SUPPORTING STATEMENT ELECTRONIC MONITORING SYSTEMS FOR ATLANTIC HIGHLY MIGRATORY SPECIES (HMS) OMB CONTROL NO. 0648-0372

A. JUSTIFICATION

This request is for revision and extension of the information collection.

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 <u>Magnuson-Stevens Fishery Conservation and Management Act</u> (Magnuson-Stevens Act; 16 U.S.C. 1801 *et. seq.*) and the <u>Atlantic Tunas Convention Act of 1975</u> (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 (Amendment 7) 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. 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. Implementation of 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, required further VMS and electronic monitoring (EM) measures. These measures provide real-time catch monitoring that is necessary to track relatively small quantities of bluefin catch and also help to ensure PLL vessels stay within their IBO allocations.

Electronic monitoring and VMS requirements in HMS fisheries approved under this collection are:

- 1) Pelagic longline (PLL), shark bottom longline (BLL)^a, and shark gillnet vessels^b 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);

^a between 33°00' N. latitude and 36°30' N. latitude between January 1 and July 31 every year

^b 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

- 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;
- 5) PLL and Purse Seine vessels are required to use VMS E-MTUs to make reports of fishing effort and bluefin tuna catch for each set; and
- 6) PLL vessels are required to install and use an EM system to record effort and document catch during PLL fishing activity, including incidentally caught bluefin tuna.

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

VMS installation and activation checklist - Requirement for additional respondents

Individuals purchasing VMS for the first time (i.e., new entrants), 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 Office of Law Enforcement (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

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 the 2006 Consolidated HMS FMP and its amendments. 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 NMFS OLE investigations, and to support enforcement of other regulations such as closed seasons once a quota has been reached. The requirement to notify NMFS OLE 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

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 unit. 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 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

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 dry dock 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 OLE, only in certain circumstances (i.e., when the vessel in going into dry dock for repairs or will not be fishing for an extended period of time).

Bluefin tuna catch and fishing effort reports

PLL and purse seine vessels are required to report fishing effort and disposition of any bluefin tuna catch (i.e., kept or discarded) for each set. These data are 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. Permit holders and fishery participants, including dealers who purchase from vessels fishing with PLL gear, maintain an IBQ System account (user registration in the IBQ system is addressed in collection 0648-0677). When the catch and effort data entered by the dealer are correct, the vessel operator must electronically sign to confirm the catch and effort data and the data entered by the dealer regarding the bluefin tuna that were sold.

Electronic monitoring system – Requirement for PLL vessels

All PLL vessels are required to have a NMFS-approved contractor install an EM 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 PLL gear retrieval. NMFS uses the recorded data to verify the accuracy of counts and identification of bluefin tuna reported by the vessel owner/operator, as well as

observers that may also be on board the vessel. Electronic monitoring enables 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 augments 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.

NMFS has paid for EM equipment and its installation to date. *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 EM to the vessel owner.*

For all vessels issued an Atlantic Tunas Longline permit that fish with PLL gear, vessel owners (or their representatives) must coordinate with the NMFS-approved contractor to install and test EM equipment, and the contractor will then provide certification that the equipment has been properly installed. Vessel owners are required to make their vessel accessible to designated personnel on a specific date, or range of dates, to allow installation, testing, and training of EM equipment, and may be required to steam to a designated port within their geographic region to enable such installation and training.

To fish using PLL gear, a vessel must have a valid certification form from the NMFS-approved contractor that it has a fully functioning EM system on board. Because the PLL fleet is diverse with respect to vessel size, mechanical infrastructure, and operation, and the technology supporting EM is changing and improving, NMFS implemented detailed regulations that include some technical specifications regarding the necessary equipment that constitutes an EM system to provide flexibility to allow vessels to install equipment that performs well in a cost effective manner. NMFS utilizes 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 a NMFS-approved contractor, coordinate installation and maintain the following equipment, as components of an EM system: Two to four video cameras, a recording device, video monitor, hydraulic pressure transducer, winch drum rotation sensor, system control box, Global Positioning System (GPS) receiver, and related support equipment needed to achieve the objectives (i.e., power supply, camera mounts, lighting) of EM. Slight modifications to the equipment listed above may be required to support the objectives of EM, 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 EM 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 PLL 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 EM 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 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 (i.e., 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-approved 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 EM 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 will 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 <u>Section 515 of Public Law</u> <u>106-554</u>.

3. <u>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</u>.

VMS is the best technology available at this time for monitoring vessel locations to aid enforcement efforts. The integrated 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 position 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 NMFS OLE 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. NMFS requires EM as a means to verify self-reported bluefin tuna data.

4. Describe efforts to identify duplication.

NMFS is the sole authority responsible for managing the domestic Atlantic 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 NMFS OLE and is not duplicated for multiple fisheries.

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

5. <u>If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden</u>.

All owners of vessels with commercial permits for HMS, (i.e., swordfish, sharks, and tuna) are considered small entities. Current VMS regulations require approximately 194 PLL, BLL, 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 recently 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 EM rather than expansion of observer coverage requirements in the PLL fleet was largely an effort to control costs for small businesses and the government. NMFS estimated that total annual costs of EM 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 PLL 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, NMFS 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 EM system in accordance with detailed equipment and system requirements. To ease the regulated community's burden associated with EM requirements, NMFS identified funds to pay for the equipment and its installation when Amendment 7 was initially implemented in 2015. 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 EM to the vessel owner.

6. <u>Describe the consequences to the Federal program or policy activities if the collection is</u> <u>not conducted or is conducted less frequently</u>.

Using VMS to verify the location of a vessel is passive and automatic, requiring no reporting time on the part of the vessel operator. NMFS 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 stock decline. As a practical matter, it is very difficult for NMFS OLE 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 EM 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, accurate real-time data are necessary to ensure that vessels remain within their quota.

Real-time data collection enhances and improves 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 U.S. overharvests its quota.

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

VMS units report 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 is reported per set, which is more frequent than OMB guidelines suggest. Daily reports are required so IBQs and quota allocations can be tracked on a real-time basis. Since IBQ allocations are relatively small, accurate real-time data are necessary to manage the accounts and ensure that vessels remain within their quota.

8. <u>Provide information on the PRA Federal Register notice that solicited public comments</u> 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.

A <u>Federal Register</u> Notice soliciting public comments on this collection was published on June 8, 2016 (81 FR 36893). NMFS did not receive any comments referring to the Federal Register notice, but comments about EM requirements have been received through the HMS Advisory Panel since the implementation of Amendment 7.

Specifically in March 2016, fishermen have provided comments asking that EM hard drives be returned to NMFS less frequently, possibly on a bimonthly basis. Currently, PLL fishermen are required to return their EM system hard drives to NMFS following each fishing trip. In

response, NMFS has indicated it would place the matter under consideration as part of a threeyear review of the IBQ program.

Other comments received on EM have pertained to technical difficulties with the equipment. One fisherman has reported his cameras cutting off regularly when on the water necessitating he turn in both his hard drives after a trip as the system switches to the back-up hard drive after being restarted. Other fishermen have reported shifts in camera or other equipment positions that have impacted the operation of EM system. NMFS will also consider these issues in the IBQ program three-year review, and works with the system contractor to address any technical issues as they arise.

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. <u>Describe any assurance of confidentiality provided to respondents and the basis for</u> <u>assurance in statute, regulation, or agency policy</u>.

All VMS reports of vessel position, fishing effort, and bluefin tuna catch and EM system video reports received by NMFS will be treated as confidential data to the extent required by the Magnuson-Stevens Act and <u>NOAA Administrative Order 216-100</u>. Assurances of this confidentiality are included in the small business compliance guide and individual correspondence with vessel owners.

11. <u>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</u>.

No questions of a sensitive nature are asked.

12. <u>Provide an estimate in hours of the burden of the collection of information</u>.

VMS REPORTING

A total of 194 vessels are subject to the EM and/or VMS requirements. The number of PLL vessels is updated to 136 (the previous number was 252). The total number of respondents for this collection would decrease to 194. Based on the number of limited access permit holders for swordfish and tuna that qualified for IBQ shares following the implementation of Amendment 7, there are 136 PLL vessels that are subject to VMS and EM requirements (Table 1). Based on the number of limited access directed shark permits, an estimated 25 BLL shark fishing vessels and 30 shark gillnet vessels are also subject to VMS requirements. Based on 2015 permit data, 3 purse seine 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.** 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).**

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.

PLL and purse seine vessels are required to use VMS to submit catch and effort data for each set. 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.

Type Based on 2015/2016 Permit Data.					
Pelagic Longline (Tuna Longline)	Bottom Longline (Directed Shark Permit Holders in NC, SC, and VA)	Gillnet (Vessels with a Directed Shark Permit and Landed Sharks with Gillnet)	Purse Seine	Total	
136	25	30	3	194	

 Table 1. Number of HMS Vessels Required to Comply with VMS Requirements by Gear

 Type Based on 2015/2016 Permit Data

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 infrequent)

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: 136 x 72 = 9,792 responses x 2 minutes = 19,584/60 minutes = 326.4 (326) hours.

PLL vessels are also required to use VMS to report bluefin tuna catch and fishing effort for each set. 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: 136 x 36 x 1.0 = 4,896 responses x 5 minutes = 24,480/60 minutes = 408 hours.

Upon offloading, vessel operators are required to check the IBQ data system to verify that it received VMS transmitted catch and effort data, which would require one minute per trip: **136 vessels x 36 trips = 4,896 responses x 1 minute = 81.6 (82) hours.**

NMFS estimates that 10% 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 10% of the previous calculations is used to estimate the number of responses: **10% of 4,896 = 490 responses; 10% of 408 hours = 41 hours.**

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

1) <u>Hail in/hail out responses per vessel</u>: 36 trips/year * 2 declarations = 72 declarations. Total hail in/out responses: 72 * 136 = **9,792**.

18,144 responses * 2 minutes/response = 36,288 minutes/60 minutes/hour = **326 hours**

2) <u>PLL effort and bluefin tuna catch reports</u>: 36 trips/year * 1.0 reports per trip = 36 reports per vessel

Total PLL effort and bluefin tuna catch responses = 36 * 136 = **4,896**

9,072 responses * 5 mins/response = 45,360 minutes/60 minutes/hour = 408 hours

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

Total review responses = 36 * 136 = **4,896**

4,896 responses * 1 min/response = 4,896 minutes/60 minutes/hour = 82 hours

4) <u>Resubmission of VMS reports due to incomplete data transmission</u> – 10% of all bluefin tuna and effort reports: Total responses = 4,896 * 10% = 490

490 responses * 5 mins/response = 2,450 minutes/60 minutes/hour = **41 hours**

Total annual responses: 9,792 + 4,896 + 4,896 + 490 = 20,074 responses Total annual hours: 326 + 408 + 82 + 41 = 857 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

136 vessels * 1 declaration * 2 minutes/declaration / 60 minutes/hour = 8.1 (8) hours

2) PLL effort and <u>bluefin tuna catch reports</u>: 36 trips/year * 1.0 reports per trip = 36 reports per vessel

Total PLL effort and bluefin tuna catch responses = 36 * 136 = **4,896**

8,784 responses * 5 mins/response = 24,480 minutes/60 minutes/hour = 408 hours

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

Total review responses = 36 * 136 = **4,896**

8,784 responses * 1 min/response = 4,896 minutes/60 minutes/hour = 82 hours

4) <u>Resubmission of VMS reports due to incomplete data transmissions</u> – 10% of all PLL effort and bluefin tuna catch reports: Total responses = 4,896 * 10% = **490**

490 responses * 5 mins/response = 2,450 minutes/60 minutes/hour = 41 hours

Maximum total reduction: 8 + **408** + **82** + **41** = **539 hours.**

2. Shark Bottom Longline Vessels:

All vessels with BLL 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 BLL 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 infrequent)

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 infrequent)

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

Vessels with Atlantic tunas Purse Seine category permits are required to install a E-MTU VMS (if not already installed), and follow reporting requirements, including hail-in/hail out, 24/7/365 position reporting, and long-term declarations out of the fishery. Purse seine vessels are also required to report fishing effort and bluefin catch after each set.

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 fishing effort and bluefin catch 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 infrequent)

Installation time: average of 4 hours

Submission of completed installation checklist: 5 minutes

Total hours: Unknown.

Recurring burden:

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

2) Fishing effort and b<u>luefin tuna catch:</u> 3 sets per trip * 2 trips * 3 vessels = 18 responses * 15 minutes/60 minutes per bluefin report = **4.5 (5) hours**

3) <u>Review of VMS submitted fishing effort and bluefin tuna catch reports</u>: 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) <u>Resubmission of VMS reports due to incomplete data transmission</u> – 10% of all fishing effort and bluefin tuna catch reports: Total responses = 6 * 10% = 0.6 (1) responses

1 responses * 15 mins/response = 15 minutes/60 minutes/hour = **0.25 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) Fishing effort and bluefin tuna catch: 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 fishing effort and bluefin tuna catch 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 incomplete data transmission – 10% of all fishing effort and bluefin tuna catch reports: Total responses = 6 * 10% = 0.6 (1) responses

1 responses * 15 mins/response = 15 minutes/60 minutes/hour = 0.25 hours

Total reduction: 6 hours

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

ELECTRONIC MONITORING (PLL Vessels)

PLL vessels are required to use an EM system to record all longline catch and relevant data regarding PLL retrieval. Vessel owners (or their representatives) must coordinate with the NMFS-approved contractor to install and test EM 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 (removing the EM hard drive and mailing it to the contractor) is expected to take approximately 1 hour per trip. **Based on the upper limit of 36 PLL trips** (responses) per year, data retrieval is estimated at 36 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 * 136 vessels = 4,896 responses

Annual time burden for each vessel is estimated at 36 hours per vessel * 136 vessels = **4,896** hours

	Pelagic longline vessels	Bottom longline vessels with directed shark permits	Gillnet vessels with directed shark permits	Purse seine vessels	Total
Respondents	136	25	30	3	194
Responses	24,970*	10,600	9,120	38	44,728
Hours	5,753**	353	304	6	6,416

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

*VMS total of 20,074 plus 4,896 for data retrieval

**VMS total of 857 + 4,896 for data retrieval

Adding VMS installation placeholder: 2 responses and 4 hours, totals are 44,730 responses and 6,420 hours.

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

Of the 194 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).**

To date, NMFS has provided funding for the purchase of EM systems and installation for 112 PLL vessels. There are an additional 24 vessels with PLL permits and IBQ shares that have yet to install EM equipment, and would need to do so if they wish to continue fishing in the PLL fishery. 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. However, NMFS has taken over costs associated with data retrieval (downloading from the hard drives) and review as specified in section 14 below. Costs for unit purchase, installation, maintenance, and use are included in Table 4.

	PLL Vessels (136)	Bottom Longline Vessels (25)	Gillnet Vessels (30)	Purse Seine Vessels (3)
Days Fishing/Year	324	212	152	10
Monthly E-MTU VMS Unit Plans average including 24/7 Position Reports and data	\$44	\$44	\$44	\$44
Annual Compliance Costs/ Vessel (\$44/month * months fishing/year)	\$528/vessel (12 months)	\$308/vessel (7 months)	\$220/vessel (5 months)	\$44/vessel (2 months -10 days may be spread over 2 months)
Annual Compliance Costs + Maintenance Costs (\$500/year)	\$1,028	\$808	\$720	\$588
Total Costs by Fleet (cell above times # of vessels in first cell)	\$139,808	\$20,200	\$21,600	\$1,764
VMS Compliance Costs	\$183,372			

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

Item	Per vessel cost	Per vessel annualized (3 yrs) cost	Annualized Fleet Cost
Purchase and installation (capital/start-up for remaining 24 vessels)	\$17,825	\$5,942	\$142,608
Service (6x/yr, \$45 each for 136 vessels)		\$270	\$36,720
Mailing hard drives + return postage (36 trips/yr, \$11.50 each for 136 vessels)		\$414	\$56,304
Total Annualized Fleet Costs	\$235,632		

Table 4. Summary of total costs associated with the EM requirements for PLL vessels.

Gross annual cost estimate for EM = \$183,372 + \$235,632 + placeholder VMS purchase and installation of \$3,325 = \$422,329.

14. <u>Provide estimates of annualized cost to the Federal government</u>.

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 EM portion of this collection, costs to the government would include personnel time for management of the EM program and data retrieval and interpretation. Management of the EM program requires 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).** Costs associated with EM data retrieval and interpretation are \$225 per trip with 36 trips per year for a total cost of \$8,100 per vessel per year. **Total annual costs for data retrieval and interpretation for a fleet of 136 PLL vessels would thus be \$1,101,600 per year.**

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

Program changes: The costs are changed to reflect the government taking on funding EM electronic data retrieval and review costs (-\$939,600 per year), and PLL fishermen being required to pay for the postage costs of mailing EM hard drives to the government following each trip (plus \$56,304 per year). **These resulted in an overall reduction of \$883,296 in costs to respondents per year.**

Adjustments: The hours and costs are adjusted to reflect changes in the number of PLL vessels required to report with VMS and EM that qualified for IBQ shares (253 to 136 vessels), the number that have already installed EM equipment (112 of 136 vessels), the estimated time it takes to mail in an EM hard drive (2 hrs reduced to 1 hr), and an increase in the number of months purse seine vessels are likely to be fishing and required to use VMS (1 month to 2 months). There were reductions of 117 respondents, 22,658 responses, 14,093 hours and \$2,606,812.

	PREVIOUS	NEW (TOTAL)	CHANGE	ADJUSTMENT
RESPONDENTS	311	194	-0	-117
RESPONSES	67,388	44,730	-0	-22,658
HOURS	20,513	6,420	-0	-14,093
COSTS	\$3,912,437	\$422,329	-\$883,296	-\$2,606,812

16. <u>For collections whose results will be published, outline the plans for tabulation and publication</u>.

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. 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.