DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 600

[Doc. No. 200113-0010]

RIN 0648-BJ15

Vessel Monitoring Systems; Requirements for Type-Approval of Cellular Transceiver Units

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; request for comments.

SUMMARY: The U.S. Vessel Monitoring System (VMS) program type-approves enhanced mobile transceiver units (EMTUs) for use in U.S. fisheries. Currently, the only approved method for transferring VMS data from a vessel to NMFS is by satellite-linked communication services. This proposed rule would amend the existing VMS type-approval regulations to add cellular-based EMTUs (EMTU-Cs) type-approval application and testing procedures; compliance and revocation processes; and technical, service, and performance standards. This proposed rule is necessary to allow for the use of EMTU-Cs and cellular communication service, in addition to satellite-only models, in federally managed fisheries.

DATES: Comments on this proposed rule must be received by [insert date 30 days after date of publication in the FEDERAL REGISTER].
ADDRESSES: You may submit comments on this proposed rule identified by “NOAA-NMFS-2019-0126” by either of the following methods:

- **Electronic Submission:** Submit all electronic public comments via the Federal e-Rulemaking Portal. Go to [www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2019-0126](http://www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2019-0126), click the “Comment Now!” icon, complete the required fields, and enter or attach your comments.

- **Mail:** Send all written comments to Kelly Spalding, 1315 East-West Highway, Room 3207, Silver Spring, MD 20910.

  **Instructions:** Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on [www.regulations.gov](http://www.regulations.gov) without change. All personal identifying information (e.g., name, address, etc.), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter “N/A” in the required fields if you wish to remain anonymous).

  Written comments regarding the burden-hour estimates or other aspects of the collection-of-information requirements contained in this proposed rule may be submitted to Kelly Spalding, Vessel Monitoring System Program Manager, 1315 East-West Highway, Room 3207, Silver Spring, MD 20910, by email to OIRA_Submission@omb.eop.gov, or by fax to 202-395-5806.

**FOR FURTHER INFORMATION CONTACT:** Kelly Spalding, Vessel Monitoring System Program Manager, NMFS: 301-427-8269 or kelly.spalding@noaa.gov.
SUPPLEMENTARY INFORMATION:

Purpose of This Proposed Rule

EMTU-Cs transmit data via cellular communication services, which are less expensive than satellite communications services used with EMTUs. EMTU-Cs are capable of collecting global positioning system (GPS) location data at regular intervals while vessels are at the dock and at sea; however, they can only transmit the data when the EMTU-Cs are within range of their land-based cellular receivers. Thus, unlike EMTUs, EMTU-C data cannot be sent at near real-time during the majority of fishing trips in Federal waters.

Whether EMTU-Cs are appropriate for a particular fishery needs to be evaluated under the relevant fishery management plan and its regulations. If EMTU-Cs are required, this proposed rule would amend the existing type-approval requirements to allow for type-approval of the EMTU-Cs for use in the fishery. NMFS regulations at 50 C.F.R. part 600, Subpart Q, specify the procedures and requirements for EMTUs for initial type-approvals; compliance with, and revocations and appeals of type-approvals; and technical, service, and performance standards. This proposed rule would use the same procedures and requirements for EMTU-Cs, amending existing regulations accordingly to add in EMTU-Cs. It is important to note that this proposed rule would not affect the existing satellite-based EMTU type-approval process; therefore, no impacts on current VMS applicants or end users are anticipated.

Background

If federal fishery regulations require use of VMS, fishing vessels must have a NMFS-approved EMTU (or mobile transmitter unit, although MTUs are no longer
approved for new installations). EMTUs are affixed to fishing vessels as required by Federal regulations, and report GPS locations and potentially other fisheries information to NMFS. The EMTU allows NMFS Office of Law Enforcement (OLE) to determine the geographic position of the vessel at specified intervals or during specific events, via satellite mobile communication services (MCSs). These satellite MCSs and EMTUs send data securely and at near real-time so that fisheries management and enforcement can monitor vessels’ activity as it occurs.

Fishermen must comply with applicable Federal fishery VMS regulations, and in doing so, may select from a variety of EMTU vendors that have been approved by NMFS to participate in the VMS program for specific fisheries. NMFS uses national VMS type-approval standards (50 C.F.R. part 600, Subpart Q) to approve an EMTU, including any installed software, and associated MCS, collectively referred to as a bundle, before they are authorized for use in federally managed fisheries (79 FR 77399, December 24, 2014).

On October 26, 2018, NMFS published a proposed rule that would require owners and operators of recreational charter vessels and headboats (for-hire vessels) with Gulf of Mexico (Gulf) permits for reef fish or coastal migratory pelagic species to report GPS vessel location information to NMFS, among other management measures (83 FR 54069). NMFS approved an amendment to the fishery management plans associated with that proposed rule, and is drafting a final rule to implement those requirements. The Gulf of Mexico Fishery Management Council determined that real-time satellite transmission is not necessary to meet the requirements for the Gulf for-hire reporting rule’s vessel monitoring purposes, and that cellular data transmission will be sufficient.
NMFS seeks to accommodate the requirements for for-hire Gulf permit holders and to adapt to NMFS fishery monitoring trends while also maintaining type-approval standards that are equitably applied to all fisheries. So, in light of the above rule, this proposed rule would modify the existing NMFS VMS type-approval regulations to provide for type-approval of EMTU-Cs and allow VMS communications to be sent through secure cellular communication services. Having a single, codified type-approval process for satellite and cellular-based tracking devices would ensure the approval process is efficient, transparent, and enforceable for all approved devices nation-wide. Although the impetus for this proposed rule was the Gulf proposed rule, this rule would be applied nationally for type-approval of EMTU-Cs, if adopted in other NMFS regions and monitoring programs.

Management Measures Contained in This Proposed Rule

The measures described below are the current type-approval process and requirements for satellite-based EMTUs and associated communication services. This proposed rule would amend the measures to include EMTU-Cs. EMTU-Cs would not be universally allowed for use in all fisheries, and the specific type-approvals may differ among fisheries and areas. The type-approved units for each applicable Federal fishery or area are located at https://www.fisheries.noaa.gov/national/enforcement/noaa-fisheries-type-approved-vms-units.

A requestor seeking type-approval would submit a written request and electronic copies of supporting materials to NMFS OLE along with two EMTU-Cs for testing. The documentation would list each of the type-approval requirements, and the requestor must certify that the required features and components comply with each requirement specified
in subpart Q. OLE would test the EMTU-C and, unless additional time is required for testing, OLE would notify the requestor, in writing, of their approval or disapproval within 90 days from receipt of complete written request.

Specific standards for automatic position reporting, two-way communications, and billing are described at 50 CFR 600.1502. Regulations at 50 CFR 600.1503 would require that the EMTU-C be able to transmit position reports that meet the latency standards (the time delay between transmission and receipt of position reports) and automatically begin reporting upon power-up. Section 600.1503 describe the GPS reporting requirements for EMTU and EMTU-C, such as a minimum of 100-meter (328.1-ft) accuracy and position fix precision to the decimal minute hundredths. Section 600.1503 would also specify the requirements related to storage capacities, reporting intervals, and specially identified position reports such as EMTU-C power-ups and power-downs, and loss of communication signals.

Delivery of VMS data to NMFS would be required to be encrypted and sent securely through all associated cellular, satellite and internet communication pathways and channels, and the EMTU-C must also have the durability and reliability necessary to meet all requirements in subpart Q. The EMTU-C cabling and antennas must be resistant to salt, moisture, and shock associated with sea-going vessels in the marine environment.

The proposed rule would establish a latency requirement that 90 percent of the positions reports during each 24-hour period reach NMFS within 15 minutes of being sent from the EMTU-C, and gives notice of NMFS continual monitoring of latency compliance.
Messaging and electronic forms requirements and capabilities are stated in 50 CFR 600.1505 and 600.1506. The EMTU-C must support, or be able to connect to a device that supports, a 1-KB minimum message length, message delivery confirmation, notice to senders of failed message delivery to the EMTU-C and the reason for the failure, and an address book capability. The EMTU-C must store, or be able to connect to a device that can store, a minimum of 50 messages in a format that can be searched by date or by sender.

The EMTU-C must support, or be able to connect to a device that supports, forms software and a minimum of 20 electronic forms that can be selected from a menu. Each form must be capable of being defined as optional, mandatory or logic driven, and mandatory fields must be filled before the form can be submitted. A minimum of 20 previous forms must be stored and searchable, and they must indicate whether or not the form was successfully delivered, the cause for any delivery failure, and the option of attempting redelivery. Each form must be capable of including VMS position data, including latitude, longitude, and date and time. Data to populate these fields must be automatically generated by the EMTU-C, and prevented from being manually entered or altered.

The proposed rule would require that the EMTU-C and MCS be capable of providing updates to forms or adding new form requirements via wireless transmission and without manual installation, as NMFS may provide type-approved vendors with requirements for new forms or modifications to existing forms periodically. NMFS may also provide notice of forms and form changes through the NMFS Work Order System.
Type-approved vendors would be given at least 60 calendar days from the time of notification to complete their implementation of new or changed forms.

The type-approved vendor would be responsible for field and technical services as described at 50 CFR 600.1508 of this proposed rule. The vendor must be able to receive customer service requests 24-hours per day with initial response times of no more than 24 hours. Field and technical services may include diagnostic and trouble-shooting support to NMFs and to fishermen, warranty and maintenance agreements, escalation procedures for resolution of problems, and assistance to the fishermen with the maintenance and repair of their EMTU-C and any communications anomalies caused by the EMTU-C or MCS. This level of customer service is necessary to reduce the economic impacts of cancelled trips due to equipment problems. Customer services to NMFS OLE and its contractors, upon request, would include issue resolution efforts regarding the VMS operation, other technical issues, and data analyses related to the VMS Program or system. In light of NMFS OLE’s established practice of paying the reasonable cost for such assistance via NMFS-authorized service or purchase agreements, work order or contracts, NMFS is proposing to strike the provision in the existing regulations at § 600.1508(h) stating that the assistance would be provided free of charge by the type-approved vendor unless otherwise specified by NMFS.

Section 600.1509 of the proposed rule specifies the required handling of personally identifying information (PII), business identifying information (BII), and VMS data, which are confidential. All such data would be handled by NMFS in accordance with 16 U.S.C. 1881a and other applicable state and Federal laws and policies. Any release of PII or other protected information by NMFS beyond authorized entities may require a written
request and approval. Any PII, BII, or VMS information sent electronically by the type-
approval holder to NMFS OLE would require secure transmission that meets all state and
Federal laws, Department of Commerce Information Technology Privacy Policy, 16
U.S.C. 1881a, and NMFS policies.

Section 600.1515 of the proposed rule would also require the type-approval holder’s
litigation support. All technical aspects of a type-approved EMTU-C, MCS, or bundle are
subject to being admitted as evidence in a court of law, if needed, and the type-approval
holder would be required to provide technical and expert support for litigation to
substantiate the EMTU-C, MCS, and/or bundle capabilities to establish NMFS OLE
cases against potential violators. NMFS will pay the reasonable cost for such assistance
in NMFS-authorized service or purchase agreements, work orders or contracts. If these
technologies have previously been subject to such scrutiny in a court of law, the type-
approval holder must provide NMFS with a brief summary of the litigation and any court
findings on the reliability of the technology.

The proposed rule would establish a type-approval letter that would serve as
NMFS’ official notice of type-approval and it would also require type-approval holders to
notify NMFS within 2 calendar days of any substantive changes from the original
submission for type-approval. Timely notification of such changes is needed to allow
NMFS OLE to be aware of a change that would affect monitoring, and to give notice of
any change to our stakeholders, and to ensure that the unit is still in a type-approved
status. Within 60 calendar days of receiving such notice, NMFS OLE would notify the
type-approval holder if an amended type-approval would be required, including
additional testing, or provide notice that OLE would initiate the type-approval revocation process.

If NMFS were to issue notice of the intent to revoke a type-approval, it would issue a revocation letter to the type-approval holder. The type-approval holder would be given the opportunity to respond, in writing, if they believe the revocation is in error or they could propose a solution to correct the issue. Any response would have to be submitted by a specified response date set by NMFS for between 30 to 120 calendar days from the date of the notification letter, depending on the impact and urgency of the alleged failure.

A type-approval holder may file an appeal of a type-approval revocation with the NMFS Assistant Administrator at the address stated in the revocation letter. Under proposed regulations at 50 CFR 600.1513, a petition must be filed within 14 calendar days of the date of any revocation letter. A type-approval holder would not be able to request an extension of time to file a petition to appeal.

An appeal to NMFS about a type-approval revocation must include a complete copy of the revocation letter and its attachments and a written statement detailing any facts or circumstances explaining and/or refuting the details contained in the revocation notice. Within 21 days of receipt of the appeal, the NMFS Assistant Administrator would affirm, vacate, or modify the revocation letter by sending a letter to the type-approval holder explaining their determination. The NMFS Assistant Administrator’s determination constitutes the final agency decision.

Following the issuance of a revocation, NMFS would notify affected fishermen, and offer reimbursement of the cost of a new type-approved EMTU or EMTU-C, as
appropriate for that fishery, should funding for reimbursement be available pursuant to 50 CFR 600.1516. Under those proposed regulations NMFS would offer, subject to the availability of funds, a reimbursement opportunity for the purchase price of a replacement EMTU or EMTU-C provided that all eligibility and process requirements specified by NMFS are met as described in NMFS Policy Directive 06-102 (available at: https://www.fisheries.noaa.gov/national/laws-and-policies/law-enforcement-policy-directives); and the replacement type-approved EMTU or EMTU-C is installed on the vessel, and reporting to NMFS OLE; and the type-approval for the previously installed EMTU-C has been revoked by NMFS; or NMFS requires the vessel owner to purchase a new EMTU or EMTU-C prior to the end of an existing unit’s service life. The monetary cap for individual reimbursement payments is currently $3,100 for the EMTU or EMTU-C, only, and the cap is subject to change by NMFS.

Classification

The NMFS Assistant Administrator has determined that this proposed rule is consistent with the Magnuson-Stevens Act, and other applicable laws, subject to further consideration after public comment.

Executive Order 12866

This proposed rule has been determined to be not significant for purposes of Executive Order 12866.

Executive Order 13771

This proposed rule is expected to be an Executive Order 13771 deregulatory action.

Regulatory Flexibility Act (RFA)
NMFS prepared an initial regulatory flexibility analysis (IRFA) for this proposed rule, as required by section 603 of the RFA (5 U.S.C. 603). The IRFA describes the economic impact this proposed rule, if adopted, would have on small entities. A description of this proposed rule, why it is being considered, and the objectives of this proposed rule are contained in the preamble. A copy of the full analysis is available from NMFS (see ADDRESSES). A summary of the IRFA follows.

The Magnuson-Stevens Act provides the statutory basis for this proposed rule. No duplicative, overlapping, or conflicting Federal rules have been identified.

This proposed rule would directly apply to any companies that wish to obtain VMS type-approval for EMTU-Cs in the future. There are currently no EMTU-C units that have been type-approved by NMFS and no end users of such devices. NMFS received inquiries and quotes from six prospective telecommunications and/or computer and electronic product manufacturing companies within the past year expressing interest in seeking VMS type-approval for EMTU-Cs. Half of these are foreign companies based in either the United Kingdom or New Zealand. Because these foreign companies do not have a place of business located in the United States, do not operate primarily within the United States, or make a significant contribution to the U.S. economy through payment of taxes or use of American products, materials, or labor, they are not considered to be small businesses by the Small Business Administration (SBA) and only the effects on U.S. applicant companies will be discussed. One of the prospective U.S. companies is a publicly traded firm that primarily operates in the satellite telecommunications industry. The other two prospective U.S. applicant companies for EMTU-Cs are privately held businesses that do not publicly disclose total earnings or employment numbers. Based on
information from their websites and product offerings, NMFS believes that one of them primarily operates in the radio and television broadcasting, and wireless communications equipment manufacturing industry, and the other primarily operates in the search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing industry. It is not possible to estimate how many additional companies may enter the marketplace for NMFS approved EMTU-Cs in the future.

It is important to note that this proposed rule would not be expected to affect the existing satellite-based EMTU type-approval process; therefore, no impacts on current VMS type-approval holders or end users are anticipated.

Additionally, this proposed rule would not directly apply to fishing businesses or end users of EMTU-C devices. This proposed rule may affect the availability of EMTU-Cs for purchase, the retail price of these devices, monthly service charges, and future replacement costs; however, these would all be indirect effects of this proposed rule. Consideration of indirect effects is outside the scope of the RFA and, therefore, only the effects on EMTU-C vendor companies will be discussed.

The SBA has established size standards for all major industry sectors in the U.S. including satellite telecommunications businesses (NAICS code 517410), radio and television broadcasting and wireless communications equipment manufacturers (NAICS code 334220), and search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturers (NAICS 334511). A business primarily involved in the satellite telecommunications industry is classified as a small business if it is independently owned and operated, is not dominant in its field of operation (including its affiliates), and has combined annual receipts not in excess of $32.5 million for all its
affiliated operations worldwide. A business primarily involved in the radio and television broadcasting and wireless communications equipment manufacturing industry is classified as a small business if it is independently owned and operated, is not dominant in its field of operation (including its affiliates), and employs 1,250 or fewer persons on a full-time, part-time, temporary, or other basis at all its affiliated operations worldwide. Finally, a business primarily involved in the search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing industry is classified as a small business if it is independently owned and operated, is not dominant in its field of operation (including its affiliates), and employs 1,250 or fewer persons on a full-time, part-time, temporary, or other basis at all its affiliated operations worldwide.

Based on financial records from a 2018 annual report to stockholders, NMFS has determined that the publicly traded U.S. vendor company that may be directly affected by this proposed rule would not be considered a small business under the SBA size criteria for its industry designation, the satellite telecommunications industry. NMFS conservatively assumes that the other two prospective U.S. vendor companies for EMTU-Cs that are believed to primarily operate in either the radio and television broadcasting, and wireless communications equipment manufacturing industry, or the search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing industry are small entities. NMFS therefore estimates that this rule would impact at least two small entities in the short term and likely more in the long term.

This proposed rule would involve reporting, record keeping, and other compliance requirements for the type-approval application process, notifications to NMFS for any
substantive changes to type-approved EMTU-Cs or MCSs, customer service, potential
responses to revocation notices or revocation appeals, and litigation support.

The type-approval application process would require an applicant requesting type-
approval of an EMTU-C, MCS, or bundle to make a written request to NMFS that must
include the following information pertaining to the EMTU-C, MCS, or bundle:
communication class; manufacturer; brand name; model name; model number; software
version and date; firmware version number and date; hardware version number and date;
antenna type; antenna model number and date; tablet, monitor or terminal model number
and date; MCS to be used in conjunction with the EMTU-C; entity providing MCS to the
end user; current global and regional coverage of the MCS; the requestor-approved third
party business entities associated with the EMTU-C and its use; the NMFS region(s)
and/or Federal fisheries reporting program for which type-approval is sought; copies of,
or citation to, applicable VMS regulations and requirements; communications
functionality; position report data formats and transmission standards; latency
specifications; messaging and electronic form capabilities; communications security
specifications; details of customer service that would be provided to NMFS and
fishermen; general durability and reliability of the unit; protection of PII, BII, and other
protected information associated with the purchase or activation of an EMTU-C from
disclosure; certification that the features, components, configuration, and services of the
requestor’s EMTU-C, MCS, or bundle comply with each applicable requirement set out
in proposed 50 CFR 600.1502 through 600.1509 and the applicable VMS regulations and
requirements in effect for the NMFS region(s) and/or Federal fisheries reporting program
for which the requestor seeks type-approval; and a certification that the requestor accepts
responsibility for ensuring compliance with type-approval regulations during the type-approval period. In addition, the application must include two EMTU-Cs, loaded with forms and software if required by the applicable fishery(s), with activated MCS, at no cost to the government for each NMFS region or Federal fishery for which the application is made for a minimum of 90 calendar days for testing and evaluation. Two EMTU-Cs are needed for testing in each NMFS region or Federal fishery in order to quickly conduct in-office and field trials simultaneously. The application must also include thorough documentation, including EMTU-C fact sheets, installation guides, user manuals, any necessary interfacing software, MCS global and regional coverage, performance specifications, and technical support information. This application process would likely require engineering and product manager expertise for preparation of the application.

The proposed rule would also require type-approval holders to notify NMFS within 2 calendar days of any substantive changes from the original submission for type-approval. Such change or modification notices would likely require engineering and product manager support as well.

EMTU-C type-approval holders would be responsible for ensuring that customer service includes diagnostic and troubleshooting support to NMFS and fishermen, which is available 24 hours a day, 7 days per week, and year round. This may require dedicated customer service representative or technician support.

If NMFS issues a Notification Letter indicating intent to revoke a type-approval, the type-approval holder must respond, in writing, within 30 to 120 calendar days from the date specified in the NMFS Notification Letter if they believe the notification is in
error or can propose a solution to correct the issue. This response would likely require engineering and product manager expertise to develop. Additionally, a type-approval holder may file a petition to appeal a type-approval revocation, which could involve additional technical or legal support.

Finally, as a condition of type-approval, the type-approval holder would be required to provide technical and expert support for litigation to substantiate the EMTU-C, MCS, or bundle capabilities to establish NMFS OLE cases against potential violators, as needed. If the technology has been subject to prior scrutiny in a court of law, the type-approval applicant or holder would be required to provide a brief summary of the litigation and any court finding on the reliability of the technology.

The proposed rule, if implemented, would apply to all companies that wish to obtain VMS type-approval for EMTU-Cs in the future. As discussed previously, there are currently no EMTU-C units that have been type-approved by NMFS and no end users of such devices; however, three U.S. companies are expected to request type-approvals for EMTU-Cs. NMFS believes two of these companies are small entities. It is unknown how many additional companies may enter this market in the future. Because the majority of prospective applicant companies that are likely to be directly regulated by this proposed rule are believed to be small entities, NMFS conservatively assumes that this rule would affect a substantial number of small entities.

All entities likely to be affected by this rule are expected to face comparable costs for the type-approval application process. Although detailed company information is not available for the small entities that would be directly regulated by this proposed rule, based on the nature of the products and services sold by these businesses, it is assumed
they have the requisite resources to comply with most of the technical requirements included in this proposed rule as well. The requirement for customer service that is available 24 hours a day, 7 days per week, and year round would, however, have the potential to disproportionately burden small entities relative to large entities. This proposed rule may necessitate that small businesses hire dedicated customer service support staff. This increase in overhead costs could place them at a competitive disadvantage to large businesses that likely already have robust customer service resources. Small entities are typically not able to achieve the same economies of scale or scope as large entities. In other words, large entities are able to drive down overhead costs per unit by operating at higher levels of output or spreading overhead costs, such as customer service labor, across multiple products. This requirement may create a barrier to entry for small businesses that wish to participate in the EMTU-C market.

The following information summarizes the expected direct effects of this proposed rule on small entities.

_Vessel Monitoring System Type-Approval Application Process_

Under this proposed rule, an applicant would need to submit a written type-approval request and electronic copies of supporting materials that include the information required under proposed 50 CFR 600.1501 to NMFS OLE. The application process would likely require engineering and product manager expertise for preparation of the application. NMFS estimates that applicants would utilize up to approximately 40 hours of engineering labor and 40 hours of product management labor to compile the written request and statement that details how the applicant’s EMTU-C meets the minimum national VMS standards as required by this rule. This estimate also includes the
amount of time it would take to compile the EMTU-C documentation and the packaging of the EMTU-Cs to ship to each NMFS region or Federal fishery for which an application is submitted. Based on the Bureau of Labor Statistics May 2018 National Occupational Employment and Wage Estimates, the mean hourly wage for engineers is $47.71 per hour; for general and operations managers it is approximately $59.56 per hour. Therefore, NMFS estimates the total wage costs to be approximately $4,300 per EMTU-C application.

With respect to providing OLE two EMTU-Cs for each NMFS region, NMFS estimates that applicants would likely spend between $55 and $86 per shipment (two units each) based on current United States Postal Service (USPS) ground shipping rates for a package of up to 30 pounds ($49.62-$80.51 depending on the region) and box/packaging costs of $5.00. Upon completion of testing and evaluation by OLE in each NMFS region, applicants would also be responsible for the cost of EMTU-C return shipments. Therefore, assuming an applicant sends units to all five NMFS regions, the total shipping cost per application would be $674 based on USPS ground delivery costs of approximately $50 per region in the continental United States and $81 per region for the Alaska and the Pacific Islands offices. The cost would be lower if type-approval is requested for fewer regions.

In addition, applicants would be responsible for covering the costs of the MCS during the testing period. Using the average applicant quoted monthly service charge to customers, NMFS estimates that this would run approximately $25 per month per unit. Assuming a 90-day testing period for 10 units (2 sent to each NMFS region), the total
MCS cost would be approximately $750. It would be less for requests that involve fewer regions.

The average estimated retail price of an EMTU-C unit, as based on six different vendor quotes, is approximately $458. The applicant seeking type-approval will be unable to sell the EMTU-C units as new after providing them to NMFS for testing and evaluation for 90 days. They might only get 60 to 80 percent of the regular retail value on refurbished units. If 10 EMTU-Cs that regularly retail new for $458 each are sent to 5 regions, the reduced retail revenue would total approximately $916 to $1,832 per type-approval application. Again, if type-approval is requested for fewer than five regions, the cost would be lower. Alternatively, the applicant may opt to use these units as demo units for trade shows and other marketing purposes and therefore considerably lower the costs of providing the evaluation units. It is difficult to estimate the exact costs associated with providing the units to NMFS given the uncertainty associated with what applicants would do with these EMTU-Cs after the 90-day evaluation period.

The total upper bound cost to applicants of the VMS type-approval application process is estimated to be $6,631 to $7,547 per application ($4,291 in wages, plus $674 in shipping, plus $750 in MCS charges, plus $916 to $1,832 in reduced retail revenue for the demo units). This cost would be lower if type-approval is requested for fewer than five regions.

Changes or Modifications to Type-Approvals

After a type-approval is issued, the type-approval holder must notify NMFS OLE in writing no later than 2 days following modification to or replacement of any functional component or piece of their type-approved EMTU-C, MCS, or bundle. If the changes are
substantial, NMFS OLE will notify the type-approval holder in writing within 60 calendar days that an amended type-approval is required or that NMFS will initiate the type-approval revocation process. NMFS estimates that small entities would utilize up to approximately 4 hours of engineering labor and 4 hours of product management labor to notify NMFS of any substantive changes to the original type-approval submission and provide the agency with the details of those changes. NMFS estimates the total wage costs to be approximately $429 for the change notification process. NMFS estimates that there would likely be less than two change/modification notices submitted per year based on past experience. There were two change/modification notices submitted in 2017 for existing VMS type-approvals, as well as two in 2018. Therefore, the annual total cost to small entities for this provision would likely be less than $858 per year.

Customer Service

The type-approval holder would be responsible for ensuring that customer service includes: Diagnostic and troubleshooting support to NMFS and fishermen, which is available 24 hours a day, 7 days per week, and year round; response times for customer service inquiries that do not exceed 24 hours; warranty and maintenance agreements; escalation procedures for resolution of problems; established facilities and procedures to assist fishermen in maintaining and repairing their EMTU-C; assistance to fishermen in the diagnosis of the cause of communications anomalies; assistance in resolving communications anomalies that are traced to the EMTU-C; and assistance to NMFS OLE and its contractors, upon request, in VMS operation, resolving technical issues, and data analyses related to the VMS Program or system. NMFS is unable to estimate the direct costs to businesses to comply with these customer service requirements; however, they
may be nontrivial. Costs would likely vary depending on each vendor’s existing assets, liabilities, and profit maximization strategies.

Revocation Process

If at any time, a type-approved EMTU-C or bundle fails to meet requirements at proposed 50 CFR 600.1502 through 600.1509 or applicable VMS regulations and requirements in effect for the region(s) and Federal fisheries for which the EMTU-C is type-approved, NMFS OLE may issue a Notification Letter to the type-approval holder that: identifies the EMTU-C, MCS, or bundle that allegedly fails to comply with type-approval regulations and requirements; identifies the alleged failure to comply with type-approval regulations and requirements, and the urgency and impact of the alleged failure; cites relevant regulations and requirements under proposed 50 CFR 600, subpart Q; describes the indications and evidence of the alleged failure; provides documentation and data demonstrating the alleged failure; sets a response date by which the type-approval holder must submit to NMFS OLE a written response to the Notification Letter, including, if applicable, a proposed solution; and explains the type-approval holder’s options if the type-approval holder believes the Notification Letter is in error.

NMFS will establish a response date between 30 and 120 calendar days from the date of the Notification Letter. The type-approval holder’s response must be received in writing by NMFS on or before the response date. If the type-approval holder fails to respond by the response date, the type-approval will be revoked. At its discretion and for good cause, NMFS may extend the response date to a maximum of 150 calendar days from the date of the Notification Letter. A type-approval holder who has submitted a timely response may meet with NMFS within 21 calendar days of the date of that
response to discuss a detailed and agreed-upon procedure for resolving the alleged failure. The meeting may be in person, conference call, or webcast.

If the type-approval holder disagrees with the Notification Letter and believes that there is no failure to comply with the type-approval regulations and requirements, NMFS has incorrectly defined or described the failure or its urgency and impact, or NMFS is otherwise in error, the type-approval holder may submit a written objection letter to NMFS on or before the response date in accordance with proposed 50 CFR 600.1512.

NMFS estimates that the proposed revocation process would potentially involve 16 hours of engineering labor and 8 hours of product management labor, per instance, to investigate the issues raised by NMFS and prepare a written response. Based on the wage costs previously discussed, NMFS estimates the revocation process could result in approximately $1,240 in labor costs. However, the actual amount of labor costs could vary considerably depending on the complexity of the issues causing the potential violations NMFS identified. Some vendors may decide not to challenge the revocation or may be unable to bring the issue to final resolution to NMFS’ satisfaction and then face the revocation of the type-approval for their product. The vendor would then be impacted by the loss of future EMTU-C sales and monthly data communication fees from vessels required to carry and operate a type-approved EMTU-C, MCS, or bundle.

The vendor could also opt to appeal the type-approval revocation. In addition to the costs associated with the engineering and product management support provided during the revocation process, the vendor may also decide to employ legal assistance to challenge the agency’s decision. These costs could vary considerably depending on the complexity of the appeal arguments.
**Litigation Support**

Finally, in accordance with proposed 50 CFR 600.1515, the proposed rule would also require the type-approval holder’s litigation support. All technical aspects of a type-approved EMTU-C, MCS, or bundle are subject to being admitted as evidence in a court of law, if needed, and the type-approval holder would be required to provide technical and expert support for litigation to substantiate the EMTU-C, or bundle capabilities to establish NMFS OLE cases against violators. NMFS will pay the reasonable cost for such assistance in NMFS-authorized service or purchase agreements, work orders or contracts. If the technologies have previously been subject to such scrutiny in a court of law, the type-approval holder must provide NMFS with a brief summary of the litigation and any court findings on the reliability of the technology. This litigation support, if not fully paid for by NMFS, would be another potential cost of this proposed rule to EMTU-C vendors or mobile communications service providers. Because details of future litigation support needs are unknown, it is not possible to estimate these costs.

In conclusion, participation in the EMTU-C market would be voluntary. It is assumed vendors are profit maximizing firms that would only apply for type-approvals if the expected profits from selling EMTU-C units and services justify the costs presented in this RFA analysis. However, there may be disproportionate effects on small entities relative to large entities, due to the customer service requirements included as part of this proposed rule.

The following discussion describes the alternatives that were not selected as preferred by NMFS.
Only two alternatives were considered for this rule. The first alternative, the no-action alternative, would not add EMTU-Cs and cellular based transmissions of VMS data to the VMS type-approval regulations. Currently there is no type-approval process for EMTU-Cs. This alternative was not selected by NMFS, because a type-approval process is required in order to facilitate the use of EMTU-Cs and cellular-based VMS transmissions in federally regulated fisheries that will require, or allow the use of, such in the future. Therefore, the no-action alternative was not a viable alternative. The second alternative, which includes all of the provisions laid out in this proposed rule, is the preferred alternative. NMFS has not identified any other alternatives that would meet the objectives of the proposed rule while minimizing economic impacts on small entities.

Paperwork Reduction Act (PRA)

This proposed rule contains a collection-of-information requirement subject to review and approval by the Office of Management and Budget (OMB) under the PRA. This requirement has been submitted to OMB for approval. Public reporting burden for the application process is estimated to average 80 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection information.

Public comment is sought regarding: whether this proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; the accuracy of the burden estimate; ways to enhance the quality, utility, and clarity of the information to be collected; and ways to minimize the burden of the collection of information, including through the use of automated collection techniques or other forms of information.
technology. Send comments on these or any other aspects of the collection of information to the NMFS OLE at the Addresses above, by email to OIRA_Submission@omb.eop.gov, or fax to 202-395-7285.

Notwithstanding any other provision of the law, no person is required to respond to, and no person shall be subject to penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB control number.

NMFS requests public comment on this decision, the associated analysis and all other aspects of this proposed rule. Send comments to NMFS at the Addresses above.

List of Subjects in 50 CFR Part 600

Administrative practice and procedure, Fisheries, Fishing, Reporting and recordkeeping requirements.


____________________________
Samuel D. Rauch III,
Deputy Assistant Administrator for Regulatory Programs,
National Marine Fisheries Service.
For the reasons set out in the preamble, 50 CFR part 600 is proposed to be amended as follows:

**PART 600--MAGNUSON- STEVENS ACT PROVISIONS**

1. The authority citation for part 600 continues to read as follows:

   **Authority:** 5 U.S.C. 561 and 16 U.S.C. 1801 *et seq.*

2. Revise subpart Q to part 600 to read as follows:

**Subpart Q -- Vessel Monitoring System Type-Approval**

Sec.

600.1500 Definitions and acronyms.

600.1501 Vessel Monitoring System type-approval process.

600.1502 Communications functionality.

600.1503 Position report data formats and transmission.

600.1504 Latency requirement.

600.1505 Messaging.

600.1506 Electronic forms.

600.1507 Communications security.

600.1508 Customer service.

600.1509 General.

600.1510 Notification of type-approval.

600.1511 Changes or modifications to type-approvals.

600.1512 Type-approval revocation process.

600.1513 Type-approval revocation appeals process.

600.1514 Revocation effective date and notification to vessel owners.
600.1515 Litigation support.

600.1516 Reimbursement opportunities for revoked Vessel Monitoring System type-approval products.

§ 600.1500 Definitions and acronyms.

In addition to the definitions in the Magnuson-Stevens Act and in § 600.10, and the acronyms in § 600.15, the terms and acronyms in this subpart have the following meanings:

Authorized entity means a person, defined at 16 U.S.C. 1802(36), authorized to receive data transmitted by a VMS unit.

Bench configuration means the configuration of a VMS unit after it has been customized to meet the Federal VMS requirements.

Bundle means a mobile communications service and VMS unit sold as a package and considered one product. If a bundle is type-approved, the requestor will be the type-approval holder for the bundled MCS and VMS unit.

Cellular communication means the wireless transmission of VMS data via a cellular network.

Communication class means the satellite or cellular communications operator from which communications services originate.

Electronic form means a pre-formatted message transmitted by a VMS unit that is required for the collection of data for a specific fishery program (e.g., declaration system, catch effort reporting).

Enhanced Mobile Transceiver Unit (EMTU) means a type of MTU that is capable of supporting two-way communication, messaging, and electronic forms transmission via
satellite. An EMTU is a transceiver or communications device, including an antenna, and dedicated message terminal and display which can support a dedicated input device such as a tablet or keyboard, installed on fishing vessels participating in fisheries with a VMS requirement.

*Enhanced Mobile Transceiver Unit, Cellular Based (EMTU-C)* means an EMTU that transmits and receives data via cellular communications, except that it may not need a dedicated message terminal and display component at the time of approval as explained at § 600.1502(a)(6). An EMTU-C only needs to be capable of transmission and reception when in the range of a cellular network.

*Latency* means the state of untimely delivery of Global Positioning System position reports and electronic forms to NMFS (*i.e.*, information is not delivered to NMFS consistent with timing requirements of this subpart).

*Mobile Communications Service (MCS)* means the satellite and/or cellular communications services used with particular VMS units.

*Mobile Communications Service Provider (MCSP)* means an entity that sells VMS satellite and/or cellular communications services to end users.

*Mobile Transmitter Unit (MTU)* means a VMS unit capable of transmitting Global Positioning System position reports via satellite. (MTUs are no longer approved for new installations on VMS vessels).

*Notification Letter* means a letter issued by NMFS to a type-approval holder identifying an alleged failure of a VMS unit, MCS, or the type-approval holder to comply with the requirements of this subpart.
*Position report* means the unique global positioning system (GPS) report generated by a vessel’s VMS unit, which identifies the vessel’s latitude/longitude position at a point in time. Position reports are sent from the VMS unit via the MCS, to authorized entities.

*Requestor* means a vendor seeking type-approval.

*Service life* means the length of time during which a VMS unit remains fully operational with reasonable repairs.

*Sniffing* means the unauthorized and illegitimate monitoring and capture, through use of a computer program or device, of data being transmitted over a network.

*Spoofing* means the reporting of a false Global Positioning System position and/or vessel identity.

*Time stamp* means the time, in hours, minutes, and seconds in a position report. Each position report is time stamped.

*Type-approval holder* means an applicant whose type-approval request has been approved pursuant to this subpart.

*Vendor* means a commercial provider of VMS hardware, software, and/or mobile communications services.

*Vessel Monitoring System (VMS)* means, for purposes of this subpart, a satellite and/or cellular based system designed to monitor the location and movement of vessels using onboard VMS units that send Global Positioning System position reports to an authorized entity.

*Vessel Monitoring System (VMS) data* means the data transmitted to authorized entities from a VMS unit.
*Vessel Monitoring System Program* means the Federal program that manages the vessel monitoring system, data, and associated program-components, nationally and in each NMFS region; it is housed in the Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service’s Office of Law Enforcement.

*Vessel Monitoring System (VMS) Unit* means MTU, EMTU or EMTU-C, as well as the units that can operate as both an EMTU and an EMTU-C.

*Vessel Monitoring System (VMS) Vessels* means vessels that operate in federally managed fisheries with a requirement to carry and operate a VMS unit.

**§ 600.1501 Vessel Monitoring System type-approval process.**

(a) **Applicability.** Unless otherwise specified, this section applies to EMTUs, EMTU-Cs, units that operate as both an EMTU and EMTU-C, and MCSs. Units that can operate as both an EMTU and EMTU-C must meet the requirements for both an EMTU and an EMTU-C in order to gain type-approval as both. MTUs are no longer eligible for type-approval.

(b) **Application submission.** A requestor must submit a written type-approval request and electronic copies of supporting materials that include the information required under this section to the NMFS Office of Law Enforcement (OLE) at: U.S. Department of Commerce; National Oceanic and Atmospheric Administration; National Marine Fisheries Service; Office of Law Enforcement; Attention: Vessel Monitoring System Office; 1315 East-West Highway, SSMC3, Suite 3301, Silver Spring, Maryland 20910.
(c) Application requirements. (1) EMTU, EMTU-C, and MCS Identifying Information: In a type-approval request, the requestor should indicate whether the requestor is seeking approval for an EMTU, EMTU-C, MCS, or bundle and must specify identifying characteristics, as applicable: communication class; manufacturer; brand name; model name; model number; software version and date; firmware version number and date; hardware version number and date; antenna type; antenna model number and date; tablet, monitor or terminal model number and date; MCS to be used in conjunction with the EMTU/EMTU-C; entity providing MCS to the end user; and current global and regional coverage of the MCS.

(2) Requestor-approved third party business entities: The requestor must provide the business name, address, phone number, contact name(s), email address, specific services provided, and geographic region covered for the following third party business entities:

(i) Entities providing bench configuration for the EMTU/EMTU-C at the warehouse or point of supply.

(ii) Entities distributing/selling the EMTU/EMTU-C to end users.

(iii) Entities currently approved by the requestor to install the EMTU/EMTU-C onboard vessels.

(iv) Entities currently approved by the requestor to offer a limited warranty.

(v) Entities approved by the requestor to offer a maintenance service agreement.

(vi) Entities approved by the requestor to repair or install new software on the EMTU/EMTU-C.

(vii) Entities approved by the requestor to train end users.
(viii) Entities approved by the requestor to advertise the EMTU/EMTU-C.

(ix) Entities approved by the requestor to provide other customer services.

(3) Regulatory Requirements and Documentation: In a type-approval request, a requestor must:

(i) Identify the NMFS region(s) and/or Federal fisheries for which the requestor seeks type-approval.

(ii) Include copies of, or citation to, applicable VMS regulations and requirements in effect for the region(s) and Federal fisheries identified under paragraph (c)(3)(i) of this section that require use of VMS.

(iii) Provide a table with the type-approval request that lists in one column each requirement set out in §§ 600.1502 through 600.1509 and regulations described under paragraph (c)(3)(ii) of this section. NMFS OLE will provide a template for the table upon request. The requestor must indicate in subsequent columns in the table:

(A) Whether the requirement applies to the type-approval; and

(B) Whether the EMTU, EMTU-C, MCS, or bundle meets the requirement.

(iv) Certify that the features, components, configuration and services of the requestor’s EMTU/EMTU-C, MCS, or bundle comply with each requirement set out in §§ 600.1502 through 600.1509 and the regulations described under paragraph (c)(3)(ii) of this section.

(v) Certify that, if the request is approved, the requestor agrees to be responsible for ensuring compliance with each requirement set out in §§ 600.1502 through 600.1509 and the regulations described under paragraph (c)(3)(ii) of this section over the course of the type-approval period.
(vi) Provide NMFS OLE with two EMTU/EMTU-Cs loaded with forms and software, if applicable, for each NMFS region or Federal fishery, with activated MCS, for which a type-approval request is submitted for a minimum of 90 calendar days for testing and evaluation. For EMTU-Cs, the forms and software may be loaded onto a dedicated message terminal and display component to which the EMTU-C can connect. Copies of forms currently used by NMFS are available upon request. As part of its review, NMFS OLE may perform field tests and at-sea trials that involve demonstrating every aspect of EMTU/EMTU-C and communications operation. The requestor is responsible for all associated costs including paying for: shipping of the EMTU/EMTU-C to the required NMFS regional offices and/or headquarters for testing; the MCS during the testing period; and shipping of the EMTU/EMTU-C back to the vendor.

(vii) Provide thorough documentation for the EMTU/EMTU-C and MCS, including: EMTU/EMTU-C fact sheets; installation guides; user manuals; any necessary interfacing software; MCS global and regional coverage; performance specifications; and technical support information.

(d) Certification. A requestor seeking type-approval of an EMTU/EMTU-C to operate with a class or type of communications, as opposed to type-approval for use with a specific MCS, shall certify that the EMTU/EMTU-C meets requirements under this subpart when using at least one MCSP within that class or type of communications.

(e) Notification. Unless additional time is required for EMTU/EMTU-C testing, NMFS OLE will notify the requestor within 90 days after receipt of a complete type-approval request as follows:
(1) If a request is approved or partially approved, NMFS OLE will provide notice as described under § 600.1510 and the type-approval letter will serve as official documentation and notice of type-approval. OLE will publish and maintain the list of type-approved units on their Vessel Monitoring System webpage.

(2) If a request is disapproved or partially disapproved:

(i) OLE will send a letter to the requestor that explains the reason for the disapproval/partial disapproval.

(ii) The requestor may respond to NMFS OLE in writing with additional information to address the reasons for disapproval identified in the NMFS OLE letter. The requestor must submit this response within 21 calendar days of the date of the OLE letter sent under paragraph (e)(2)(i) of this section.

(iii) If any additional information is submitted under paragraph (e)(2)(ii) of this section, NMFS OLE, after reviewing such information, may either take action under paragraph (e)(1) of this section or determine that the request should continue to be disapproved or partially disapproved. In the latter case, the NMFS OLE Director will send a letter to the requestor that explains the reasons for the continued disapproval/partial disapproval. The NMFS OLE Director’s decision is final upon issuance of this letter and is not appealable.

§ 600.1502 Communications functionality.

(a) Unless otherwise specified, this subsection applies to all VMS units. Units that can operate as both an EMTU and EMTU-C must meet the requirements for both an EMTU and an EMTU-C in order to gain type-approval as both. The VMS unit must:

(1) Be able to transmit all automatically-generated position reports.
(2) Provide visible or audible alarms onboard the vessel to indicate malfunctioning of the VMS unit.

(3) Be able to disable non-essential alarms in non-Global Maritime Distress and Safety System (GMDSS) installations.

(4) EMTU/EMTU-Cs must be able to send communications that function uniformly throughout the geographic area(s) covered by the type-approval, except an EMTU-C only needs to be capable of transmission and reception when in the range of a cellular network.

(5) EMTU/EMTU-Cs must have two-way communications between the unit and authorized entities, via MCS, or be able to connect to a device that has two-way communications.

(6) EMTU/EMTU-Cs must be able to run or to connect to a dedicated message terminal and display component that can run software and/or applications that send and receive electronic forms and Internet email messages for the purpose of complying with VMS reporting requirements in Federal fisheries. Depending on the reporting requirements for the fishery(s) in which the requester is seeking type-approval, an EMTU-C type-approval may not require the inclusion of a dedicated message terminal and display component at the time of approval, but the capability to support such a component must be shown.

(7) Have messaging and communications mechanisms that are completely compatible with NMFS vessel monitoring and surveillance software.

(b) In addition, messages and communications from a VMS unit must be able to be parsed out to enable clear billing of costs to the government and to the owner of a
vessel or EMTU/EMTU-C, when necessary. Also, the costs associated with position reporting and the costs associated with other communications (for example, personal email or communications/reports to non-NMFS Office of Law Enforcement entities) must be parsed out and billed to separate parties, as appropriate.

§ 600.1503 Position report data formats and transmission.

Unless otherwise specified, this subsection applies to all VMS units, MCSs and bundles. Units that can operate as both an EMTU and EMTU-C must meet the requirements for both an EMTU and an EMTU-C in order to gain type-approval as both. To be type-approved in any given fishery, a VMS unit must also meet any additional positioning information as required by the applicable VMS regulations and requirements in effect for each fishery or region for which the type-approval applies. The VMS unit must meet the following requirements:

(a) Transmit all automatically-generated position reports, for vessels managed individually or grouped by fleet, that meet the latency requirement under § 600.1504.

(b) When powered up, must automatically re-establish its position reporting function without manual intervention.

(c) Position reports must contain all of the following:

(1) Unique identification of an EMTU/EMTU-C and clear indication if the unit is an EMTU-C.

(2) Date (year/month/day with century in the year) and time stamp (GMT) of the position fix.

(3) Date (year/month/day with century in the year) and time stamp (GMT) that the EMTU-C position report was sent from the EMTU-C.
(4) Position fixed latitude and longitude, including the hemisphere of each, which comply with the following requirements:

(i) The position fix precision must be to the decimal minute hundredths.

(ii) Accuracy of the reported position must be within 100 meters (328.1 ft).

(d) An EMTU/EMTU-C must have the ability to:

(1) Store 1,000 position fixes in local, non-volatile memory.

(2) Allow for defining variable reporting intervals between 5 minutes and 24 hours.

(3) Allow for changes in reporting intervals remotely and only by authorized users.

(e) An EMTU/EMTU-C must generate specially identified position reports upon:

(1) Antenna disconnection.

(2) Loss of positioning reference signals.

(3) Security events, power-up, power down, and other status data.

(4) A request for EMTU/EMTU-C status information such as configuration of programming and reporting intervals.

(5) The EMTUs loss of the mobile communications signals.

(6) An EMTU must generate a specially identified position report upon the vessel crossing of a pre-defined geographic boundary.

§ 600.1504 Latency requirement.

(a) Ninety percent of all pre-programmed or requested Global Positioning System position reports during each 24-hour period must reach NMFS within 15 minutes or less.
of being sent from the VMS unit, for 10 out of 11 consecutive days (24-hour time periods).

(b) NMFS will continually examine latency by region and by type-approval holder.

(c) Exact dates for calculation of latency will be chosen by NMFS. Days in which isolated and documented system outages occur will not be used by NMFS to calculate a type-approval holder’s latency.

§ 600.1505 Messaging.

(a) Unless otherwise specified, this section applies to all VMS units, MCSs, and bundles. Units that can operate as both an EMTU and EMTU-C must meet the requirements for both an EMTU and an EMTU-C in order to gain type-approval as both. Depending on the reporting requirements for the fishery(s) in which the requester is seeking type-approval, an EMTU-C type-approval may not require the inclusion of a dedicated message terminal and display component at the time of approval, but the capability to support such a component must be shown. To be type-approved in any given fishery, a VMS unit must meet messaging information requirements under the applicable VMS regulations and requirements in effect for each fishery or region for which the type-approval applies. The VMS unit must also meet the following requirements:

(b) An EMTU must be able to run software and/or applications that send email messages for the purpose of complying with VMS reporting requirements in Federal fisheries that require email communication capability. An EMTU-C must be able to run or connect to a device that can run such software and/or applications. In such cases, the EMTU/EMTU-C messaging must provide for the following capabilities:
(1) Messaging from vessel to shore, and from shore to vessel by authorized entities, must have a minimum supported message length of 1 KB. For EMTU-Cs, this messaging capability need only be functional when in range of shore-based cellular communications.

(2) There must be a confirmation of delivery function that allows a user to ascertain whether a specific message was successfully transmitted to the MCS e-mail server(s).

(3) Notification of failed delivery to the EMTU/EMTU-C must be sent to the sender of the message. The failed delivery notification must include sufficient information to identify the specific message that failed and the cause of failure (e.g., invalid address, EMTU/EMTU-C switched off, etc.).

(4) The EMTU/EMTU-C must have an automatic retry feature in the event that a message fails to be delivered.

(5) The EMTU/EMTU-C user interface must:

(i) Support an “address book” capability and a function permitting a “reply” to a received message without re-entering the sender’s address.

(ii) Provide the ability to review by date order, or by recipient, messages that were previously sent. The EMTU/EMTU-C terminal must support a minimum message history of 50 sent messages – commonly referred to as an “Outbox” or “Sent” message display.

(iii) Provide the ability to review by date order, or by sender, all messages received. The EMTU/EMTU-C terminal must support a minimum message history of at least 50 messages in an inbox.

§ 600.1506 Electronic forms.
Unless otherwise specified, this subsection applies to all EMTUs, EMTU-Cs, MCSs, and bundles.

(a) *Forms.* An EMTU/EMTU-C must be able to run, or to connect to and transmit data from a device that can run electronic forms software. Depending on the reporting requirements for the fishery(s) in which the requester is seeking type-approval, an EMTU-C type-approval may not require the inclusion of a dedicated message terminal and display component at the time of approval, but the capability to support such a component must be shown. The EMTU/EMTU-C must be able to support forms software that can hold a minimum of 20 electronic forms, and it must also meet any additional forms requirements in effect for each fishery or region for which the type-approval applies. The EMTU/EMTU-C must meet the following requirements:

(1) Form Validation: Each field on a form must be capable of being defined as Optional, Mandatory, or Logic Driven. Mandatory fields are those fields that must be entered by the user before the form is complete. Optional fields are those fields that do not require data entry. Logic-driven fields have their attributes determined by earlier form selections. Specifically, a logic-driven field must allow for selection of options in that field to change the values available as menu selections on a subsequent field within the same form.

(2) A user must be able to select forms from a menu on the EMTU/EMTU-C.

(3) A user must be able to populate a form based on the last values used and “modify” or “update” a prior submission without unnecessary re-entry of data. A user must be able to review a minimum of 20 past form submissions and ascertain for each form when the form was transmitted and whether delivery was successfully sent to the
type-approval holder’s VMS data processing center. In the case of a transmission failure, a user must be provided with details of the cause and have the opportunity to retry the form submission.

(4) VMS Position Report: Each form must include VMS position data, including latitude, longitude, date and time. Data to populate these fields must be automatically generated by the EMTU/EMTU-C and unable to be manually entered or altered.

(5) Delivery and Format of Forms Data: Delivery of form data to NMFS must employ the same transport security and reliability as set out in § 600.1507 of this subpart. The forms data and delivery must be completely compatible with NMFS vessel monitoring software.

(b) Updates to Forms. (1) The EMTU/EMTU-C and MCS must be capable of providing updates to forms or adding new form requirements via wireless transmission and without manual installation.

(2) From time to time, NMFS may provide type-approved applicants with requirements for new forms or modifications to existing forms. NMFS may also provide notice of forms and form changes through the NMFS Work Order System. Type-approved applicants will be given at least 60 calendar days to complete their implementation of new or changed forms. Applicants will be capable of, and responsible for translating the requirements into their EMTU/EMTU-C-specific forms definitions and wirelessly transmitting the same to all EMTU/EMTU-C terminals supplied to fishing vessels.

§ 600.1507 Communications security.
Communications between an EMTU/EMTU-C and MCS must be secure from tampering or interception, including the reading of passwords and data. The EMTU/EMTU-C and MCS must have mechanisms to prevent to the extent possible:

(a) Sniffing and/or interception during transmission from the EMTU/EMTU-C to MCS.

(b) Spoofing.

(c) False position reports sent from an EMTU/EMTU-C.

(d) Modification of EMTU/EMTU-C identification.

(e) Interference with Global Maritime Distress and Safety System (GMDSS) or other safety/distress functions.

(f) Introduction of malware, spyware, keyloggers, or other software that may corrupt, disturb, or disrupt messages, transmission, and the VMS system.

(g) The EMTU/EMTU-C terminal from communicating with, influencing, or interfering with the Global Positioning System antenna or its functionality, position reports, or sending of position reports. The position reports must not be altered, corrupted, degraded, or at all affected by the operation of the terminal or any of its peripherals or installed-software.

(h) VMS data must be encrypted and sent securely through all associated cellular, satellite, and internet communication pathways and channels.

§ 600.1508 Field and Technical Services.

As a requirement of its type-approval, a type-approval holder must communicate with NMFS to resolve technical issues with a VMS Unit, MCS or bundle and ensure that field and technical services includes:
(a) Diagnostic and troubleshooting support to NMFS and fishers, which is available 24 hours a day, seven days per week, and year-round.

(b) Response times for customer service inquiries that shall not exceed 24 hours.

(c) Warranty and maintenance agreements.

(d) Escalation procedures for resolution of problems.

(e) Established facilities and procedures to assist fishers in maintaining and repairing their EMTU, EMTU-C, or MTU.

(f) Assistance to fishers in the diagnosis of the cause of communications anomalies.

(g) Assistance in resolving communications anomalies that are traced to the EMTU, EMTU-C, or MTU.

(h) Assistance to NMFS Office of Law Enforcement and its contractors, upon request, in VMS system operation, resolving technical issues, and data analyses related to the VMS Program or system.

§ 600.1509 General.

(a) Durability. An EMTU/EMTU-C must have the durability and reliability necessary to meet all requirements of §§ 600.1502 through 600.1507 regardless of weather conditions, including when placed in a marine environment where the unit may be subjected to saltwater (spray) in smaller vessels, and in larger vessels where the unit may be maintained in a wheelhouse. The unit, cabling and antenna must be resistant to salt, moisture, and shock associated with sea-going vessels in the marine environment.

(b) PII and Other Protected Information. Personally identifying information (PII) and other protected information includes Magnuson-Stevens Act confidential information
as provided at 16 U.S.C. 1881a and Business Identifiable Information (BII), as defined in the Department of Commerce Information Technology Privacy Policy. A type-approval holder is responsible for ensuring that:

(1) All PII and other protected information is handled in accordance with applicable state and Federal law.

(2) All PII and other protected information provided to the type-approval holder by vessel owners or other authorized personnel for the purchase or activation of an EMTU/EMTU-C or arising from participation in any Federal fishery are protected from disclosure not authorized by NMFS or the vessel owner or other authorized personnel.

(3) Any release of PII or other protected information beyond authorized entities must be requested and approved in writing, as appropriate, by the submitter of the data in accordance with 16 U.S.C. 1881a, or by NMFS.

(4) Any PII or other protected information sent electronically by the type-approval holder to the NMFS Office of Law Enforcement must be transmitted by a secure means that prevents interception, spoofing, or viewing by unauthorized individuals.

§ 600.1510 Notification of type-approval.

(a) If a request made pursuant to § 600.1501 (type-approval) is approved or partially approved, NMFS will issue a type-approval letter to indicate the specific EMTU/EMTU-C model, MCSP, or bundle that is approved for use, the MCS or class of MCSs permitted for use with the type-approved EMTU, and the regions or fisheries in which the EMTU/EMTU-C, MCSP, or bundle is approved for use.
(b) The NMFS Office of Law Enforcement will maintain a list of type-approved EMTUs/EMTU-C, MCSPs, and bundles on a publicly available website and provide copies of the list upon request.

§ 600.1511 Changes or modifications to type-approvals.

Type-approval holders must notify NMFS Office of Law Enforcement (OLE) in writing no later than 2 days following modification to or replacement of any functional component or piece of their type-approved EMTU, EMTU-C, or MTU configuration, MCS, or bundle. If the changes are substantial, NMFS OLE will notify the type-approval holder in writing within 60 calendar days that an amended type-approval is required or that NMFS will initiate the type-approval revocation process.

§ 600.1512 Type-approval revocation process.

(a) If at any time, a type-approved EMTU/EMTU-C, MCS, or bundle fails to meet requirements at §§ 600.1502 through 600.1509 or applicable VMS regulations and requirements in effect for the region(s) and Federal fisheries for which the EMTU/EMTU-C or MCS is type-approved, or if an MTU fails to meet the requirements under which it was type-approved, OLE may issue a Notification Letter to the type-approval holder that:

(1) Identifies the MTU, EMTU, EMTU-C, MCS, or bundle that allegedly fails to comply with type-approval regulations and requirements;

(2) Identifies the alleged failure to comply with type-approval regulations and requirements, and the urgency and impact of the alleged failure;

(3) Cites relevant regulations and requirements under this subpart;

(4) Describes the indications and evidence of the alleged failure;
(5) Provides documentation and data demonstrating the alleged failure;

(6) Sets a response date by which the type-approval holder must submit to NMFS OLE a written response to the Notification Letter, including, if applicable, a proposed solution; and

(7) Explains the type-approval holder’s options if the type-approval holder believes the Notification Letter is in error.

(b) NMFS will establish a response date between 30 and 120 calendar days from the date of the Notification Letter. The type-approval holder’s response must be received in writing by NMFS on or before the response date. If the type-approval holder fails to respond by the response date, the type-approval will be revoked. At its discretion and for good cause, NMFS may extend the response date to a maximum of 150 calendar days from the date of the Notification Letter.

(c) A type-approval holder who has submitted a timely response may meet with NMFS within 21 calendar days of the date of that response to discuss a detailed and agreed-upon procedure for resolving the alleged failure. The meeting may be in person, conference call, or webcast.

(d) If the type-approval holder disagrees with the Notification Letter and believes that there is no failure to comply with the type-approval regulations and requirements, NMFS has incorrectly defined or described the failure or its urgency and impact, or NMFS is otherwise in error, the type-approval holder may submit a written objection letter to NMFS on or before the response date. Within 21 calendar days of the date of the objection letter, the type-approval holder may meet with NMFS to discuss a resolution or redefinition of the issue. The meeting may be in person, conference call, or webcast. If
modifications to any part of the Notification Letter are required, then NMFS will issue a revised Notification Letter to the type-approval holder; however, the response date or any other timeline in this process would not restart or be modified unless NMFS decides to do so, at its discretion.

(e) The total process from the date of the Notification Letter to the date of final resolution should not exceed 180 calendar days, and may require a shorter timeframe, to be determined by NMFS, depending on the urgency and impact of the alleged failure. In rare circumstances, NMFS, at its discretion, may extend the time for resolution of the alleged failure. In such a case, NMFS will provide a written notice to the type-approval holder informing him or her of the extension and the basis for the extension.

(f) If the failure to comply with type-approval regulations and requirements cannot be resolved through this process, the NMFS OLE Director will issue a Revocation Letter to the type-approval holder that:

(1) Identifies the MTU, EMTU, EMTU-C, MCS, or bundle for which type-approval is being revoked;

(2) Summarizes the failure to comply with type-approval regulations and requirements, including describing its urgency and impact;

(3) Summarizes any proposed plan, or attempts to produce such a plan, to resolve the failure;

(4) States that revocation of the MTU, EMTU, EMTU-C, MCS, or bundle’s type-approval has occurred;

(5) States that no new installations of the revoked unit will be permitted in any NMFS-managed fishery requiring the use of VMS;
(6) Cites relevant regulations and requirements under this subpart;

(7) Explains why resolution was not achieved;

(8) Advises the type-approval holder that:

(i) The type-approval holder may reapply for a type-approval under the process set forth in § 600.1501, and

(ii) A revocation may be appealed pursuant to the process under § 600.1513.

§ 600.1513 Type-approval revocation appeals process.

(a) If a type-approval holder receives a Revocation Letter pursuant to § 600.1512, the type-approval holder may file an appeal of the revocation to the NMFS Assistant Administrator.

(b) An appeal must be filed within 14 calendar days of the date of the Revocation Letter. A type-approval holder may not request an extension of time to file an appeal.

(c) An appeal must include a complete copy of the Revocation Letter and its attachments and a written statement detailing any facts or circumstances explaining and refuting the failures summarized in the Revocation Letter.

(d) The NMFS Assistant Administrator may, at his or her discretion, affirm, vacate, or modify the Revocation Letter and send a letter to the type-approval holder explaining his or her determination, within 21 calendar days of receipt of the appeal. The NMFS Assistant Administrator’s determination constitutes the final agency decision.

§ 600.1514 Revocation effective date and notification to vessel owners.

(a) Following issuance of a Revocation Letter pursuant to § 600.1512 and any appeal pursuant to § 600.1513, NMFS will provide notice to all vessel owners impacted
by the type-approval revocation via letter and Federal Register notice. NMFS will provide information to impacted vessel owners on:

(1) The next steps vessel owners should take to remain in compliance with regional and/or national VMS requirements;

(2) The date, 60-90 calendar days from the notice date, on which the type-approval revocation will become effective;

(3) Reimbursement of the cost of a new type-approved EMTU/EMTU-C, should funding for reimbursement be available pursuant to § 600.1516.

§ 600.1515 Litigation support.

(a) All technical aspects of a type-approved EMTU, EMTU-C, MTU, MCS, or bundle are subject to being admitted as evidence in a court of law, if needed. The reliability of all technologies utilized in the EMTU, EMTU-C, MTU, MCS, or bundle may be analyzed in court for, inter alia, testing procedures, error rates, peer review, technical processes and general industry acceptance.

(b) The type-approval holder must, as a requirement of the holder’s type-approval, provide technical and expert support for litigation to substantiate the EMTU/EMTU-C, MCS, or bundle capabilities to establish NMFS Office of Law Enforcement cases against violators, as needed. If the technologies have previously been subject to such scrutiny in a court of law, the type-approval holder must provide NMFS with a brief summary of the litigation and any court findings on the reliability of the technology.
(c) The type-approval holder will be required to sign a non-disclosure agreement limiting the release of certain information that might compromise the effectiveness of the VMS operations.

§ 600.1516 Reimbursement opportunities for revoked Vessel Monitoring System type-approval products.

(a) Subject to the availability of funds, vessel owners may be eligible for reimbursement payments for a replacement EMTU/EMTU-C if:

(1) All eligibility and process requirements specified by NMFS are met as described in NMFS Policy Directive 06-102; and

(2) The replacement type-approved EMTU/EMTU-C is installed on the vessel, and reporting to NMFS Office of Law Enforcement; and

(3) The type-approval for the previously installed EMTU/EMTU-C has been revoked by NMFS; or

(4) NMFS requires the vessel owner to purchase a new EMTU/EMTU-C prior to the end of an existing unit’s service life.

(b) The cap for individual reimbursement payments is subject to change. If this occurs, NMFS Office of Law Enforcement will publish a notice in the Federal Register announcing the change.

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