

## SUPPORTING STATEMENT

### ELECTRONIC MONITORING SYSTEMS AND VESSEL MONITORING SYSTEMS (VMS) FOR ATLANTIC HIGHLY MIGRATORY SPECIES (HMS)

OMB CONTROL NO. 0648-0372

#### A. JUSTIFICATION

This is a resubmission of a revision request, with Final Rule 0648-BC09.

This collection of information is being changed to account for new requirements included in Amendment 7 to the 2006 Consolidated Highly Migratory Species (HMS) Fishery Management Plan (FMP). Amendment 7 adds new VMS and electronic monitoring requirements to the preexisting VMS requirements already approved under this collection. This supporting statement includes the National Marine Fisheries Service's (NMFS) responses to public comments about electronic monitoring that were submitted for the Amendment 7 proposed rule. In response to comments, NMFS adjusted the VMS reporting requirements in this collection to include a verification stage and provided funding for purchase and installation of electronic monitoring systems.

The collection's name is being changed from "Vessel Monitoring Systems for Atlantic HMS" to "Electronic Monitoring Systems and Vessel Monitoring Systems (VMS) for Atlantic Highly Migratory Species (HMS)."

Based on comments on the proposed rule, NMFS implementation of the final rule will relieve certain purchase and installation requirements that were set out in the proposed rule. Rather than requiring vessel owners to buy and install equipment and make decisions about equipment specifications and functionality, the final rule instead requires the vessel owners to obtain certification from a NMFS-approved contractor stating that the contractor has properly installed and verified the functionality of the electronic monitoring system in accordance with more detailed equipment and system requirements provided in the final rule. As set out in the proposed rule, vessel owners would have been responsible for the costs of the equipment and for installation for the electronic monitoring systems. Since publication of the proposed rule and the FEIS, and in response to public comment and to ease the regulated community's burden associated with the new monitoring requirements, NMFS has identified funds to pay for the equipment and its installation. *However, it is not clear whether these funds will be available for future years, so the cost analysis in this collection of information continues to assign the cost and burden associated with electronic monitoring to the vessel owner.*

#### **1. Explain the circumstances that make the collection of information necessary.**

The United States (U.S.) Secretary of Commerce is authorized to regulate fisheries for Atlantic HMS under the [Magnuson-Stevens Fishery Conservation and Management Act](#) (Magnuson-Stevens Act; 16 U.S.C. 1801 *et. seq.*) and the [Atlantic Tunas Convention Act of 1975](#) (ATCA; 16 U.S.C. 971 *et. seq.*), as amended. Under ATCA, the Secretary of Commerce is required to promulgate regulations as may be necessary and appropriate to implement binding

recommendations adopted by the International Commission on the Conservation of Atlantic Tunas (ICCAT).

ICCAT recommendations establish annual quotas which limit the overall U.S. bluefin tuna catch and require that data be collected on all sources of bluefin tuna fishing mortality. Under the authority of the Magnuson-Stevens Act and ATCA, the 2006 Consolidated HMS Fishery Management Plan (FMP) and implementing regulations at 50 CFR 635 were developed and implemented to manage HMS fisheries, and thus established the framework for allocation of the U.S. annual bluefin tuna quota. Amendment 7 to the 2006 Consolidated HMS FMP was developed to further refine bluefin tuna quota allocations and management overall, to reduce dead discards in the Longline category, and to collect information on sources of bluefin tuna fishing mortality in other fishing categories. *This collection of information is being revised to incorporate the electronic monitoring and VMS provisions of Amendment 7.*

Electronic monitoring systems (i.e., video and gear monitoring) and VMS can provide valuable data on fishing effort, catch, and geographic location of fishing effort and catch.. Current VMS requirements in HMS fisheries that have been previously approved under this collection are:

- 1) Pelagic longline (PLL), shark bottom longline (BLL)<sup>a</sup>, and shark gillnet vessels<sup>b</sup> are required to have a VMS electronic mobile transmitting unit (E-MTU) installed by a qualified marine technician and submit an installation checklist;
- 2) Vessels with VMS must provide hourly position reports 24/7/365 (unless covered by provisions in 4), below);
- 3) Vessels with VMS must hail in and out for each trip;
- 4) Provisions for long-term declaration out of the fishery and power down exemptions.

Implementation of the additional fishery management controls in Amendment 7, including individual bluefin tuna quotas (IBQs) for Longline category (pelagic longline, PLL) vessels, and quota trading for PLL and Purse seine category participants, require further VMS measures and new electronic monitoring measures. These measures will provide real-time catch monitoring that is necessary to track what may be relatively small quantities of bluefin catch and thus help to ensure individuals stay within their IBQ allocations.

In addition to the VMS reporting requirements that apply to other HMS vessels, Amendment 7 requires PLL and Purse Seine vessels to use VMS E-MTUs to make reports of fishing effort and bluefin tuna catch for each set. Vessel operators will also be required to verify their VMS reports when they sell their fish to a dealer, or if no bluefin tuna are sold, they must verify their reports after returning to port. VMS reporting verification is required in response to public comment regarding the unreliability of certain VMS units.

The new Amendment 7 requirement for PLL vessels to install and use an electronic monitoring system will record effort and document catch during PLL fishing activity, including incidentally caught bluefin. This system will provide a census of bluefin tuna catch in the PLL fishery to complement the current use of, and verify the accuracy of logbook data.

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<sup>a</sup> between 33°00' N. latitude and 36°30' N. latitude between January 1 and July 31 every year

<sup>b</sup> possess a shark directed permit and have gillnet gear onboard between November 15-April 15 in the Southeast U.S. Restricted Area as defined in 50 CFR 229.32

**2. Explain how, by whom, how frequently, and for what purpose the information will be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, then explain how the collection complies with applicable Information Quality Guidelines.**

**VMS installation and activation checklist - current requirement for additional respondents**

Individuals purchasing VMS for the first time (i.e., new entrants and Purse seine vessels), would be required to submit a one-time installation and activation checklist after a new E-MTU VMS unit is installed by a qualified marine electrician. The checklist indicates the procedures to be followed by the marine electricians whom install the E-MTU VMS units. These forms would be completed by the electricians and then submitted to NMFS by the vessel owner. This checklist provides NMFS OLE with information about the hardware installed and the communication service provider that will be used by the vessel operator. Specific information that links a permitted vessel with a certain transmitting unit and communications service is necessary to ensure that NMFS will receive automatic position reports properly. In the event that there are problems, NMFS will have access to a database that links owner information with installation information. NMFS can then contact the vessel operator and discern whether the problem is associated with the transmitting hardware or the service provider.

**VMS hourly location reports and hail-in/hail-out information - current requirement**

NMFS OLE uses VMS hourly location reports and hail-in/hail-out information to monitor and enforce closed and gear restricted areas implemented to reduce bycatch of juvenile swordfish, sharks, sea turtles, bluefin tuna, and other species necessary to comply with the Marine Mammal Protection Act, Endangered Species Act, National Standard 9 (bycatch and bycatch mortality reduction) of the Magnuson-Stevens Act, and, when implemented, Amendment 7. There are numerous areas that are closed or gear restricted to fishermen fishing for HMS. NMFS OLE uses VMS position data to reduce costs and improve enforcement of time/area closures, to monitor the fleet during the closed period, to deter illegal fishing, to increase efficiency of surveillance patrols, to provide probable cause for obtaining a search warrant in enforcement investigations, and to support enforcement of other regulations such as closed seasons once a quota has been reached. The requirement to notify NMFS enforcement at least three hours, but no more than 12 hours, prior to returning to port (i.e., hail-in) provides notification that fishing activities are being completed, gear is no longer being deployed, and the vessel is transiting back to port.

**Long-term declarations out of the fishery - current requirement**

Vessel operators carrying HMS permits, but not fishing for or retaining HMS for two or more consecutive fishing trips, have the option to make long-term declarations out of the fishery so that they are not required to hail-out or hail-in on each trip. To “declare out” of HMS fisheries, the vessel operator must declare that they were fishing for non-HMS species via the VMS. Such a declaration exempts the vessel from hail-in and hail-out requirements until the vessel resumes fishing for and retaining HMS at which time the vessel will need to resume hailing-out and hailing-in for each trip. Vessels operating under a long-term declaration out of the HMS fishery are still required to provide 24/7 hourly location signals with their VMS units, and are still required to follow all other HMS regulations (i.e., not fishing within relevant closed areas). Vessel operators wishing to make long-term declarations out of the fishery must submit the

declaration before leaving for their next fishing trip. Vessels that have declared out of the HMS fisheries, but incidentally catch and retain HMS species while fishing must revise their target species and “declare in” while at sea before returning to port with any HMS species in their possession. The vessel is also then required to hail-in as per the regular HMS reporting requirements.

### **VMS power down exemption – current requirement**

In the event that a vessel has to power down their VMS unit, any long-term declaration would become null and void, and a new declaration must be issued upon powering up the VMS unit. Fishermen must request a documented exemption if their VMS units need to be powered down for various reasons such as placing the vessel in drydock for repairs or suspending fishing activity for an extended period. In such instances, fishermen must contact NMFS OLE and follow the instructions provided. The request must describe the reason an exemption is being requested; the location of the vessel during the time an exemption is sought; the exact time period for which an exemption is needed (*i.e.*, the time the VMS signal will be turned off and turned on again); and sufficient information to determine that a power down exemption is appropriate. Approval of a power down must be documented and will be granted, at the discretion of NMFS enforcement, only in certain circumstances (*i.e.*, when the vessel is going into dry dock for repairs or will not be fishing for an extended period of time).

### **Bluefin tuna catch and fishing effort reports – new requirement**

In addition to the requirements listed above, under Amendment 7, PLL and Purse seine vessels are required to make reports of fishing effort when bluefin tuna are encountered and disposition of any bluefin tuna catch (*i.e.*, kept or discarded) for each set. These data will be used by NMFS to help ensure that quotas and IBQ allocations are not exceeded. The VMS form to be filled out for each set is attached. NMFS received several public comments regarding the unreliability of certain VMS units. NMFS is working to adjust the VMS regulations to ensure the functionality of all VMS units in a separate rulemaking (see 79 FR 53386, September 9, 2014). Meanwhile, vessel operators will be required to ensure NMFS received their bluefin catch and effort data by reviewing their VMS-submitted data when they offload their catch at a dealer location. The VMS-submitted catch and effort data will be accessed and verified in the IBQ System. Permit holders and fishery participants will maintain an IBQ System account (user registration in the IBQ system is addressed in collection 0648-0677). When vessel operators sell their catch to a dealer, the operators will verify their VMS-submitted reports via the dealer interface in the IBQ System. If the VMS data are not in the system, the vessel operator will be required to enter the bluefin tuna catch and effort data at the time of review. Once the catch and effort data are correct, the vessel operator will electronically sign to confirm the catch and effort data and the data entered by the dealer regarding the bluefin tuna that were sold. If no bluefin tuna are sold, then the vessel operator is required to review and verify their VMS data submission upon return to port.

### **Electronic monitoring system – new requirement for PLL vessels**

Amendment 7 requires all PLL vessels to have a NMFS-approved contractor install an electronic monitoring system and obtain certification of such installation. They must then properly maintain the video cameras and associated data recording and monitoring equipment, which will record all longline catch and relevant data regarding pelagic longline gear retrieval and

deployment. NMFS will use the recorded data to verify the accuracy of counts and identification of bluefin tuna reported by the vessel owner/operator, as well as observers. Electronic monitoring will enable the collection of video images and fishing effort data that may be used in conjunction with other sources of information to estimate bluefin tuna dead discards, and may augment the ability of an observer to fulfill their duties by providing a record of catch during the time periods the observer may be unable to observe the catch directly.

In light of public comments expressing concern about ensuring the functionality of electronic monitoring systems and the costs of such systems, NMFS implementation of the final rule will relieve certain purchase and installation requirements that were set out in the proposed rule. Rather than requiring vessel owners to buy and install equipment and make decisions about equipment specifications and functionality, the final rule instead requires the vessel owners to obtain certification from a NMFS-approved contractor stating that the contractor has properly installed and verified the functionality of the electronic monitoring system in accordance with more detailed equipment and system requirements provided in the final rule. As set out in the proposed rule, vessel owners would have been responsible for the costs of the equipment and for installation for the electronic monitoring systems. Since publication of the proposed rule and the FEIS, and in response to public comment and to ease the regulated community's burden associated with the new monitoring requirements, NMFS has identified funds to pay for the equipment and its installation. *However, it is not clear whether these funds will be available for future years, so the cost analysis in this collection of information continues to assign the cost and burden associated with electronic monitoring to the vessel owner.*

For all vessels issued an Atlantic Tunas Longline permit that fish with pelagic longline gear, vessel owners (or their representatives) must coordinate with the NMFS-approved contractor to install and test electronic monitoring equipment, and the contractor will then provide certification that the equipment has been properly installed. Vessel owners will be required to make their vessel accessible to designated personnel on a specific date, or range of dates, to allow installation and testing of electronic monitoring equipment, and may be required to steam to a designated port within their geographic region to enable such installation. This is consistent with the proposed rule's requirement that vessels be available for inspection, as it will not result in any additional absence from fishing time than was analyzed and proposed in the proposed rule or impose additional financial costs or regulatory burden. Vessel owners or operators will be required to make their vessel accessible to designated personnel on a specific date, or range of dates, to allow installation and training of the use and maintenance of electronic monitoring equipment, and may be required to steam to a designated port within their geographic region to enable such installation and training.

To fish using pelagic longline gear, a vessel must have a valid certification form from the NMFS-approved contractor, that it has a fully functioning electronic monitoring system on board. Because the pelagic longline fleet is diverse with respect to vessel size, mechanical infrastructure, and operation, and the technology supporting electronic monitoring is changing and improving, NMFS is implementing detailed regulations that include some technical specifications regarding the necessary equipment that constitutes an electronic monitoring system to respond to public comment that more details are needed while still providing flexibility to allow vessels to install equipment that performs well in a cost effective manner. NMFS will utilize both third party experts and NMFS staff to provide vessel owners instructions

regarding the specific required equipment and operational features of the system. As explained in more detail below, vessels must, in accordance with instructions provided by NMFS and/or NMFS-approved contractor, coordinate installation and maintain the following equipment, as components of an electronic monitoring system: Two to four video cameras, a recording device, video monitor, hydraulic pressure transducer, winch drum rotation sensor, system control box, GPS receiver, and related support equipment needed to achieve the objectives (e.g., power supply, camera mounts, lighting). Slight modifications to the equipment listed above may be required to support the objectives of electronic monitoring, adapt to unique vessel characteristics, or achieve cost savings or efficiencies. Vessel owner/operators must coordinate installation and subsequently maintain and operate the system in accordance with instructions provide by NMFS, and allow inspection of the equipment by NMFS. The electronic monitoring system must include software to enable a test function so that the vessel operator may test the status of the system (i.e., whether it is fully functional) prior to each trip, and record the outcome of the test. A vessel operator may not depart on a pelagic longline trip unless the pre-trip test indicates that the system is fully functioning. Upon successful installation and testing by the NMFS-approved contractor, the NMFS-approved contractor will provide vessel owners with a certificate that the equipment installed constitutes a “fully functioning electronic monitoring system” based on written instructions and requirements that NMFS provided the contractor. The vessel owner must make the certificate available upon request by NMFS OLE. The required cameras must be installed that provide a view of the area where the longline gear is retrieved and catch is removed from the hook (prior to placing in the hold or discarding boatside) and a requirement that such a system be connected to the mechanical hauling device so that recording is initiated by gear retrieval. Specifically, the equipment functional requirements are as follows:

#### *Video Cameras:*

Video data are produced by digital IP (Internet protocol) video cameras at a resolution of no less than 720p (1280x720). The individual vessel systems must include no less than two cameras: at least one camera to record close-up images of the deck at the haul back station for species identification/length estimation, and at least one camera to record activity along the side of the vessel at the water line of the haul back station to document animals that are caught and discarded but not brought aboard, as well as the disposition of that catch (released alive/dead). The frame rates of the footage will need to allow for easy of viewing. The cameras are not required to record audio.

#### *GPS Receiver:*

A GPS receiver is required to produce output, which includes location coordinates, velocity, and heading data, and is directly logged continuously by the control box at a minimum rate of 10 seconds. The GPS receiver must be installed and remain in a location to order to receive a strong signal continuously.

#### *Hydraulic & Drum Rotation Sensors:*

A hydraulic sensor is required to continuously monitor the hydraulic pressure, and a drum rotation sensor must continuously monitor drum rotations in order to provide the data necessary for the electronic monitoring (EM) system to trigger the video camera to record. The combination of these two sensors provide a mechanism to ensure that specific periods of time are captured on video, such as when gear is being retrieved and catch is removed from the hooks.

### *EM Control Box & Monitor:*

The system must include a 'control box' to receive and store the raw data provided by the sensors and cameras. The control box must contain removable hard drives and storage system adequate to store data for the entire trip (e.g., adequate to store the data associated with a trip lasting approximately 30 days). A wheelhouse monitor must provide a graphical user interface for harvesters to monitor the state and performance of the control box and should include information such as: current date and time synced via GPS, GPS coordinates, current hydraulic pressure reading, presence of a data disk, percentage used of the data disk, and video recording status.

### *Hydraulics:*

Prior to system installation, vessel operators must possess and install a fitting for the pressure side of the line of the drum hydraulic system. The fitting may be either "T" or inline, with a female ¼" threaded National Pipe Thread (NPT) port to enable connection to the pressure transducer.

### *Power:*

Electronic monitoring systems are capable of being powered by both alternating current (AC) and direct current (DC) power. An EM system that is to be powered by a DC circuit must have free space on a 12-volt bus bar in the wheelhouse and a dedicated DC power switch. If the EM systems are to be powered by AC circuits, vessels must provide an Uninterrupted Power Supply (UPS) in the wheelhouse.

### *Camera Mounts:*

During installation of the EM system, cameras must be mounted so that the camera may be positioned to view the waterline outboard of the vessel rail. If determined during the vessel assessment that there is not suitable mounting structure onboard, vessels may be required to provide a mount that allows a camera to be positioned to view the waterline outboard of the vessel rail. Before each scheduled installation of an EM system, NMFS-approved contractors will discuss mounting alternatives with the vessel's owner or operator.

### *Lighting:*

Vessels must provide sufficient lighting for cameras to clearly illuminate individual fish on deck at the haul back station and along the vessel rail at the waterline, at all times. Lighting will be evaluated by NMFS-approved contractors during the vessel assessment/EM installation. After installation, if NMFS -pproved contractors review video footage and determine that lighting is insufficient, the vessel owner must adjust the lighting to ensure it is sufficient before the EM system can be recertified.

Upon completion of a fishing trip the vessel operator must mail the removable EM system hard drive containing all data to NMFS or the NMFS-approved contractor, within 48 hours of the completion of the trip, according to instructions provided by NMFS. Prior to departing on a subsequent trip, the vessel owner or operator must install a replacement EM system hard drive to enable data and video recording. The vessel owner or operator is responsible for contacting NMFS, or NMFS-approved contractors, if they have not received a replacement hard drive(s).

The vessel operator is responsible to ensure that all bluefin tuna are handled in a manner that enables the electronic monitoring system to record such fish, and must identify a crew person or employee responsible for ensuring that all handling, retention, and sorting of bluefin tuna occurs in accordance with the regulations. NMFS or the NMFS-approved contractor, with the vessel owner or operators' input, will develop and provide a written Vessel Monitoring Plan, to document the standardized procedures relating to electronic monitoring and facilitate communication of such procedures to the vessel crew. The vessel owner or operator is responsible for ensuring that the EM system remains powered for the duration of each trip; that cameras are cleaned routinely to ensure unobstructed views, and the EM system components are not tampered with.

NMFS will communicate instructional information in writing, via permit holder letters, to the vessel owners during all phases of the program to provide direction and assistance to vessel owners, and facilitate the provision of technical assistance.

The information in this collection could be used to calculate publicly disseminated information such as overall estimates of bluefin tuna dead discards and total annual U.S. bluefin tuna catch. See responses in Question 10 of this Supporting Statement on confidentiality and privacy and Question 16 for more information on data dissemination and use. NMFS would retain control over personal information and pecuniary business information and safeguard it from improper access and use consistent with legal requirements and NOAA policy for confidentiality, privacy, and electronic information. The information collection is designed to yield data that meet all information quality guidelines. Prior to dissemination, the information would be subjected to quality control measures and a pre-dissemination review pursuant to [Section 515 of Public Law 106-554](#).

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology.**

VMS is the best technology available at this time for monitoring vessel locations to aid enforcement efforts. The integrated Global Positioning System (GPS) provides a near real-time mechanism for submitting accurate position reports. VMS is considered much more accurate than logbooks for reporting geographical distribution of fishing effort for each trip. Logbooks are submitted by fishermen seven days after offloading and provide information only regarding the start of a fishing set. Thus, logbooks do not meet the real-time needs of NMFS OLE and could allow vessels to fish illegally in closed areas without prosecution. VMS, on the other hand, provides 24 reports each day for the duration of the trip. Twenty-four hour report data, in conjunction with a declaration by the vessel, prior to leaving port, would provide pertinent data concerning target species and gear being deployed. Providing a window of time in the "hail-in" for when a vessel is returning to report also allows NMFS OLE officials to more accurately determine arrival time for possible inspections. This information is important for discerning which closed areas apply to a particular vessel and allows enforcement to react immediately if a vessel is found fishing in a closed area. Vessels would also be able to receive information from NMFS concerning weather alerts, natural disasters, fishery closures, and other information. VMS units may provide a platform for future electronic logbook reporting of both target and non-target species.



Electronic monitoring is a cutting edge technology that is just beginning to be used by NMFS to complement or replace logbook and observer coverage. Vessel logbooks require vessel operators to report sensitive information such as turtle and bluefin tuna bycatch, each of which can result in fishery closures. NMFS analyses comparing logbook and observer data from the same trip corroborate concerns that self-reported data can be inaccurate. However, deployment of observers on all PLL trips is not feasible due to the cost. Amendment 7 requires electronic monitoring as a means to verify self-reported data without the associated costs of observer coverage.

#### **4. Describe efforts to identify duplication.**

NMFS is the sole authority responsible for managing the domestic bluefin tuna fishery, on behalf of the Secretary of Commerce. The Atlantic HMS management program includes a high degree of internal coordination across NMFS regions, science centers, and headquarters offices. The distributed nature of the HMS staff specialists throughout the agency helps garner knowledge of other NMFS activities and helps the program avoid duplication and leverage other NMFS assets.

When developing an HMS FMP amendment, NMFS coordinates with the HMS Advisory Panel (AP). The HMS AP includes citizens from HMS commercial and recreational fishing interests, environmental interests, academia, state fishery agencies, and federal fishery management councils. These individuals provide significant input and direction to NMFS, including the status of other fishery management or research programs and any potential for duplication of or similar reporting requirements in other fisheries. NMFS also coordinates directly with the states of the Atlantic and Gulf of Mexico coasts, and the federal fishery management councils and interstate marine fisheries commissions operating in these geographic areas.

Position reports at the start of each fishing set are required to be recorded in HMS logbooks, and will therefore be duplicated by participants using VMS; however, VMS position reports are automated and would not require any action on the part of the vessel operator. Typically, most of the participants in the PLL fishery for tunas and/or swordfish use the HMS logbook. Most vessels participating in the shark BLL and gillnet fisheries use a different logbook (Coastal Fisheries Logbook) that does not require position reports of individual fishing set and would not be duplicated (they could also use the HMS logbook).

There are no alternate sources of such specific and near real-time vessel location and activity information. Use of VMS is required in other fisheries and fishermen who have already purchased a VMS unit can use the same unit for multiple fisheries. Information is only reported one time to enforcement and is not duplicated for multiple fisheries.

Although some of the data collected via electronic monitoring is also included in vessel logbooks and observer reports, simultaneous collection of these data are necessary as NMFS introduces and refines its electronic monitoring requirements.

#### **5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.**

All owners of vessels with commercial permits for HMS, (i.e., swordfish, sharks, and tuna) are considered small entities. Current VMS regulations require approximately 308 PLL, bottom longline, and shark gillnet vessels to maintain VMS units at an average monthly cost of \$44/month. Individual position or message reports costs are included in the estimated monthly

cost. In an attempt to provide vessel owners new to the fishery with some flexibility of choice and help minimize costs, NMFS OLE published general type approval specifications (January 31, 2008, 73 FR 5813) describing the types of units that are appropriate. Existing units that meet the criteria range in price from \$3,000 - \$3,300, depending on the features of the E-MTU VMS device. Vessels are already required to use an E-MTU VMS in some other fisheries, and may already possess the required equipment. For example, each of the three vessels currently authorized to deploy purse seine gear for Atlantic tunas have already installed E-MTU VMS in compliance with Council-managed fisheries.

Only newly permitted vessels that have not already purchased similar gear required for other fisheries will need to purchase the units. Further, reimbursement funds (\$3,100/E-MTU VMS unit) may be available for new HMS fishery participants required to install E-MTU VMS units. The reimbursement is available for the costs of the new unit and does not cover installation by a qualified marine electrician or data transmission.

The introduction of electronic monitoring rather than expansion of observer coverage requirements in the PLL fleet is largely an effort to control costs for small businesses and the government. NMFS estimates that total annual costs of electronic monitoring per vessel would be approximately \$19,175 (installation and maintenance annualized over 5 years would be approximately \$3,835) plus \$225 per trip. In comparison, observer coverage is much more expensive. The Southeast Fisheries Science Center's observer program estimates that observers cost approximately \$1,075 per sea day. This equates to approximately \$9,675 per trip for pelagic longline vessels, which have an average trip length of nine days.

Rather than requiring vessel owners to buy and install equipment and make decisions about equipment specifications and functionality, the final rule instead requires the vessel owners to obtain certification from a NMFS-approved contractor stating that the contractor has properly installed and verified the functionality of the electronic monitoring system in accordance with more detailed equipment and system requirements provided in the final rule. As set out in the proposed rule, vessel owners would have been responsible for the costs of the equipment and for installation for the electronic monitoring systems. Since publication of the proposed rule and the FEIS, and in response to public comment and to ease the regulated community's burden associated with the new monitoring requirements, NMFS has identified funds to pay for the equipment and its installation. However, it is not clear whether these funds will be available for future years, so the cost analysis in this collection of information continues to assign the cost and burden associated with electronic monitoring to the vessel owner.

**6. Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently.**

Using VMS to verify the location of a vessel is passive and automatic, requiring no reporting time on the part of the vessel operator. ICCAT recognizes the developments in satellite-based VMS and their possible utility, including better resource management and, thus, more effective and sustainable use of resources. More specifically, benefits for management include increased compliance with and enhanced enforcement effectiveness regarding area restrictions, more timely data regarding fishing effort by areas, and more timely catch reporting. Other possible benefits of the VMS include increased vessel safety and dependable and confidential communications, which may improve fleet management.

Monitoring and enforcement are essential components of fisheries management. Monitoring fishing vessels facilitates enforcement of NMFS' conservation and management regulations by enabling detection of violations. Monitoring also promotes compliance by having a general deterrent effect. Lack of proper monitoring and enforcement makes it difficult to gauge the effectiveness of conservation and management measures. In the case of overfished stocks, enforcement is necessary to prevent further overfishing and subsequent decline to dangerously low stock levels. As a practical matter, it is very difficult for enforcement personnel to effectively monitor the full operational range of the U.S. PLL fleet without having some method of detecting a vessel's location. With respect to PLL time/area closures in particular, the size of the closed areas makes the likelihood of detection through conventional surveillance methods rather small.

Less frequent reporting would prevent NMFS and the vessel operator from confirming that the VMS unit is functioning properly and would make it more difficult to determine whether a vessel is fishing in, or transiting through, a closed area. Furthermore, not requiring vessels to make a declaration, either per trip or long-term, describing target species and gear deployed would make it difficult for NMFS OLE to know which closed areas and other regulations apply to that particular vessel.

If the VMS and electronic monitoring portion of the collection were not conducted, NMFS would not be able to effectively implement and monitor the IBQ component of Amendment 7. Without the ability to monitor the IBQ component, the management program would be less effective and there would be greater incentive to underreport. Since IBQ allocations are relatively small and may be comprised of a single fish, accurate real-time data is necessary to ensure that vessels remain within their quota.

Real-time data collection will enhance and improve the management of the limited quota allocations and Longline category quota because ICCAT quotas are accounted on a yearly basis. Overages by the Longline category could impact other domestic user groups or result in an annual quota overage. ICCAT could assess a penalty if the United States overharvests its quota.

**7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.**

VMS will be reporting positions 24 times a day, which is more frequent than OMB guidelines suggest. This frequency is required for the near real-time and accurate tracking of vessel activities. The requirement for 24 position reports per day is designed to allow NMFS to distinguish between a vessel that is fishing, and a vessel that is traversing a closed area. Fewer reports would indicate that a vessel was in the area but would not indicate whether the vessel was setting gear, hauling gear, or traversing the area. The time burden as a result of this frequency, however, remains minimal because the position reports are automated and require no action on the part of the vessel operator. As stated above, the two-time (per trip) declaration would facilitate improved enforcement of regulations because NMFS OLE would know which gear is being deployed and the relevant HMS target species for individual trips, while the provision of long-term declarations out of the HMS fishery would minimize burden on vessels not targeting the HMS fisheries intended to be monitored by the current regulations.

Bluefin catch would be reported per set, which is more frequent than OMB guidelines suggest. Daily reports would be required so IBQs and quota allocations could be tracked on a real-time

basis. Since IBQ allocations are relatively small and may be comprised of a single fish, accurate real-time data would be necessary to manage the accounts and ensure that vessels remain within their quota.

**8. Provide information on the PRA Federal Register notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments. Describe the efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.**

Proposed Rule 0648-BC09, soliciting public comments on this collection, was published on August 21, 2013 (78 FR 52032). This request was submitted after that time, as another rule-related revision of this collection was then in process.

During the public comment period, NMFS received comments about both the VMS and electronic monitoring requirements included in the proposed rule. The comments and responses that were included in the final rule are appended below. In addition to the response in the final rule text included below, NMFS adjusted the VMS reporting requirements in this collection to include a verification stage. The requirement is described in Question 2 (Bluefin tuna effort and catch reports – new requirement) of this supporting statement.

Comment 92: NMFS received comments on proposed VMS requirements for the Purse Seine and Longline categories (preferred Alternative D1b), expressing both support and opposition. Several commenters were concerned about the functionality of certain VMS models, particularly those used in the mid-Atlantic.

Response: NMFS recently published a proposed rule regarding type-approval of VMS units to ensure vendors and associated mobile communications providers are meeting fishing industry needs (79 FR 53386; September 9, 2014). Specifically, the rule proposed NMFS procedures for EMTU/MTU and MCS type approval, type-approval renewal, and revocation; revision of latency standards; and methods to ensure compliance with type approval standards. By codifying requirements and processes, NMFS will be better able to ensure vendor compliance with the VMS type-approval requirements.

Comment 93: NMFS received comments that supported electronic monitoring (i.e., video camera and gear sensors), while other comments either expressed concern or opposed it. Comments supporting electronic monitoring indicated that it is not cost prohibitive, that it would allow NMFS to ground-truth other data, and that it supports accountability and enforcement. Those opposed to electronic monitoring said that it is cost prohibitive, an invasion of privacy, and is redundant with existing information. Some comments expressed concern about the functionality of a system, considering the issues experienced with some VMS functionality, and the ability to identify the difference between bigeye and bluefin tuna using video cameras. Implementation using a pilot scale was suggested, which would allow time to set up a functioning infrastructure. Expansion of electronic monitoring to other categories with dead discards was also suggested.

Response: Amendment 7 establishes requirements to monitor dead discards for all commercial user categories to better achieve the ICCAT requirement to account for sources of bluefin tuna

fishing mortality and to better monitor the fishery for bluefin accounting purposes domestically. This final rule implements a requirement for Purse seine category vessels to report dead discards via VMS, and for hand gear fisheries (General, Harpoon, and Charter/headboat categories) to report using an automated catch reporting system via the internet or phone. As described above, for all vessels issued an Atlantic Tunas Longline permit that fish with pelagic longline gear, vessel owners (or their representatives) must coordinate with the NMFS-approved contractor to install and test electronic monitoring equipment, and the contractor will then provide certification that the equipment has been properly installed. Longline category vessels are required maintain an electronic monitoring system (including video recording and data sensors) that will record all catch and relevant data regarding pelagic longline gear deployment and retrieval. The purpose of video monitoring for the Longline category is to provide a cost effective and reliable source of information to verify the accuracy of bluefin tuna interactions reported via VMS and logbooks. In many instances, the FEIS analysis found discrepancies in logbook data and observer data (considered to be highly accurate) reported for the same trip. The Amendment 7 electronic monitoring requirement supports accurate catch data and bluefin tuna IBQ management measures, by providing a means to verify the accuracy of the counts and identification of bluefin reported by the vessel operator. In light of public comments expressing concern about ensuring the functionality of electronic monitoring systems and the costs of such systems, this final rule relieves certain purchase and installation requirements that were set out in the proposed rule. Rather than requiring vessel owners to buy and install equipment and make decisions about equipment specifications and functionality, this final rule instead requires the vessel owners to obtain certification from a NMFS-approved contractor stating that the contractor has properly installed and verified the functionality of the electronic monitoring system in accordance with more detailed equipment and system requirements provided in the final rule. As set out in the proposed rule, vessel owners would have been responsible for the costs of the equipment and for installation for the electronic monitoring systems, which are estimated to be approximately \$19,175 for purchase and installation per vessel as well as variable costs of approximately \$225 per trip for data retrieval, fishing activity interpretation, and catch data interpretation. These costs are lower than the cost of increased observer coverage. The Southeast Fisheries Science Center estimates that observer deployment costs approximately \$1,075 per sea day, which equates to approximately \$9,675 per average nine-day pelagic longline trip.

Video monitoring is currently used in several fisheries, and NMFS has funded over 30 pilot projects to further research the use and effectiveness of electronic monitoring, including research on the accuracy of finfish identification. These studies provide evidence that properly deployed and maintained video monitoring camera systems can provide effective data for accurately identifying large pelagic species. NMFS acknowledges that identification of closely related species such as bluefin and bigeye tuna can be challenging, particularly for smaller fish. The size of tunas that are caught on pelagic longline vessels tend to be larger due to the size of the hooks used in commercial fisheries. To ensure accurate identification of all species, the NMFS-approved contractor will place cameras to ensure a clear view of the gear hauling location. NMFS white papers on electronic monitoring are available at the following web address: [http://www.nmfs.noaa.gov/sfa/reg\\_svcs/Councils/ccc\\_2013/K\\_NMFS\\_EM\\_WhitePapers.pdf](http://www.nmfs.noaa.gov/sfa/reg_svcs/Councils/ccc_2013/K_NMFS_EM_WhitePapers.pdf). NMFS will take into account the time required for owners to outfit their vessels with newly

required equipment when establishing the timetable for requirement vessels to have fully operational electronic monitoring systems.

**9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.**

No payments or gifts are to be offered as part of this information collection.

**10. Describe any assurance of confidentiality provided to respondents and the basis for assurance in statute, regulation, or agency policy.**

All VMS reports of vessel position, fishing effort, and bluefin tuna catch and electronic monitoring system video reports received by NMFS will be treated as confidential data to the extent required by the Magnuson-Stevens Act and [NOAA Administrative Order 216-100](#).

Assurances of this confidentiality will be included in the small business compliance guide (to be completed in conjunction with the final rule) and individual correspondence with vessel owners (draft attached in this submission).

**11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.**

No questions of a sensitive nature are asked.

**12. Provide an estimate in hours of the burden of the collection of information.**

**VMS REPORTING**

A total of 308 vessels were subject to the pre-Amendment 7 VMS requirements. Three purse seine vessels are added under Amendment 7, and the number of PLL vessels is updated using 2013 permit data to 252 (the previous number was 253). The total number of respondents for this collection would increase to 310 (Table 1). Based on the number of limited access permits for swordfish and tuna, an estimated 252 PLL vessels are subject to VMS requirements that would be increased under Amendment 7, as well as the new electronic monitoring requirements in Amendment 7. Based on the number of limited access directed shark permits, an estimated 25 bottom longline shark fishing vessels and 30 shark gillnet vessels are also subject to VMS requirements.

Once a VMS is installed by a qualified marine electrician, the vessel owner is required to submit an activation checklist via regular mail to NMFS OLE. **The estimate for this burden is 5 minutes per new participant.** Since the 3 purse seine vessels already have VMS installed, there would be no additional burden for this Amendment 7 provision.

Before leaving port, vessels must transmit an electronic hail-out message to NMFS OLE declaring target species and gear deployed for the fishing trip. Vessels must also report, or hail-in, to NMFS OLE when they are returning to port. **NMFS estimates that these declarations would require approximately 4 minutes per trip (2 declarations, 2 minutes/declaration).** There would be no additional time burden associated with the new PLL Amendment 7 provisions, since they are included in the two minutes per declaration.

Once on, position reports are automatically sent from the VMS on an hourly basis 24/7/365, and would be required to continue reporting continuously unless an email requesting a documented

power down exemption is submitted to and confirmed by NMFS OLE. There is no burden for these reports.

Vessels not pursuing HMS fisheries for two or more consecutive trips have the option to submit a long-term declaration out of the fishery which would exempt them from making hail-out and hail-in declarations for the duration of the long-term declaration. Declarations out of the fishery may be submitted via email (5 minutes per declaration), or during vessel hail-out (2 minutes per declaration). Vessels operating under long-term declarations out of the HMS fishery are still required to submit automatic hourly position reports, and remain subject to all other applicable HMS regulations. Burden associated with maintenance is not anticipated with the E-MTU VMS units.

Under Amendment 7, PLL and purse seine vessels are required to use VMS to submit catch and effort data for each set that captures bluefin tuna. **Each report is estimated to take approximately 5 minutes for PLL vessels and 15 minutes for purse seine vessels. Review of VMS-submitted reports at dockside is expected to take 1 minute per trip for each vessel type.**

**Table 1. Number of HMS Vessels Required to Comply with VMS Requirements by Gear Type Based on 2010/2013\*Permit Data.**

<b>PLL (Tuna Longline)</b>	<b>Bottom Longline (Directed Shark Permit Holders in NC, SC, and VA)</b>	<b>Gillnet (Vessels with a Directed Shark Permit and Landed Sharks with Gillnet, 2004-2007)</b>	<b>Purse Seine</b>	<b>Total</b>
252*	25	30	3*	310

\*2013 Permit data (i.e, 252 PLL and 3 PS permits) are used for Amendment 7 changes, including all PLL VMS requirements

**1. PLL Vessels:**

**One-time burden (keeping a placeholder of a total of one annual respondent and associated burden for this request, not per fleet):**

Total responses: Unknown (will only apply to new entrants to the fishery or current fishermen purchasing new units – both will likely be rare occasions)

Installation time: average of 4 hours

Submission of completed installation checklist: 5 minutes

Total hours: Unknown.

### **Recurring burden (If no vessels declare out of the fishery):**

All PLL vessels participating in HMS fisheries are currently required to have an E-MTU VMS unit installed by a qualified marine electrician, and to declare target species and gear being deployed to NMFS OLE before fishing and inform NMFS OLE when returning to port. These vessels must provide hourly position reports 24/7/365 unless granted a documented power down exemption from NMFS OLE.

Trip duration within the PLL fleet varies based on time of year, location, target species, market prices, quota availability, and other factors. Logbook data indicate that the average trip duration for PLL vessels is 9 days. It is assumed that vessels need at least one day in port to offload their catch and procure supplies before returning to sea. PLL vessels may take as many as 36 trips per year, which equals 324 days per year at sea (36 trips/year \* 9 days/trip = 324). **Each trip would require 2 declarations/trip and it is estimated that each declaration would require 2 minutes:  $252 \times 72 = 18,144$  responses  $\times 2$  minutes =  $36,288/60$  minutes =  $604.8$  (605) hours.**

Under the new provisions of Amendment 7, PLL vessels are also required to use VMS to report bluefin tuna catch and fishing effort for each set with bluefin tuna interaction. Each report is expected to take 5 minutes. Based on HMS logbook data from 2006-2012, on average, **PLL vessels have 1.0 interactions with bluefin tuna per trip:  $252 \times 36 \times 1.0 = 9072$  responses  $\times 5$  minutes =  $45,360/60$  minutes =  $756$  hours.**

Upon offloading, Amendment 7 requires vessel operators to check the IBQ data system to verify that it received VMS transmitted catch and effort data, which would require one minute per trip:  **$252$  vessels  $\times 36$  trips =  $9,072$  responses  $\times 1$  minute =  $151$  hours.**

NMFS estimates that 25% of the VMS data submitted will not reach the IBQ data system and vessel operators will have to re-enter it upon offloading. Data re-entry is expected to take the same amount of time, so 25% of the previous calculations is used to estimate the number of responses: **25% of  $9,072 = 2,268$  responses; 25% of  $756$  hours =  $189$  hours.**

### **Recurring burden (If no vessels declare out of the fishery):**

1) Hail in/hail out responses per vessel: 36 trips/year \* 2 declarations = 72 declarations. Total hail in/out responses:  $72 * 252 = 18,144$ .

$18,144$  responses \* 2 minutes/response =  $36,288$  minutes/60 minutes/hour = **605 hours**

2) Bluefin tuna and effort reports: 36 trips/year \* 1.0 reports per trip = 36 reports per vessel

Total bluefin tuna responses =  $36 * 252 = 9,072$

$9,072$  responses \* 5 mins/response =  $45,360$  minutes/60 minutes/hour = **756 hours**

3) Review of VMS submitted bluefin tuna and effort reports: 36 trips/year \* 1 report per trip = 36 reports per vessel

Total review responses =  $36 * 252 = 9,072$

$9,072$  responses \* 1 min/response =  $9,072$  minutes/60 minutes/hour = **151 hours**

4) Resubmission of VMS reports due to faulty VMS units – 25% of all bluefin tuna and effort reports: Total responses =  $9,072 * 25\% = 2,268$



2,268 responses \* 5 mins/response = 11,340 minutes/60 minutes/hour = **189 hours**

**Total annual responses: 18,144 + 9,072 + 9,072 + 2,268 = 38,556 responses**

**Total annual hours: 605 + 756 + 151 + 189 = 1,701 hours**

**Maximum reduction in burden if each vessel declaring out of the fishery (full season):**

1) Hail in/hail out per vessel response reduction: 36 trips/year \* 2 declarations/trip – 1 initial declaration out of fishery = 71 responses

252 vessels \* 1 declaration \* 2 minutes/declaration / 60 minutes/hour = 8.4 (8) hours

2) Bluefin tuna and effort reports: 36 trips/year \* 1.0 reports per trip = 36 reports per vessel

Total bluefin tuna responses = 36 \* 252 = **9,072**

9,072 responses \* 5 mins/response = 45,360 minutes/60 minutes/hour = **756 hours**

3) Review of VMS submitted bluefin tuna and effort reports: 36 trips/year\*1 report per trip = 36 reports per vessel

Total review responses = 36 \* 252 = **9,072**

9,072 responses \* 1 min/response = 9,072 minutes/60 minutes/hour = **151 hours**

4) Resubmission of VMS reports due to faulty VMS units – 25% of all bluefin tuna and effort reports: Total responses = 9,072 \* 25% = **2,268**

2268 responses \* 5 mins/response = 11,340 minutes/60 minutes/hour = **189 hours**

**Maximum total reduction: 8 + 756 + 151 + 189 = 1,104 hours.**

## **2. Shark Bottom Longline Vessels:**

All vessels with bottom longline gear onboard and possessing a directed shark permit in North Carolina, South Carolina, and Virginia are required to use E-MTU VMS from January 1 to July 31 when they are between 33 N and 36.3 N on an annual basis. Newly permitted vessels would be required to have an E-MTU VMS unit installed by a qualified marine electrician, declare target species and gear being deployed to NMFS OLE before/after fishing, and provide hourly position reports 24/7 from January 1 to July 31, unless granted a documented power down exemption from NMFS OLE.

During this time period (January-July) and in this vicinity, most participants with BLL on board would be targeting Large Coastal Sharks (LCS). It is assumed that most vessels targeting LCS would be making day trips (i.e., returning to port to offload once every 24 hours). Therefore, it is assumed that vessels could be in this vicinity with bottom longline gear onboard for 212 days/year (January 1 – July 31).

**One-time burden (keeping a placeholder of a total of one annual respondent and associated burden for this request, not per fleet):**

Total responses: Unknown (will only apply to new entrants to the fishery or current fishermen purchasing new units – both will likely be rare occasions)

Installation time: average of 4 hours

Submission of completed installation checklist: 5 minutes

Total hours: Unknown.

**Recurring burden (If no vessels declare out of the fishery):**

Per vessel responses: 212 trips/year \* 2 declarations = 424 declarations. Total responses: 424 \* 25 = **10,600** x 2 minutes/60 minutes = **353.4 (353) hours**.

**Total annual responses: 10,600**

**Total annual hours: 353**

**Maximum reduction in burden if each vessel declaring out of the fishery (full season):**

Per vessel response reduction: 212 trips/year \* 2 declarations/trip – 1 initial declaration out of fishery = 423 responses

25 vessels \* 1 declaration \* 2 minutes/declaration / 60 minutes/hour = 0.8 hours (1 hour)

**3. Directed Shark Gillnet Vessels:**

Vessels that possess a shark directed permit and have gillnet gear onboard between November 15 and April 15 are required to use VMS in the Southeast U.S. Restricted Area as defined in 50 CFR 229.32. NMFS estimates that 30 vessels meet this requirement.

The gillnet fishery primarily targets Small Coastal Sharks (SCS) and blacktip sharks (included in the aggregate LCS management unit). Season length for sharks varies from year to year based on quota availability, catch rates, and other considerations. Many shark gillnet vessels possess permits which allow them to participate in other fisheries using gillnet gear, therefore, to estimate burden it is assumed that affected vessels could be engaged in fishing activities and subject to VMS requirements for the duration of this time period every year (152 days).

**One-time burden (keeping a placeholder of a total of one annual respondent and associated burden for this request, not per fleet):**

Total responses: Unknown (will only apply to new entrants to the fishery or current fishermen purchasing new units – both will likely be rare occasions)

Installation time: average of 4 hours

Submission of completed installation checklist: 5 minutes

Total hours: Unknown.

**Recurring burden (If no vessels declare out of the fishery):**

Responses: 152 trips/year \* 2 declarations = 304 \* 30 = **9,120 responses** \* 2 minutes/60 minutes = **304 hours**.

**Total annual responses: 9,120**

**Total annual hours: 304**

**Maximum reduction in burden if each vessel declaring out of the fishery (full season):**

Per vessel response reduction: 152 trips/year \* 2 declarations/trip – 1 initial declaration out of fishery = 151 responses

30 vessels \* 1 declaration \* 2 minutes/declaration / 60 minutes/hour = 1 hour

**4. Purse Seine**

Amendment 7 would require vessels with Atlantic tunas Purse Seine category permits to install a E-MTU VMS (if not already installed), and follow reporting requirements applicable to other VMS-carrying HMS vessels, including hail-in/hail out, 24/7/365 position reporting, and long-term declarations out of the fishery. Amendment 7 would also require purse seine vessels to report bluefin catch disposition and effort after each set with bluefin tuna interactions.

The year with greatest Purse Seine category activity in the last 10 years was 2013 when one vessel had two successful trips with a few sets for each trip. 2013 data are used in this analysis. Similar to the PLL fishery, the time burden for hail-in/out is expected to be 2 minutes each, but reporting bluefin tuna interaction and effort is expected to take longer (15 minutes) since the purse seine fishery targets bluefin tuna and would likely have more bluefin tuna to report.

**One-time burden (keeping a placeholder of a total of one annual respondent and associated burden for this request, not per fleet):**

Total responses: Unknown (will only apply to new entrants to the fishery or current fishermen purchasing new units – both will likely be rare occasions)

Installation time: average of 4 hours

Submission of completed installation checklist: 5 minutes

Total hours: Unknown.

**Recurring burden:**

1) Hail-in/hail-out declarations: 2 trips/year \* 2 declarations per trip \* 3 vessels = 12 responses \* 2 minutes/60 minutes = 0.4 hours.

2) Bluefin tuna catch and fishing effort: 3 sets per trip \* 2 trips \* 3 vessels = 18 responses \* 15 minutes/60 minutes per bluefin report = 4.5 (5) hours

3) Review of VMS submitted bluefin tuna and effort reports: 2 trips/year\*1 report per trip = 2 reports per vessel

Total review responses = 2 reports \* 3 vessels = 6 responses

6 responses \* 1 min/response = 6 minutes/60 minutes/hour = 0.1 hours

4) Resubmission of VMS reports due to faulty VMS units – 25% of all bluefin tuna and effort reports: Total responses = 6 \* 25% = 1.5 (2) responses

2 responses \* 15 mins/response = 30 minutes/60 minutes/hour = **0.5 (1) hour**

**Total annual responses: 38**

**Total annual hours: 6**

**Maximum reduction in burden if each vessel declares out of the fishery (full season):**

1) Per vessel response reduction: 2 trips/year \* 2 declarations per trip = 4 declarations -1 initial declaration = 3 responses

3 responses \* 2 minutes/60 minutes = 0.1 hours

2) **Bluefin tuna catch and fishing effort:** 3 sets per trip \* 2 trips \* 3 vessels = **18 responses** \* 15 minutes/60 minutes per bluefin report = **4.5 hours**

3) Review of VMS submitted bluefin tuna and effort reports: 2 trips/year\*1 report per trip = 2 reports per vessel

Total review responses = 2 reports \* 3 vessels = 6 responses

6 responses \* 1 min/response = 6 minutes/60 minutes/hour = 0.1 hours

4) Resubmission of VMS reports due to faulty VMS units – 25% of all bluefin tuna and effort reports: Total responses = 6 \* 25% = 1.5 (2) responses

2 responses \* 15 mins/response = 30 minutes/60 minutes/hour = 0.5 hours

**Total reduction: 6 hours**

**One VMS purchase and installation:** 2 responses (installation and checklist), totaling 4 hours.

**ELECTRONIC MONITORING (PLL Vessels)**

Amendment 7 requires PLL vessels to use an electronic monitoring system to record all longline catch and relevant data regarding PLL retrieval and deployment. Vessel owners (or their representatives) must coordinate with the NMFS-approved contractor to install and test electronic monitoring equipment, and the contractor will then provide certification that the equipment has been properly installed. The burden and cost associated with this requirement can be divided into three categories – one time installation, annual maintenance, and per-trip data retrieval.

There would be no reports required to be completed by the vessel owner for installation or annual maintenance. The contractor will provide a certification that the equipment has been properly installed. Data retrieval is expected to take approximately 2 hours per trip. **Based on the upper limit of 36 PLL trips (responses) per year, data retrieval is estimated at 72 hours per vessel per year.** Actual use of the equipment during the fishing trip requires minimal interaction by the crew.

**Number of responses** = 36 trips \* 252 vessels = **9,072 responses**

**Annual time burden** for each vessel is estimated at 72 hours per vessel \* 252 vessels = **18,144 hours**

**Table 2. Summary of the maximum burden for VMS and Electronic Monitoring for all vessels.**

	PLL vessels	Bottom longline vessels with directed shark permits	Gillnet vessels with directed shark permits	Purse seine vessels	Total
<b>Respondents</b>	252	25	30	3	310
<b>Responses</b>	47,628*	10,600	9,120	38	67,386
<b>Hours</b>	19,845**	353	304	6	20,508

\*VMS total of 38,556 plus 9,072 for data retrieval

\*\*VMS total of 1,701 + 18,144 for data retrieval

**Adding VMS installation placeholder: 2 responses and 4 hours, totals are 67,388 responses and 20,512 hours (rounded up to 20,513 in ROCIS).**

**13. Provide an estimate of the total annual cost burden to the respondents or record-keepers resulting from the collection.**

Of the 310 vessels required to have VMS installed, all were previously required to purchase and install their units, or in the case of the purse seine vessels, have installed them to comply with requirements in other fisheries. So, the start-up costs for these vessels have not been included in the annual cost burden estimates. However, communication and maintenance costs, which are ongoing, have been included for all vessels in Table 3.

**Start-up costs for new or replacement vessels** would be: \$3,100 for the unit and \$50 - \$400 for installation: for placeholder installation, the cost would be **\$3,325 (purchase plus average of installation costs)**

Electronic monitoring is a new requirement under Amendment 7. In the final rule, NMFS clarified funding would be provided for the purchase of electronic monitoring systems and installation. However, the availability of funds for future years is unknown. As a precautionary measure, we are continuing to assign these costs to the public in this summary statement, with the intent of identifying the maximum likely public burden associated with these reporting requirements. Costs for unit purchase, installation, maintenance, and use are included in Table 4.

**Table 3. Summary of the estimated total costs associated with the current and revised E-MTU VMS requirements in Atlantic HMS fisheries.**

	<b>PLL Vessels (252)</b>	<b>Bottom Longline Vessels (25)</b>	<b>Gillnet Vessels (30)</b>	<b>Purse Seine Vessels (3)</b>
<b>Days Fishing/Year</b>	324	212	152	10
<b>Number of Fishing Trips/Year</b>	36	212	152	2
<b>Monthly E-MTU VMS Unit Plans average including 24/7 Position Reports and data</b>	\$44.00	\$44.00	\$44.00	\$44.00
<b>Annual Compliance Costs/ Vessel (\$44/month * months fishing/year)</b>	\$528/vessel (12 months)	\$308/vessel (7 months)	\$220/vessel (5 months)	\$44/vessel (1 month)
<b>Annual Compliance Costs + Maintenance Costs (\$500/year)</b>	\$1,028	\$808	\$720	\$544
<b>Total Costs by Fleet</b>	\$259,056	\$20,200	\$21,600	\$1,632
<b>VMS Compliance Costs</b>	\$302,488			

**Table 4. Summary of total costs associated with the electronic monitoring requirements for PLL vessels included in Amendment 7.**

Item	Per vessel cost	Per vessel annualized (3 yrs) cost	Annualized Fleet Cost (252 vessels)
Purchase and installation (capital/start-up)	\$17,825	\$5,942	\$1,497,384
Service (6x/yr, \$45 each)		\$270	\$68,040
Data retrieval & interpretation (\$225/trip)		\$8,100	\$2,041,200
<b>Total Annualized Fleet Costs</b>			<b>\$3,606,624</b>

**Gross annual cost estimate for electronic monitoring = \$302,488 + \$3,606,624 + placeholder VMS purchase and installation of \$3,325 = \$3,912,437.**

**14. Provide estimates of annualized cost to the Federal government.**

There would be no significant cost to the Federal government for the VMS portion of this collection outside of the initial reimbursement for newly permitted vessels. NMFS is developing an integrated hardware and tracking system to manage the various VMS programs being developed for many other U.S. fisheries. Those costs are already covered by current programs of NMFS OLE and are extraneous to this collection. Given the current capacity of these systems, incremental costs specifically attributable to the HMS VMS program are negligible.

For the electronic monitoring portion of this collection, costs to the government would include personnel time for development and management of the new electronic monitoring program. Tasks will likely include development of protocols for equipment installation and maintenance, and database construction and management. These tasks are likely to require one half of a full time employee at the Band IV level annually, at a **cost to the government of approximately \$90,000 per year (including benefits).**

In the final rule, NMFS clarified funding would be provided for the purchase of electronic monitoring systems and installation in the next fiscal year. However, the availability of funds for future years is unknown. As a precautionary measure, we are continuing to assign these costs to the public in this summary statement, with the intent of identifying the maximum likely public burden associated with these reporting requirements. Actual NMFS costs for installation are not included here to avoid double-counting.

**15. Explain the reasons for any program changes or adjustments.**

**Program changes:** The hours and costs are changed to reflect the addition of new requirements under Amendment 7, including VMS requirements for purse seine vessels, reports of bluefin tuna interactions for PLL and purse seine vessels, and electronic monitoring for PLL vessels. There are an additional 29,510 responses, 19, 246 hours and \$3,606,624.

**Adjustments:** There are no current capital costs for VMS installations, or any expected in the next three years; however, one installation is included here (there were previously 5). Minor changes in trip numbers changed hail-in/hail out responses and costs, and automatic location costs: a net decrease of 68 responses, a net decrease of 19 hours, and a net increase of \$23,607 in costs.

In the previous submission, VMS maintenance costs were included in the supporting statement, but omitted in ROCIS; thus there is an increase of \$155,000, due to correction. Therefore, total adjustment to costs is \$178,607.

	PREVIOUS	NEW (TOTAL)	CHANGE	ADJUSTMENT
RESPONDENTS	308	310	2	0
RESPONSES	37,946	67,388	29,438	4
HOURS	1,286	20,590	19,304	-17
COSTS	\$127,206	\$3,912,437	\$3,606,624	\$178,607

**16. For collections whose results will be published, outline the plans for tabulation and publication.**

No formal scientific publications based on this program are planned at this time. The data will be used for enforcement, management reports, and drafting or evaluating fishery management plan amendments by NMFS. However, subsequent use of the data collected over a series of years may be included in scientific papers and publications. Position data will remain confidential and will only be revealed to the public in aggregated form.

**17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons why display would be inappropriate.**

Not Applicable.

**18. Explain each exception to the certification statement.**

There are no exceptions.

**B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS**

This collection does not employ statistical methods.