change in the placement of observers on vessels in the longline fleets based in Hawaii and American Samoa. The WCPFC Secretariat may place an occasional observer as part of an auditing process to ensure that national and sub-regional observer programs are operating up to WCPFC standards. It is also anticipated that U.S. purse seine vessels operating under the SPTA would continue to carry observers from the Pacific Islands Forum Fisheries Agency (FFA) observer program (a sub-regional observer program). If the FFA is unable to provide observers to meet increased coverage levels mandated by the WCPFC, those vessels may make other arrangements to obtain

WCPFC-approved observers.

The responsibilities of vessel operators and crew members with respect to observers would include to allow and assist observers to: embark and disembark at agreed times and places; have access to and use of all facilities and equipment on board that are necessary to conduct observer duties; remove samples; and carry out all duties safely. The vessel operator would also be responsible for providing observers, while on board the vessel, with food, accommodation and medical facilities of a reasonable standard equivalent to those normally available to an officer on board the vessel. In the case of longline vessels in the Hawaii and American Samoa fleets, however, costs incurred for providing subsistence for NMFS observers would be eligible for reimbursement, as currently provided at 50 CFR 665.28.

5. Vessel identification

Vessels with WCPFC Area Endorsements would be required to be marked in accordance with the Convention's requirements, which are based on the FAO Standard Specifications for the Marking and Identification of Fishing Vessels. Specifically, if assigned an international radio call sign (IRCS), the port and starboard sides of a vessel's hull or superstructure, as well as a deck, would have to be marked with the IRCS; if not assigned an IRCS, it would have to be marked with its official number (i.e., Coast Guard documentation number or state or tribal registration number), preceded by the characters "USA" and a hyphen. In both cases, the specified marking would be the only allowable marking on the hull or superstructure apart from the vessel's name and hailing port. The markings would have to be placed so that they are clear, distinct, uncovered, and unobstructed. Any boats, skiffs, or other watercraft that are carried on board the vessel would also have to be marked with the same identifier as the fishing vessel. For some affected vessels, this marking requirement would conflict with other existing vessel marking requirements, such as those at 50 CFR 300.14 (under the HSFCA; applicable to vessels used for fishing on the high seas), 50 CFR 300.173 (under the legislation implementing the U.S.-Canada Albacore Treaty; applicable to vessels used for fishing under that treaty), 50 CFR 660.704 (under the MSA; applicable to vessels in West Coast HMS fisheries), and 50 CFR 665.16 (under the MSA; applicable to vessels in western Pacific fisheries). The requirement at 50 CFR 300.14 would be slightly modified in this proposed rule to make it consistent with this new requirement. The Pacific Regional Fishery Management Council and the Western Pacific Fishery Management Council are considering the need to change the other three sets of regulations in order to remove what would be conflicts with this proposed rule, if implemented. If the Councils recommend such changes, their recommendations would be subject to the approval of NMFS and would be implemented by NMFS through the rulemaking process. It is not known when such changes would be recommended, approved, or implemented, but the new vessel marking requirement in this proposed rule would be made effective only if and when the conflicting regulations are modified so as not to be in conflict with the new requirement.

6. Transshipment restrictions

Offloading fish from or receiving fish from a purse seine vessel at sea in the Convention Area would be prohibited. Transshipping at sea is already severely restricted for U.S. purse seine vessels licensed under the SPTA.

7. Reporting and recordkeeping

The owner or operator of any U.S. vessel used for commercial fishing for HMS anywhere in the Pacific Ocean would be required to maintain and submit to NMFS information on fishing effort and catch. The proposed rule would be worded so as to avoid duplication with other effort and catch reporting requirements, particularly those established under the MSA, the HSFCA, the TCA, the SPTA, and the implementing legislation for the U.S.-Canada Albacore Treaty, as well as relevant State reporting requirements. Specifically, compliance with other existing reporting requirements would satisfy this new Act-mandated reporting requirement.

8. Compliance with the laws of other nations

A vessel with a WCPFC Area Endorsement would, when in the Convention Area in areas under the jurisdiction of another nation, have to be operated in compliance with the laws of that nation and could be used for fishing only if specifically authorized by that nation.

Additionally, the owner and operator of any U.S. fishing vessel in an area under the jurisdiction of another Member of the WCPFC would, if used for commercial fishing for HMS or for transshipping HMS, have to comply with the relevant laws of that Member.

9. Facilitation of enforcement and inspection

The operator and crew of a vessel with a WCPFC Area Endorsement, when in the Convention Area, would be subject to the following requirements:

- carry on board any fishing authorizations issued by another nation, and make them available to specified authorities, depending on the area of jurisdiction the vessel is in;
- continuously monitor the international safety and calling radio frequency (156.8 MHz; Channel 16, VHF-FM) and, if equipped to do so, the international distress and calling radio frequency (2.182 MHz);
- carry on board a copy of the International Code of Signals; and
- when engaged in transshipment, allow and assist transshipment monitors authorized by the WCPFC (if on the high seas) or other Members of the WCPFC (if in their areas of jurisdiction) to inspect the vessel and gather information and samples.

In addition, the operator of any U.S. fishing vessel that is used for commercial fishing for HMS would, when in the Convention Area in an area in which it is not authorized to fish, specifically, either on the high seas without a valid WCPFC Area Endorsement or in an area under the jurisdiction of another nation without an authorization from that nation to fish in the area, be required to stow all fishing gear and equipment so such materials are not readily available for fishing.

Further, the operator of any U.S. fishing vessel (regardless of the species for which it is used to fish), when on the high seas in the Convention Area, would be required to accept and assist boarding and inspection by authorized inspectors of other Contracting Parties to the Convention

and, if agreed by the United States, authorized inspectors of fishing entities that have agreed to be bound by the regime established by the Convention, such as Chinese Taipei, or Taiwan, provided that such boarding and inspection is undertaken in conformance with the WCPFC's adopted procedures.

10. Confidentiality of information

As mandated by the Act, the proposed rule would include procedures designed to preserve the confidentiality of information submitted in compliance with the Act and its implementing regulations. In accordance with the Convention, the proposed procedures would allow for the disclosure of confidential data to the WCPFC.

1.3. Alternative actions considered

Many of the elements of the proposed rule are non-discretionary; that is, in order to fulfill the obligations of the United States under the Convention, there no alternative ways to implement them other than as being proposed. NMFS has some discretion, however, regarding the implementation of several components of the proposed rule: obtaining fishing authorizations (element 1, above); providing vessel information (element 2, above); carrying and using VMS units (element 3, above); and accepting boarding and inspection on the high seas in the Convention Area (one component of element 9, above). A number of options for each of these components were identified, and four reasonable combinations of those options, as well as a no-action alternative, were considered as alternatives to the proposed rule (see the Draft EA, NMFS 2009, for further details on the development of the alternatives). The non-discretionary components of the action, as described in the previous section, would be identical for all four of the action alternatives. The four discretionary components of the action are described below for each of the alternatives. Alternative D is NMFS' preferred alternative and the proposed action.

1.3.1. Alternative A (no action)

Under the no-action alternative, NMFS would not propose any new regulations or take any other action to implement the Convention.

1.3.2. Alternative B

- **Authorization-to-fish:** The existing HSFCA permit requirement (see 50 CFR 300.13 and 300.15) would continue to serve as the only authorization. That requirement states that any U.S. vessel used for commercial fishing on the high seas must have a permit issued under 50 CFR 300.13), so it would not be specific to HMS fishing or to the Convention Area.
- **Vessel information:** There would be a stand-alone information collection requirement (rather than one tied to an application for a fishing authorization) applied to vessels used to commercially fish for HMS on the high seas or in areas of foreign jurisdiction within the Convention Area.

- VMS: A vessel used to commercially fish for HMS would be required to carry and operate a VMS unit if, and only when, it is on the high seas in the Convention Area.
- Boarding and inspection: A vessel used for fishing for HMS would, while on the high seas in the Convention Area, be required to accept and facilitate boarding and inspection by duly authorized inspectors of other Contracting Parties to the Convention.

1.3.3. Alternative C

- Authorization-to-fish: As in alternatives A and B, the existing HSFCA permit requirement would continue to serve as the only authorization, so it would not be specific to HMS fishing or to the Convention Area.
- Vessel information: As in alternative B, there would be a stand-alone information collection requirement that applies to vessels used to commercially fish for HMS on the high seas or in areas of foreign jurisdiction within the Convention Area.
- VMS: A vessel used to commercially fish for HMS would be required to carry and operate a VMS unit during the entirety of any trip that includes the high seas in the Convention Area.
- Boarding and inspection: As in alternative B, a vessel used for fishing for HMS would, while on the high seas in the Convention Area, be required to accept and facilitate boarding and inspection by duly authorized inspectors of other Contracting Parties to the Convention.

1.3.4. Alternative D (preferred alternative; proposed action)

- Authorization-to-fish: Vessels used for commercial fishing for HMS on the high seas in the Convention Area would be required to obtain an endorsement on their HSFCA permit, a “WCPFC Area Endorsement”.
- Vessel information: The supplementary information needed for HSFCA-permitted vessels would be collected via the application for the WCPFC Area Endorsement and the information needed for vessels fishing in areas of foreign jurisdiction in the Convention Area would be collected via a stand-alone information collection requirement.
- VMS: Any vessel with a WCPFC Area Endorsement would be required to carry and operate a VMS unit while at sea, and NMFS would have to be notified each time the unit is turned off (at port) and each time it is turned back on (before leaving port).
- Boarding and inspection: A vessel used for fishing (for any species, not just HMS) would, while on the high seas in the Convention Area, be required to accept and facilitate boarding and inspection by duly authorized inspectors of other Contracting Parties to the Convention.

1.3.5. Alternative E

- Authorization-to-fish: Vessels used for commercial fishing for HMS anywhere in the Convention Area (not just on the high seas) would be required to obtain a new authorization, a “WCPFC Area Permit”.
- Vessel information: All the needed vessel information would be collected via the WCPFC Area Permit application.
- VMS: Any vessel with a WCPFC Area Permit would be required to carry and operate a VMS unit at all times, except for certain circumstances while not at sea and only if NMFS is notified each time the VMS unit is turned on or off.
- Boarding and inspection: As in alternative D, a vessel used for fishing (for any species, not just HMS) would, while on the high seas in the Convention Area, be required to accept and facilitate boarding and inspection by duly authorized inspectors of other Contracting Parties to the Convention.

2. REGULATORY IMPACT REVIEW

Executive Order 12866 requires that the impacts of proposed government regulations on the government, on businesses, and on others be assessed before implementation. The intent is to see that the best available alternative – whether it be regulatory or non-regulatory – is chosen to address a given problem. “In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory measures, including the alternative of not regulating” (EO 12866, Section 1). Further, “agencies should select those approaches that maximize net benefits....” The emphasis of the analysis is therefore on expected changes in net benefits that occur as a result of each of the alternative management measures. NMFS requires that this analysis be done through a regulatory impact review (RIR) for all regulatory actions that are of public interest. The RIR also includes analysis of distributive impacts and the costs of government administration and private compliance with the proposed measures. See the IRFA for further analysis of the expected economic effects on businesses, particularly small business entities.

2.1. Management objectives

See Sections 1.1 and 1.2.

2.2. Description of the fisheries

Section 3 of the Draft Environmental Assessment (EA) prepared for this action (NMFS 2009) is incorporated here by reference to serve as a description of the fisheries that would be affected by the action.

2.3. Problem statement

See Sections 1.1 and 1.2.

2.4. Description of alternatives

See Sections 1.1 and 1.3.

2.5. Economic effects of the proposed action and alternatives

Four types of economic effects are analyzed: changes in net benefits, distributional changes in net benefits, changes in income and employment, and cumulative effects.

2.5.1. Changes in net benefits

Analytical approach:

The emphasis of the RIR is on identifying changes in net benefits within a benefit-cost framework – that is, describing the expected difference in the present value of the discounted stream of net benefits under the action (and alternative actions) as compared to that under the

status quo, or the no-action alternative. For the purpose of estimating future benefits and costs, an annual discount rate of seven percent is used for a base-case analysis, following U.S. government guidance for benefit-cost analysis (OMB 1992). To illustrate the sensitivity of the discounted net present value to the discount rate, a lower discount rate, 3 percent, is also applied. A time horizon of 25 years is used (the selection of a 25-year time horizon indicates a far-sighted analysis: at a 7% discount rate, for example, a 25-year time horizon is similar to much longer time horizons, since by year 25 a given benefit or cost has been discounted to a near-zero value).

The analysis is limited to examining changes in net benefits to the national account; changes in net benefits that occur to foreign interests are not relevant in the context of this RIR. Changes in benefits and costs in both the private and public sectors are important with respect to net benefits to the national account; effects in both sectors are accounted for in this analysis to the extent possible. In the private sector, benefits may accrue as surpluses to consumers and producers (e.g., fishermen and processors). In the case of fish harvesting operations, producer surplus is reflected in the difference between gross revenues and operating costs. Expected changes in benefits and costs are quantified where possible, but in some instances only qualitative projections can be made.

Overall benefit of the proposed action:

The proposed action consists for the most part of implementing a number of monitoring, control and surveillance (MCS) tools. It would not directly control or affect how many vessels can be used to fish, who can fish, how much, when or where fishing effort can be exerted, how much, which, when or where fish can be caught, or what methods can be used to catch fish. In other words, it is not a conservation or management measure, per se, and it is not expected to alter fishing patterns or practices or affect the productivity of HMS stocks or other resources in the Pacific Ocean in any appreciable way.

The intended effect of the proposed action is that it will, in concert with similar domestic actions by the other members of the WCPFC, strengthen the degree of control by flag States such as the United States over their fishing vessels, particularly on the high seas in the Convention Area. It is likely to curtail illegal, unregulated and unreported fishing. Most importantly, it would establish an MCS framework that would allow the effective implementation – in the future – of conservation and management measures for particular fish stocks. Those measures, in turn, would be expected to safeguard or improve the productivity of HMS and other resources and thereby offer the potential for enhanced benefits to the United States and other WCPFC members. The four action alternatives vary somewhat in the rigorousness of the MCS tools that would be established. The degree of rigor increases from alternative B to alternative E (and the compliance costs to affected fishing businesses correspondingly increase from alternative B to alternative E). Accordingly, the benefit – or potential benefit – of the alternatives likely increases from alternative B to alternative E. The comparative benefits of the alternatives are discussed further in section 2.6.

In short, it is not possible to enumerate the proposed action's benefits, other than to conclude that it is a prerequisite to implementing more concrete conservation and management measures that have the potential to bring substantial benefits to the nation through the maintenance or

enhancement of benefits derived from HMS fisheries and associated resources in the Pacific Ocean.

Effects on fishery revenues:

As discussed in the Draft EA, all the action alternatives would bring compliance costs to affected fishermen that are great enough (i.e., relative to profits – information on profits and total fishing costs are generally lacking but see Chapter 3 of the Draft EA for indicative estimates of gross revenues, which can serve as a rough proxy for profits) to possibly change the behavior of some. Specifically, it is possible that some owners/operators of vessels in the longline and albacore troll fleets that would otherwise fish on the high seas in the Convention Area would choose not to do so under the action alternatives in order to avoid the compliance costs that would come with those alternatives. However, as concluded in the Draft EA, the number of such vessels is likely to be small, if there are any at all. Furthermore, any fishing operation that shifts out of the high seas in the Convention Area as a result of the action would likely shift to other fishing grounds (or other fisheries) and make up for lost revenues in the new fishing grounds or fisheries. Finally, even if these types of effects occur and result in changes in fishery revenues, it would be too speculative to predict the magnitude of those effects to provide a meaningful analysis for this RIR. In short, it is concluded that none of the action alternatives would affect revenues to individual fishing businesses or affect revenues to the affected industries as a whole.

Effects on prices and consumer surplus:

None of the action alternatives is expected to affect prices of fishery products consumed by U.S. consumers, and no effects on consumer surplus are expected. This is primarily because the producers in the fisheries affected by this action are price-takers (they participate in a global market for tuna products in which they and other U.S. producers play relatively small parts), and secondarily because the action is expected to have no effect on the productivity of tuna resources (and thus it would not affect the supply or prices of tuna products in the global market).

Effects on fishing costs:

Because no changes in the productivity of HMS resources or in consumer surplus are expected as a result of the proposed action, changes in net benefits to the nation are wholly captured by changes in producer surplus and in public sector costs. Because no changes in producer revenues are expected, changes to producer surplus are captured by changes in the operating costs of fishing businesses, which in this case are comprised wholly of the costs of complying with the proposed requirements. The cost-benefit analysis therefore comes down to examining changes in fishery operating costs and in public sector costs.

With respect to fishery operating costs, some of the 10 elements of the proposed action would bring compliance costs to affected fishing businesses. The expected costs are described below for each element and summarized in Table 2.

1. Authorization to fish

In order to obtain the “WCPFC Area Endorsement” under the proposed action (alternative D), vessel owners/operators would have to pay a fee calculated to cover NMFS’ administrative costs incurred in issuing the authorization, tentatively projected to be about \$25 per five-year period, or \$5 per vessel per year. Obtaining the authorization would be accomplished through completion and submission of an application form, as described in the following element regarding vessel information.

Under alternatives A and B, there would be no new requirements regarding fishing authorizations, and thus no compliance costs.

Under alternative E, the fee associated with the “WCPFC Area Permit” (an authorization not associated with high seas fishing permits and having a renewal period of one year) would be about \$75 per vessel per year.

2. Vessel information

Under the proposed action (alternative D), vessel owners/operators would be required to complete one or both of two forms (one for vessels used on the high seas in the Convention Area and the other for vessels used in areas of foreign jurisdiction in the Convention Area) designed to collect information about the subject vessel and its owner and operator. The forms would need to be submitted once every five years, as well as at any time that any of the submitted information changes. It is estimated that 90 minutes of labor and \$1 for mailing costs would be needed per form or update. Under the assumptions that: (1) owners/operators are required to complete both forms; (2) changes to submitted information occur once per five-year period, on average, for a total of two submissions every five years; and (3) the value of labor is \$50 per hour, the total expected annual cost per vessel would be \$30.

Under alternatives B and C the labor and associated costs would be about the same as under alternative D (\$30 per vessel per year).

Under alternative E, the information requirements would be the same as under the other alternatives, but the frequency of submission would be once per year. The annual cost would therefore be about \$76 per vessel per year (90 minutes per year at \$50 per hour, plus \$1 in mailing costs).

3. VMS

The costs of complying with the proposed VMS requirements would vary by fleet. Fishing businesses with vessels that are already subject to VMS requirements under existing fishing regulations would bear no new compliance costs, except in the case of alternative E, under which automatic position reports would have to be transmitted every day of the year, regardless of whether a vessel is at sea. Businesses that would bear new compliance costs under every action alternative (called “new” businesses or vessels) include those operating albacore troll vessels, longline vessels not based in Hawaii or American Samoa, and support vessels (e.g., carriers and

bunkers).

Under each of the action alternatives, these new businesses would bear the following approximate annualized costs: \$1,000 for the purchase and installation of VMS units (based on \$4,000 per unit and a lifespan of 4 years per unit); \$250 for VMS unit maintenance; and \$375-525 for VMS unit operation, depending on vessel type (i.e., the communication costs of transmitting the automatic vessel position reports to NMFS). These communication costs would be a function of the charges imposed by the communication service provider (e.g., per day when automatic reports are being transmitted) and the number of days per year that a given VMS unit is transmitting position reports. Based on NMFS' experience with its various VMS, it is estimated that the communication costs would be about \$1.50 per day.

The only relevant factor that would vary among the four action alternatives is the number of days per year that position reports would have to be transmitted from a given vessel. Based on historical fishing patterns of the affected fleets (see the Draft EA for details), the expected number of days per year that affected vessels would transmit position reports are given in Table 1. The expected annual communication costs for each vessel type are the product of the indicated number of days-per-year and the estimated communication charges of \$1.50 per day.

Table 1. Estimated number of days per year, on average, that automatic position reports would be transmitted from VMS units, by vessel type

Vessel Type ^a	Action Alternatives			
	B (days spent on high seas in Convention Area)	C (days at sea during trips that go into Convention Area)	D (days spent at sea)	E (365 days per year)
Longline – Hawaii and Am. Samoa	150	250	250	365
Longline – other	150	250	250	365
Purse seine	100	330	330	365
Albacore troll – North only	120	180	310	365
Albacore troll – South only	160	170	330	365
Albacore troll – North and South	280	350	350	365
Support vessels	100	300	330	365

^a See Chapter 3 of the Draft EA (NMFS 2009) for descriptions of the various vessel types and their fishing patterns.

Under all the action alternatives, vessel position information would be transmitted to NMFS and to the WCPFC. Both these organizations have policies and procedures in place to protect those data and prevent their dissemination to unauthorized users, in part to ensure that the information is not taken advantage of by fishing competitors. Nonetheless, fishing businesses may perceive risks associated with the inappropriate dissemination from their VMS units, and bear costs associated with those risks. Those costs cannot be quantified here.

Under all the action alternatives, fishing businesses could bear costs in the event of failure of the VMS unit, including the costs associated with the possibilities of having to cease fishing, submit position reports by other means, and return to port. These costs cannot be projected with any

certainty.

The compliance cost of obtaining, carrying on board, and monitoring the required communication devices is expected to be zero, as it is believed that all affected businesses already carry and monitor such devices on their vessels.

4. Vessel observer program

Under all the action alternatives, affected fishing businesses would bear costs associated with providing observers with food, accommodations, and medical facilities (termed here “observer accommodation costs”). Businesses that operate purse seine vessels would also be responsible for certain costs imposed by the FFA for the operation of its observer program as it is applied to the U.S. purse seine fleet (termed here “observer deployment costs”). For vessels other than purse seine vessels, observer deployment costs would be borne by the federal government – see “effects on public sector costs” below. These direct compliance costs are estimated below for each affected fleet. In addition to these direct costs, it is possible that accommodation of an observer could hinder the productivity of a vessel, such as by having to facilitate the boarding or disembarking of the observer at sub-optimal times or locations, or requiring that the trip be conducted with one fewer crew member than it otherwise would be conducted. The costs associated with these effects cannot be quantified.

Assuming that the observer programs administered by NMFS are authorized by the WCPFC to be part of the WCPFC ROP (again, the NMFS Pacific Islands Region Observer Program has already received interim authorization valid until July 1, 2012), NMFS would consider that observers deployed pursuant to regulations issued under other statutory authorities are WCPFC ROP observers deployed in accordance with this new requirement. As such, vessel owners and operators would be subject to the costs and burdens associated with those other regulatory requirements. For example, in the case of longline vessels in the Hawaii and American Samoa fleets, costs incurred for providing subsistence for NMFS observers would be eligible for reimbursement, as currently provided at 50 CFR 665.28.

The frequency of deployment of WCPFC ROP observers would be determined by the WCPFC, so it is not possible to accurately predict how often a given vessel would be required to accommodate a WCPFC ROP observer. For the purpose of this analysis, it is assumed that observer coverage rates would be equal to the current target observer coverage levels established by the WCPFC for its ROP, which is 5 percent for all fleets except purse seine fleets.

The recent coverage rates in the Hawaii and American Samoa fleets (at least 20 percent and about 10 percent, respectively) are in excess of the WCPFC target coverage rate of 5 percent, so NMFS does not anticipate any appreciable changes in the deployment rates in those fisheries, or any associated costs to businesses in those fisheries. Longline vessels not operating under Hawaii or American Samoa longline permits (e.g., vessels based in the Mariana Islands or on the U.S. west coast) are not currently subject to observer requirements, so businesses that operate such vessels would bear new observer accommodation costs. Based on reimbursements provided by NMFS to owners of longline vessels for observer subsistence costs pursuant to 50 CFR 665.28(i)(1), observer accommodation costs are expected to be about \$20 per observer-sea-day.

Assuming that an affected longline vessel spends 250 days at sea each year on the high seas or in foreign EEZs in the Convention Area (Table 1), its annual observer accommodation costs, at a 5-percent coverage rate, would be about \$250.

Recent observer coverage rates in the purse seine fishery are about 20 percent, but a recent WCPFC decision (in Conservation and Management Measure 2008-01) requires 100 percent coverage in 2010 and 2011. Businesses that operate purse seine vessels in the Convention Area would therefore be subject to an increase in deployment rates from 20 to 100 percent. Assuming for the purpose of this analysis that the 100-percent coverage rate continues indefinitely, and based on logbook data, 330 days at sea per vessel per year (Table 1), and, as for longline vessels, \$20 per observed sea-day in observer accommodation costs, annual observer accommodation costs would be about \$6,600 per vessel. Of these estimated costs, 80 percent, or \$5,280 per vessel, would be “new” annual costs associated with this proposed requirement. Pursuant to the terms of the South Pacific Tuna Treaty (SPTT), businesses in the purse seine fleet bear not only observer accommodations costs, but also certain costs imposed by the FFA for the operation of its observer program as it is applied to the U.S. purse seine fleet. Based on the budget for the FFA observer program for the 2008-2009 SPTT licensing period (PIP 2008), which is based on a 20-percent coverage rate, these “observer deployment costs” are about \$8,630 per vessel per year. According to the budget, about 28 percent of those costs are fixed costs (as opposed to per-trip costs). It is not known how the fixed component of costs would change with an increase in coverage to 100 percent. Assuming that fixed costs do not change at all, the annual cost per vessel at 100 percent coverage would be about \$33,440. If, at the other extreme, fixed costs increase in proportion to the level of observer coverage, the annual cost per vessel at 100 percent coverage would be about \$43,150. Of these estimated per-vessel costs, 80 percent, or \$26,750 to \$34,520, would be new annual costs associated with this proposed requirement. Together with observer accommodation costs (\$5,280), the total per-vessel compliance costs would be \$32,000 to \$39,800 per purse seine vessel. For the purpose of tallying the overall costs of the proposed requirements (Table 2), the mean of this range is used (\$35,900).

The WCPFC target coverage rate for troll vessels is 5 percent, but the WCPFC has not established a firm implementation schedule for troll vessels, so 5 percent coverage is not expected to be sought or attained for at least a few years. Nevertheless, for the purpose of this analysis, estimated compliance costs are based on a 5-percent coverage rate. There are currently no observer requirements for the U.S. albacore troll fleet (but observers are occasionally taken on a voluntary basis), so businesses that operate albacore troll vessels in the Convention Area could be subject to an increase in deployment rates from zero to approximately one per 20 trips that include the high seas or foreign EEZs in the Convention Area. Affected businesses would be responsible for observer accommodation costs, which, as for longline and purse seine vessels, are expected to be about \$20 per day. Assuming, based on logbook information, that an albacore troll vessel used in the Convention Area only in the North Pacific spends 180 days at sea each year on trips that include the high seas or foreign EEZs in the Convention Area (Table 1), its annual observer accommodation costs would be about \$180. A typical albacore troll vessel used only in the South Pacific is expected to spend slightly fewer days each year in the Convention Area (170; Table 1), which would bring about \$170 in annual observer accommodation costs. An albacore troll vessel used in both the North Pacific and South Pacific would bear about \$350 in annual observer accommodation costs.

The WCPFC target coverage rate for support vessels is 5 percent. Assuming 300 sea-days per year on trips that include the high seas or foreign EEZs in the Convention Area (see Table 1) and \$20 per observed-sea-day in observer accommodation costs, total annual observer accommodation costs per support vessel would be \$300.

For the purpose of this analysis, it is assumed that fishing vessels of unknown type that are expected to be used for HMS in the Convention Area exclusively in areas under foreign jurisdiction (of which there are approximately 20 – see Table 2) would be subject to a 5-percent coverage rate and spend 300 sea-days per year in the Convention Area, on average. Annual observer accommodation costs for these vessels would therefore be about \$300.

5. Vessel identification

All the affected fishing businesses are already subject to vessel marking requirements that are similar to the proposed requirements; it would be mainly a matter of changing what, exactly, the markings would consist of (e.g., international radio call sign rather than the Coast Guard documentation number). Because vessels and their markings are periodically repainted, the proposed action would not impose any new continuing cost burden on any businesses; it would only change the specifications of the markings that are required. However, all the affected businesses, with the exception of those that operate purse seine vessels (which, under SPTA regulations, are already in compliance with the proposed requirements), would have to immediately change their vessel markings. The (one-time) cost of doing so is estimated to be about \$250 per vessel, including labor and materials.

6. Transshipment restrictions

Complying with this element would require that owners and operators of purse seine vessels refrain from engaging in transshipment from purse seine vessels at sea in the Convention Area. Purse seine vessels are already subject to severe restrictions on at-sea transshipments under the SPTA, and purse seine vessels consequently do not, in practice, transship at sea. Accordingly, this requirement would impose essentially no compliance burden on affected businesses.

7. Reporting and recordkeeping

This element would apply to any vessel used to commercially fish for HMS anywhere in the Pacific Ocean. Consequently, the number of affected businesses is very large – approximately 5,000. However, all of the affected businesses are believed to already be in compliance by virtue of their being subject to existing similar Federal and/or State requirements. Thus, no new reporting or recordkeeping burden or associated costs are expected for any fishing businesses.

8. Compliance with the laws of other nations

It is assumed that all the affected businesses already operate in compliance with the laws of other nations when under their jurisdiction and would continue to do so under this proposed action, so no compliance costs are expected.

9. Facilitation of enforcement and inspection

The proposed requirements to carry and make available fishing authorizations, monitor the specified radio frequencies, carry the International Code of Signals, and stow fishing gear when in areas in which the vessel is not authorized to fish would bring very minor compliance burdens, and no quantifiable costs.

The compliance costs of the proposed requirement to accept and accommodate transshipment inspectors are difficult to quantify but they are expected to be minor: The frequency of such inspections is not possible to predict, but they are expected to be rare, and they are not expected to unduly divert vessel operators or crew members from their normal activities.

Under alternatives B and C, vessels used to commercially for HMS on the high seas in the Convention Area would be required to accept and assist boarding and inspection by authorized inspectors of other Contracting Parties to the Convention. In order to comply, fishing operations could lose what would otherwise be productive fishing time. However, given the relatively small number of inspection vessels available to other members of the WCPFC, and the large number of fishing vessels (of all WCPFC members combined) subject to boarding and inspection, boarding of any given vessel are expected to occur only rarely. The costs of compliance cannot be quantified, but they are expected to be minor.

Under alternatives D (the proposed action) and E, the costs from the perspective of a given fishing business would be the same as under alternatives B and C (i.e., minor), but the number of affected businesses would be somewhat greater, as they would include any business that operates a fishing vessel used for fishing for any species (not just HMS) on the high seas in the Convention Area.

10. Confidentiality of information

This element would not impose any requirements on fishing businesses or persons. It would only establish procedures for NOAA to follow in protecting and disseminating confidential data provided by owners and operators of fishing vessels.

Table 2 summarizes the expected per-vessel compliance costs for each of the 10 elements of the proposed action and, for the discretionary elements, each alternative. The costs are also broken down by vessel type, and the expected number of vessels of each type that would be subject to a given element is indicated in parentheses in the left-most column.

Table 2. Estimated average compliance costs per vessel, by vessel type, in dollars (all figures are continuing annual costs except where indicated as “one-time” costs; “NQ” means not quantifiable)

Element of Proposed Action and Vessel Type (and estimated number of affected vessels) ^a	Action Alternatives			
	B	C	D	E
1. Authorization to fish				
Longline (139)	0	0	5	75
Purse seine (40)	0	0	5	75
Albacore troll (69)	0	0	5	75
Support ^b (5)	0	0	5	75
2. Vessel information				
Longline (139)	30	30	30	76
Purse seine (40)	30	30	30	76
Albacore troll (69)	30	30	30	76
Support ^b (5)	30	30	30	76
Unknown – in foreign EEZs only (20)	30	30	30	76
3. VMS^c				
Longline – Hawaii, Am. Samoa (135)	0	0	0	173
Longline – other (4)	1,475	1,625	1,625	1,798
Purse seine (40)	0	0	0	0
Albacore troll – North only (55)	1,430	1,520	1,715	1,798
Albacore troll – South only (0)	1,490	1,505	1,745	1,798
Albacore troll – North and South (14)	1,670	1,775	1,775	1,798
Support ^b (5)	1,400	1,700	1,745	1,798
4. Vessel observer program				
Longline – Hawaii, Am. Samoa (135)	0	0	0	0
Longline – other (4)	250	250	250	250
Purse seine (40)	35,900	35,900	35,900	35,900
Albacore troll – North only (55)	180	180	180	180
Albacore troll – South only (0)	170	170	170	170
Albacore troll – North and South (14)	350	350	350	350
Support ^b (5)	300	300	300	300
Unknown – in foreign EEZs only (20)	300	300	300	300
5. Vessel identification				
Longline (139)	250 (one-time)	250 (one-time)	250 (one-time)	250 (one-time)
Purse seine (40)	0	0	0	0
Troll (69)	250 (one-time)	250 (one-time)	250 (one-time)	250 (one-time)
Support ^b (5)	250 (one-time)	250 (one-time)	250 (one-time)	250 (one-time)

^a The approximate number of vessels affected in any given year (under the no-action alternative) is indicated in parentheses for each vessel type.

^b Elsewhere in the support documentation for this proposed action, including in the Draft EA, support vessels are treated as being part of a given “fishery.” In this table, they are treated separately from the catcher vessels in a given fishery, only because their compliance costs might differ from those of the catcher vessels. Note that the Draft EA concludes that as many as five support vessels might become active in any one of the purse seine, longline, and albacore troll fisheries. As indicated in this table, the number of support vessels expected to become active in all three fisheries combined is also five.

^c In addition to the costs indicated in this table, all affected fishing vessels would be subject to (unquantifiable) costs associated with the risk of the confidentiality of the VMS data not being rigorously maintained, and costs associated with potential VMS unit failure, including the possibilities of having to cease fishing, submit manual position reports, and having to return to port; these costs are the same for all the action alternatives.

Table 2. (continued)

Element of Proposed Action and Vessel Type (and estimated number of affected vessels) ^a	Action Alternatives			
	B	C	D	E
6. Transshipment restrictions				
Longline (0)	0	0	0	0
Purse seine (40)	0	0	0	0
Troll (0)	0	0	0	0
Support ^b (5)	0	0	0	0
7. Reporting and recordkeeping				
Total (5,000)	0	0	0	0
8. Compliance with the laws of other nations				
Longline (139)	0	0	0	0
Purse seine (40)	0	0	0	0
Troll (69)	0	0	0	0
Support ^b (5)	0	0	0	0
Unknown – in foreign EEZs only (20)	0	0	0	0
9. Facilitation of enforcement and inspection				
Longline (139)	NQ – minor	NQ – minor	NQ – minor	NQ – minor
Purse seine (40)	NQ – minor	NQ – minor	NQ – minor	NQ – minor
Troll (69)	NQ – minor	NQ – minor	NQ – minor	NQ – minor
Support ^b (5)	NQ – minor	NQ – minor	NQ – minor	NQ – minor
10. Confidentiality of information				
Longline (0)	0	0	0	0
Purse seine (0)	0	0	0	0
Troll (0)	0	0	0	0
Support ^b (0)	0	0	0	0

^a The approximate number of vessels affected in any given year (under the no-action alternative) is indicated in parentheses for each vessel type.

^b Elsewhere in the support documentation for this proposed action, including in the Draft EA, support vessels are treated as being part of a given “fishery.” In this table, they are treated separately from the catcher vessels in a given fishery, only because their compliance costs might differ from those of the catcher vessels. Note that the Draft EA concludes that as many as five support vessels might become active in any one of the purse seine, longline, and albacore troll fisheries. As indicated in this table, the number of support vessels expected to become active in all three fisheries combined is also five.

The economic impact of the proposed action and alternatives on individual fishing businesses (which is not a focus of this RIR) could be examined by comparing the compliance costs shown in Table 2 with profits enjoyed by the affected businesses. However, data on profits, as well as total operating costs, are generally lacking for businesses in the affected fisheries. As a proxy for those values, gross revenues can provide an indication of impacts. See Chapter 3 of the Draft EA for rough indications of average gross revenues in the affected fisheries.

Effects on public sector costs:

There are a number of government activities that would be undertaken in association with the implementation of the regulations. These activities and their associated costs are not strictly linked to the proposed action; that is, they would not necessarily actually occur as a result of

issuing the proposed regulations. But if the issuance of the regulations is viewed as part of the government's broader implementation of the Convention, they can be viewed as costs associated with the proposed action, and they are treated as such for the purpose of this analysis.

The proposed action would likely bring public sector costs in three areas: (1) the administrative costs associated with NMFS' responsibilities in implementing element 2 (vessel information), element 3 (the VMS), and element 4 (the vessel observer program); (2) the financial contributions to the WCPFC that will be required of the U.S. in order to cover the costs of its vessels participating in the WCPFC VMS; and (3) any additional costs needed to effectively enforce all the elements of the proposed action. Note that there would also be administrative costs incurred by NMFS to implement element 1 (authorization-to-fish), but those costs would be passed on to the owners/operators of the affected fishing vessels through fees, which, under the policies of the National Oceanic and Atmospheric Administration are set at levels equal to the expected costs to the government of administering the permit program in other words, all the costs associated with element 1 are accounted for in Table 2.

Although the public sector costs would likely vary somewhat among the four action alternatives, the differences would be small, and in this analysis they are assumed to be the same for all four action alternatives.

With respect to the administrative costs of implementing element 2 (vessel information), the collection of the information would require NMFS personnel to: handle collected forms, review the collected information for completeness, make contact with the information providers to collect missing information, enter the information into a database, and mail out forms. The owners/operators of approximately 253 vessels would be required to submit the specified information once every five years, so about 50 new forms would be submitted to NMFS each year. The administrative costs associated with processing the forms and the information contained therein are expected to be no more than \$1,000 per year, and that figure is used for this analysis.

With respect to the administrative costs of implementing element 3 (the VMS), NMFS, as the administrator of the U.S. VMS and the liaison between vessel owners/operators and the WCPFC for the WCPFC, would incur costs associated with the need for its personnel to: (1) collect information about the VMS units from the owners/operators of affected vessels in order get those vessels participating in both the U.S. and WCPFC VMS, and (2) work with vessel owners/operators to troubleshoot technical and other problems associated with VMS units. Although the VMS requirements will apply to about 253 vessels, all but about 78 of those vessels already participate in the U.S. VMS, so the additional administrative costs associated with the proposed action would be moderated accordingly. Furthermore, it is expected that these administrative tasks can be accomplished in large part using existing resources; that is, most of the associated costs, which are primarily for labor and administrative support, are "sunk" costs. Although the new administrative costs of the VMS element of the proposed action cannot be projected with much certainty, it is estimated that the tasks would require about 10 percent of a mid-level employee's time. Accordingly, an indicative estimate used for the purpose of this analysis is \$10,000 per year.

With respect to the administrative costs of implementing element 4 (the vessel observer program), the U.S. government would be responsible for observer deployment costs (except for the purse seine fleet). As described previously, observers could be deployed by the WCPFC or by WCPFC-approved sub-regional and national observer programs, such as NMFS programs. For the purpose of this analysis, it is assumed that all observers are deployed from the NMFS Pacific Islands Region Observer Program. Observer deployment costs in that program have been estimated at \$790 per observed sea-day (WCPFC 2009). As described above in the section on “effects on fishing costs,” the frequency of deployment of WCPFC ROP observers would be determined by the WCPFC, so it is not possible to accurately predict how often a given vessel would be required to accommodate a WCPFC ROP observer. For the purpose of this analysis, it is assumed that observer coverage rates will be equal to the current target observer coverage levels established by the WCPFC for its ROP. The WCPFC target coverage level for purse seine fleets is 20 percent (but as described previously, there is a WCPFC-mandated rate of 100% for 2010-2011), and that for all other vessel types is 5 percent. Purse seine vessel owners, not the federal government, would be responsible for observer deployment costs, as described in the section on “effects on fishing costs.” No new observer deployment costs would be expected for the Hawaii or American Samoa longline fleets. For the remaining fleets, given the target coverage rate of 5 percent, projected deployment costs of \$790 per observed sea-day, projected annual numbers of days at sea per vessel on trips in the Convention Area (Table 1) and projected numbers of affected vessels (Table 2), total annual observer deployment costs that would be borne by the federal government are estimated as follows: For longline vessels based on the west coast and in the Mariana Islands, \$40,000; for albacore troll vessels, \$585,000; and for support vessels, \$59,000; for a total of \$683,000.

With respect to the U.S. contributions to the WCPFC to cover VMS-associated costs, the WCPFC formulated a provisional budget that anticipates a cost of approximately \$400 per vessel in the VMS’ first year of operation (WCPFC 2008). It is assumed that the total costs to the WCPFC of its VMS will be collected from individual WCPFC members in proportion to the number of vessels from each member that participates in the WCPFC VMS. Approximately 253 U.S. vessels are expected to participate, so the annual U.S. contribution for its vessels is expected to be about \$101,000 (253 vessels at \$400 per vessel per year).

With respect to enforcement, the amount of effort and financial resources that would be put into enforcement of the new regulations would be determined by NMFS and the USCG on a continuing basis. Examples of enforcement activities that might be triggered by the proposed action would be monitoring by the NMFS and the USCG of the estimated 78 additional vessels that would participate in the U.S. VMS and outreach and enforcement activities aimed at ensuring a high rate of compliance with all the new requirements. It is not possible to project the enforcement-related costs of the proposed action with any useful degree of accuracy.

In summary, the expected annual quantifiable public sector costs of the proposed action are about \$795,000, and there would be additional unquantifiable costs in the area of enforcement.

Summary of effects on net benefits:

The present value of the total quantifiable costs to the nation of the proposed action can be

calculated by applying an appropriate discount rate and time horizon to the expected annual public sector costs (\$795,000) and annual fishing costs (as detailed in Table 2 and summed across all vessels). Table 3 indicates these present values, using an annual discount rate of seven percent, for each element of the proposed action and each alternative (for elements 2 and 3, rows are included for public sector costs). To show the sensitivity of these present value estimates to the discount rate, Table 4 provides present values estimates using a lower annual discount rate, three percent.

As shown in the bottom row of Table 3, the present value of the quantifiable costs associated with the proposed action (alternative D) is estimated at \$28.0 million (or \$41.8 million using an annual discount rate of 3%, as indicated in Table 4). The costs of alternatives B and C are slightly less, at \$27.8 and \$27.9 million, respectively (or \$41.5 and \$41.6 million, respectively, at a 3% discount rate), and the cost of alternative E is somewhat more, at \$28.7 million (or \$42.9 million, at a 3% discount rate). Most of these costs stem from the observer requirement, particularly for purse seine vessels, for which a 100-percent observer coverage rate would be required starting January 1, 2010. Because the observer-related costs are the same for all four action alternatives (only a single action alternative is being considered for the observer element of the proposed action), the differences in total costs among alternatives is small in percentage terms. The differences among alternatives are much greater for the elements for which alternatives are being considered (e.g., the VMS element). Not included in these quantifiable costs are unquantifiable costs, as identified in Table 2, Table 3, and Table 4 and discussed in the text.

Table 3. Present value of expected costs of the proposed action, in thousands of dollars (based on one-time and annual costs identified previously, and annual discount rate of 7% and time horizon of 25 years; “NQ” means not quantifiable)

Element of Proposed Action and Vessel Type	Action Alternatives			
	B	C	D	E
1. Authorization to fish				
Longline	0	0	8	121
Purse seine	0	0	2	35
Albacore troll	0	0	4	60
Support	0	0	<1	4
Total	0	0	15	221
2. Vessel information				
Longline	49	49	49	123
Purse seine	14	14	14	35
Albacore troll	24	24	24	61
Support	2	2	2	4
Unknown – in foreign EEZs only	7	7	7	18
Public sector – administration	12	12	12	12
Total	107	107	107	253
3. VMS				
Longline – Hawaii, Am. Samoa	0	0	0	272
Longline – other	69	76	76	84
Purse seine	0	0	0	0
Albacore troll – North only	917	974	1,099	1,152
Albacore troll – South only	0	0	0	0
Albacore troll – North and South	272	290	290	293
Support	82	99	102	105
Public sector – administration	117	117	117	117
Public sector – WCPFC contribution	1,177	1,177	1,177	1,177
Total	2,633	2,732	2,860	3,200
4. Vessel observer program				
Longline – Hawaii, Am. Samoa	0	0	0	0
Longline – other	12	12	12	12
Purse seine	16,735	16,735	16,735	16,735
Albacore troll – North only	115	115	115	115
Albacore troll – South only	0	0	0	0
Albacore troll – North and South	57	57	57	57
Support ^b	17	17	17	17
Unknown – in foreign EEZs only	70	70	70	70
Public sector - administration	7,963	7,963	7,963	7,963
Total	24,970	24,970	24,970	24,970
5. Vessel identification				
Longline	35	35	35	35
Purse seine	0	0	0	0
Troll	17	17	17	17
Support	1	1	1	1
Total	53	53	53	53

Table 3. (continued)

Element of Proposed Action and Vessel Type	Action Alternatives			
	B	C	D	E
6. Transshipment restrictions				
Longline	0	0	0	0
Purse seine	0	0	0	0
Troll	0	0	0	0
Support	0	0	0	0
Total	0	0	0	0
7. Reporting and recordkeeping				
Total	0	0	0	0
8. Compliance with the laws of other nations				
Longline	0	0	0	0
Purse seine	0	0	0	0
Troll	0	0	0	0
Support	0	0	0	0
Unknown – in foreign EEZs only	0	0	0	0
Total	0	0	0	0
9. Facilitation of enforcement and inspection				
Longline	NQ – minor	NQ – minor	NQ – minor	NQ – minor
Purse seine	NQ – minor	NQ – minor	NQ – minor	NQ – minor
Troll	NQ – minor	NQ – minor	NQ – minor	NQ – minor
Support	NQ – minor	NQ – minor	NQ – minor	NQ – minor
Total	NQ	NQ	NQ	NQ
10. Confidentiality of information				
Longline	0	0	0	0
Purse seine	0	0	0	0
Troll	0	0	0	0
Support	0	0	0	0
Total	0	0	0	0
TOTAL	27,763	27,862	28,004	28,697

Table 4. Present value of expected costs of the proposed action, in thousands of dollars (based on one-time and annual costs identified previously, and annual discount rate of 3% and time horizon of 25 years; “NQ” means not quantifiable)

Element of Proposed Action and Vessel Type	Action Alternatives			
	B	C	D	E
1. Authorization to fish				
Longline	0	0	12	182
Purse seine	0	0	3	52
Albacore troll	0	0	6	90
Support	0	0	<1	7
Total	0	0	22	330
2. Vessel information				
Longline	73	73	73	184
Purse seine	21	21	21	53
Albacore troll	36	36	36	91
Support	3	3	3	7
Unknown – in foreign EEZs only	10	10	10	26
Public sector – administration	17	17	17	17
Total	160	160	160	378
3. VMS				
Longline – Hawaii, Am. Samoa	0	0	0	407
Longline – other	103	113	113	125
Purse seine	0	0	0	0
Albacore troll – North only	1,370	1,456	1,642	1,722
Albacore troll – South only	0	0	0	0
Albacore troll – North and South	407	433	433	438
Support	122	148	152	157
Public sector – administration	174	174	174	174
Public sector – WCPFC contribution	1,759	1,759	1,759	1,759
Total	3,934	4,083	4,273	4,782
4. Vessel observer program				
Longline – Hawaii, Am. Samoa	0	0	0	0
Longline – other	17	17	17	17
Purse seine	25,005	25,005	25,005	25,005
Albacore troll – North only	172	172	172	172
Albacore troll – South only	0	0	0	0
Albacore troll – North and South	85	85	85	85
Support ^b	26	26	26	26
Unknown – in foreign EEZs only	104	104	104	104
Public sector – administration	11,899	11,899	11,899	11,899
Total	37,310	37,310	37,310	37,310
5. Vessel identification				
Longline	36	36	36	36
Purse seine	0	0	0	0
Troll	18	18	18	18
Support	1	1	1	1
Total	55	55	55	55

Table 4. (continued)

Element of Proposed Action and Vessel Type	Action Alternatives			
	B	C	D	E
6. Transshipment restrictions				
Longline	0	0	0	0
Purse seine	0	0	0	0
Troll	0	0	0	0
Support	0	0	0	0
Total	0	0	0	0
7. Reporting and recordkeeping				
Total	0	0	0	0
8. Compliance with the laws of other nations				
Longline	0	0	0	0
Purse seine	0	0	0	0
Troll	0	0	0	0
Support	0	0	0	0
Unknown – in foreign EEZs only	0	0	0	0
Total	0	0	0	0
9. Facilitation of enforcement and inspection				
Longline	NQ – minor	NQ – minor	NQ – minor	NQ – minor
Purse seine	NQ – minor	NQ – minor	NQ – minor	NQ – minor
Troll	NQ – minor	NQ – minor	NQ – minor	NQ – minor
Support	NQ – minor	NQ – minor	NQ – minor	NQ – minor
Total	NQ	NQ	NQ	NQ
10. Confidentiality of information				
Longline	0	0	0	0
Purse seine	0	0	0	0
Troll	0	0	0	0
Support	0	0	0	0
Total	0	0	0	0
TOTAL	41,460	41,608	41,821	42,856

To obtain the present value of the net change in benefits to the nation, the estimated costs would have to be subtracted from the benefits to the nation of the proposed action. As discussed previously, the benefits are not measurable: the proposed action would serve to help establish an MCS foundation (each of the four action alternatives would do this to somewhat varying degrees) upon which more concrete conservation and management measures could be established and implemented. Those conservation and management measures which would have the potential to bring substantial benefits to the nation through the maintenance or enhancement of benefits derived from HMS fisheries and associated resources in the Pacific Ocean.

2.5.2. Distributional changes in net benefits

Examples of distributional effects include differential economic impacts according to geographical region, fishery sector, and businesses of differing sizes.

With respect to geographical effects, the proposed action would apply only to HMS fisheries and only in the western and central Pacific Ocean – specifically, the Convention Area, so businesses not involved in HMS fisheries or not involved in that area would not bear the compliance costs associated with the proposed action. Within the Convention Area, the proposed action would bring compliance costs only to businesses whose vessels are used to fish on the high seas in the Convention Area. So businesses whose vessels fish for HMS exclusively within the U.S. exclusive economic zone would not bear any of the compliance costs estimated in Table 2.

It is possible that the proposed action would lead to slight shifts in the spatial distribution in the Pacific Ocean of fishing effort in the longline and albacore troll fisheries. However, the operation of the vessels involved in such shifts is not expected to change in terms of where the vessels are based or where they land their catch, so no distributional economic effects are expected as a result of such shifts.

With respect to distributional impacts in terms of fishing sectors and business sizes, it can be seen in Table 2 that the expected compliance costs of the proposed action differ among certain of the affected fleets. Specifically, the observer-related costs to businesses in the purse seine fleet would be considerably greater than those borne by businesses in the other fleets. VMS-related costs for the purse seine fleet and the Hawaii-based and American Samoa-based longline fleets would be considerable less than those for businesses in fleets, but those costs are still much smaller than the observer costs for purse seine businesses. In general, the businesses in the purse seine fleet are larger (e.g., in terms of gross revenues) than those in the other fleets; no marked differences in typical business sizes are apparent among the other fleets (see Chapter 3 of the Draft EA). To the extent such distributional effects occur, they could extend forward and backward to sectors linked to the harvesting sector, such as businesses involved in fish processing and distributing and suppliers to the affected fleets of equipment, fuel, supplies, and provisioning services.

2.5.3. Changes in income and employment

The compliance costs associated with the proposed action (see Table 2) can be expected to have corresponding impacts on the income of individuals involved in the affected businesses. It is not possible to predict how these impacts would be distributed among individuals (e.g., vessel crew versus vessel owners). The impacts are not expected to be great enough to have any effects on employment in the primary production sector (fishing businesses) or in the backward- and forward-linked sectors, such as fish processors and distributors and suppliers to the fleet of equipment, fuel, supplies, and provisioning services.

2.5.4. Cumulative effects

Cumulative effects are the additive effects of this action and other existing and reasonably foreseeable actions (e.g., other fishery regulations). The cumulative effects of the proposed action can be described only qualitatively.

The proposed action would bring compliance costs to affected fishing businesses, as shown in Table 2. These costs would be added to the compliance costs associated with existing regulatory

requirements, including those in fishing regulations, vessel safety and transportation regulations, business regulations, and others. As discussed in section 2.5.1, these costs are relatively small in comparison with the average gross revenues in the affected fishing businesses (because information on operational costs is generally lacking for the affected fleets, it is not possible to determine how the new compliance costs compare with total operating costs or with profits). The total costs of complying with all existing regulations plus the proposed regulations are, of course, greater. It is not possible to determine whether the cumulative compliance costs are so great that affected fishing businesses would avoid them by shifting their fishing grounds or the fisheries they engage in. As concluded in the Draft EA, it appears possible that some affected businesses could do so, but the likely number of such vessels is small. It appears unlikely that any businesses would go out of business as a result of the cumulative compliance costs.

With respect to reasonably foreseeable actions, management of HMS fisheries in the western and central Pacific Ocean will be driven both by domestic mandates and international fisheries agreements and decisions. In the former category, the most relevant statutes are the MSA for federal fisheries generally and the Endangered Species Act with respect to threatened and endangered marine species. In the latter category, future changes to the SPTT could change the way the United States must govern its purse seine fleet (e.g., under the authority of the SPTA). International agreements could alter the way the United States is obligated to manage its vessels on the high seas globally (e.g., under the authority of the HSFCA). Finally, and of most relevance to the fishing businesses affected by this proposed action, future decisions of the WCPFC will very likely lead to new fishing regulations for U.S. fishing businesses (e.g., under the authority of the Act). As described previously, the proposed action is limited to establishing MCS tools. The WCPFC is likely to make additional decisions to establish new MCS tools (e.g., to regulate and monitor transshipments) and strengthen existing ones. Some of those decisions will lead to additional compliance costs for U.S. fishing businesses. The WCPFC is also likely to establish conservation and management measures for particular fish stocks and particular fishing sectors (and of relevance to the eastern Pacific Ocean, the Inter-American Tropical Tuna Commission (IATTC) is likely to do the same). For example, it could require its members to implement catch limits, fishing effort limits, time and area restrictions, gear restrictions, and other fishery controls. As stated previously, the main purpose of this proposed action and other MCS tools is to facilitate the implementation of such conservation and management measures. Although it is not possible to predict the specific measures that will be adopted by such bodies as the WCPFC and IATTC, for the most part they can be expected to be conservative in the sense that they will constrict fishing capacity, effort, and/or catch. The consequence of these measures being implemented in the fisheries in the western and central Pacific Ocean and the Pacific Ocean would be, generally, to improve the status of affected resources (not necessarily relative to their current status, but relative to their future status under the baseline). The cumulative impacts of the proposed action in combination with future domestically and internationally mandated conservation and management measures are therefore not expected to be adverse.

2.6. Summary comparison of alternatives

Any of the four action alternatives would, if fully implemented, satisfy the international obligations of the United States under the Convention and be consistent with the Act. The no-action alternative would not.

With respect to fishing authorizations, creating a “WCPFC Area Endorsement” (under preferred alternative D) that is linked to the existing HSFCA permits would provide the advantages (unlike alternatives B and C) of being able to tie a variety of Convention-related fishing requirements to an authorization without having to create an entirely new, and more costly, permit (as in alternative E). The advantages of making other requirements, such as VMS requirements, conditions of an authorization include: (1) identifying the pool of vessels/people that are subject to those requirements, which is important for outreach and enforcement; and (2) giving fishermen further incentive to comply with those requirements, since the authorization could be revoked if the requirements are not met. The WCPFC Area Endorsement would also provide a cost-effective and fairly reliable means of collecting the required vessel information.

With respect to the VMS, making the requirement a condition of holding a particular authorization (as in alternatives D and E) would, as described above, have advantages in terms of outreach and compliance with the VMS requirement. Requiring the VMS unit to be turned on at all times while the vessel is at sea would enhance the likelihood of compliance with the requirement relative to the alternative of allowing the VMS unit to be turned on and off depending where at sea the vessel is (as in alternative B). Requiring the VMS units to be turned on at all times, even at port (as in alternative E), would be even more rigorous in that respect, but the marginal benefit would likely not outweigh the costs to fishing businesses of having to keep the unit turned on while the vessel is, for example, at port for an extended time.

With respect to boarding and inspection, the choice of the alternative would not affect which vessels actually get boarded or the frequency of such boardings, because those boardings will be made by inspection vessels of other nations, without regard to this rule. Although the Convention’s boarding and inspection scheme is focused on HMS fishing vessels, it is possible that the inspectors of other nations will attempt to board and inspect non-HMS fishing vessels. For example, they might find it necessary to board and inspect a given vessel in order to determine whether it is being used to fish for HMS. In that respect, requiring that non-HMS fishing vessels accept and accommodate boarding by inspectors of other nations would serve to advise the owners and operators of such vessels of that possibility. If the requirement were not extended to non-HMS fishing vessels (as in alternatives B and C), the owners and operators of non-HMS vessels might not become aware of the possibility of an attempted boarding. In that case, they might hesitate to comply, which could lead to conflict with the inspectors, which could bring risk to the vessel’s crew.

2.7. Determination of significance under Executive Order 12866

In accordance with E.O. 12866, NMFS has made the following determinations:

- This rule is not likely to have an annual effect on the economy of more than \$100 million or to adversely affect in a material way the economy, a sector of the economy, productivity, jobs, the environment, public health or safety, or state, local, or tribal governments or communities.
- This rule is not likely to create any serious inconsistencies or otherwise interfere with any action taken or planned by another agency.

- This rule is not likely to materially alter the budgetary impact of entitlements, grants, user fees or loan programs or the rights or obligations of recipients thereof.
- This rule is not likely to raise novel or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in E.O. 12866.

Based on these determinations, the rule considered in this RIR is not a "significant regulatory action" for the purposes of E.O. 12866. Furthermore, the rule is not controversial.

3. REFERENCES

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