

Draft Framework Action: Modification of the Vessel Position Data Collection Program for the Gulf of Mexico Shrimp Fishery



August 23, 2021

Purpose and Need Statements

- The purpose of this action is to transition from the expired 3G cellular electronic logbook program to a system that would maintain the Council's and NMFS's scientific ability to estimate and monitor fishing effort in the Gulf of Mexico shrimp fishery while minimizing the economic burden on the industry to the maximum extent practicable.
- The need is to base conservation and management measures on the best scientific information available and to minimize bycatch to the extent practicable, as required by the Magnuson-Stevens Fishery Conservation and Management Act, and minimize interactions with protected species as required by the Endangered Species Act.



Background

- The 3G cellular network expired in December 2020, which was used for transmission of data from cellular electronic logbook units (cELBs).
- Even though the data can no longer be transmitted via 3G cellular networks, the hardware devices onboard vessels can still collect and store effort data, as long as they are still functioning.
- Through this framework action, the Council is exploring alternatives to the cELB program in order to continue the estimation of effort in the shrimp fishery, which will assist in conducting annual shrimp stock assessments, estimating bycatch of other species for use in other species' assessments, and monitoring the sea turtle and juvenile red snapper bycatch thresholds.



Action 1

Modify the Method Used to Collect Vessel Position Data for the Gulf of Mexico Shrimp Fishery

- Note: The types of data and amount/timing of data collection would not vary between alternatives. Consistent with current requirements, the permitted vessels selected to participate must also provide the National Marine Fisheries Service (NMFS): the size and number of shrimp trawls deployed for each set, and the type of bycatch reduction device (BRD) and turtle excluder device (TED) used in the nets. Compliance with these requirements and the requirement to submit vessel position data is required for permit renewal.



Action 1

Modify the Method Used to Collect Vessel Position Data for the Gulf of Mexico Shrimp Fishery

- **Alternative 1:** No Action - Maintain the current method to collect vessel position data through the cellular electronic logbook units supplied by the NMFS. Prior to December 7, 2020, the owners or operators of selected vessels were responsible for the cost of cellular service necessary to transmit the data. Currently, because 3G cellular transmission is no longer possible, the NMFS will collect the memory cards from the units via mail.



Action 1

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- **Alternative 2:** The owner or operator of a shrimp vessel with a valid or renewable Gulf shrimp moratorium permit (SPGM) would be required to install an approved vessel monitoring system (VMS) that archives vessel position and automatically transmits that data via cellular service to NMFS.
 - **Option 2a:** If selected by the Science and Research Director (SRD), the owner or operator of a shrimp vessel with a valid or renewable SPGM would be required to install an approved device, as defined in the alternative.
 - **Option 2b:** All owners or operators of a shrimp vessel with a valid or renewable SPGM would be required to install an approved device, as defined in the alternative.



Action 1

For Alternative 2

- Owners or operators of vessels with more than one permit requiring VMS would need to comply with all the requirements for each permit, as could be the case with Gulf shrimp vessels that possess permits in other fisheries with VMS requirements.
- As of July 21, 2021, there were 1,360 vessels with valid or renewable SPGM permits.
- Of these 1,360 vessels, 465 had permits in other fisheries; of those 465, an estimated 119 vessels are required to comply with VMS requirements in other fisheries.
- Most of these 119 vessels have South Atlantic rock shrimp limited access (RSLA) permits (83), while others have commercial Gulf reef fish (RR) permits, charter/headboat permits for Gulf reef fish (RCG) or coastal migratory pelagic species (CHG), or various Atlantic highly migratory species (HMS) permits that require VMS when various types of gear are on board (e.g., pelagic longline, bottom longline, gillnet, etc.) and/or at certain times of year or in certain areas.



Action 1

For **Options a** and **b** (under **Alternatives 2** and **3**)

- Under **Option a**, program costs would be imposed solely on the subset of the industry selected to participate.
- **Option b** would provide census level data in the EEZ, rather than a subset of data, for estimating total effort and monitoring the sea turtle effort threshold.
- **Option b** avoids the assumption that a representative sample of the fleet now would continue to be representative of the fishery in the future, without re-drawing the sample periodically.



Action 1

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- **Alternative 3:** The owner or operator of a shrimp vessel with a valid or renewable SPGM would be required to install an approved electronic logbook that archives vessel position and automatically transmits that data via cellular service to NMFS.
 - **Option 3a:** If selected by SRD, the owner or operator of a shrimp vessel with a valid or renewable SPGM would be required to install an approved device, as defined in the alternative.
 - **Option 3b:** All owners or operators of a shrimp vessel with a valid or renewable SPGM would be required to install an approved device, as defined in the alternative.



Action 1 – VMS units and costs

- The next slide shows a range of costs for VMS units, that either use cellular or satellite transmission, that have already been approved or are undergoing approval by the VMS program. (This was presented at the April Council meeting by Dr. Gloeckner.)
 - Appendix C has the list of approved VMS units for the Gulf for-hire fisheries.
- Items that will need to be further examined include the transmission costs, based on the ping rate (every 10 minutes) and the lifespan of a typical VMS unit.



Possible options for “quick” type approval

Unit	Satellite	Cellular/ Hybrid	hardware cost estimate	Transmission cost estimate	Installation type
AddValue iFleetONE	Y		\$3,000	?(no response)	marine electrician
Faria FB eTerm-C*		Y	\$1,995	\$20/month after 1st year ¹	"Plug and Play"
Faria WatchDog 750VMS (with Messaging Terminal)	Y		\$3,150	\$100-200	marine electrician
GlobalStar Smartone Solar	Y		\$300-500	\$30/month	"Plug and Play"
Nautic Alert, Insight X2	Y		\$2,599	\$150/month	"Plug and Play"
Omnicom Mcurdo FMCT/G with Tablet	Y		\$2,095 (introductory) ²	\$150- 300/month	"Plug and Play"
Omnicom McMurdo FMCT/G without Tablet	Y		\$1,595 (Introductory) ²	\$150- 300/month	"Plug and Play"
Skymate m1600 VMS	Y		\$3,000	No Quote without regulations	marine electrician
Woods Hole Group – NEMO*		Y	\$500	\$350/year	"Plug and Play"
Woods Hole Group - Triton Advanced	Y		\$3,000	\$150/month	marine electrician

¹Free the first year

²First unit purchased

*pending approval for SEFIER

Draft Action 2

Power Down Exemptions for VMS

- Note: An alternative in this action would need to be selected only if VMS is selected in the preferred alternative of Action 1.
- **Alternative 1:** No Action - No power down exemptions for the vessel position data reporting program selected under Action 1 are permitted.
- **Alternative 2.** An owner or operator of a vessel subject to the requirement to have a VMS operating at all times as specified in Action 1 can be exempted from that requirement and may power down the required VMS unit if the vessel would be continuously out of the water or in port for more than 72 consecutive hours. For the purposes of this alternative, “in port” means secured at a land-based facility, or moored or anchored after the return to a dock, berth, beach, seawall, or ramp.



Draft Action 2

Power Down Exemptions for VMS

- **Alternative 3.** An owner or operator of a vessel subject to the requirement to have a VMS operating at all times as specified in Action 1 can be exempted from that requirement and may power down the required VMS unit if the vessel would be operating outside of the U.S. Gulf of Mexico waters.



Draft Action 2

Another example – relates to when the device is powered on

- **§ 622.205 Vessel monitoring systems (VMSs).**
- (a) *VMS requirement for South Atlantic rock shrimp.* An owner or operator of a vessel that has been issued a limited access endorsement for South Atlantic rock shrimp (until January 27, 2010) or a Commercial Vessel Permit for Rock Shrimp (South Atlantic EEZ) must ensure that such vessel has an operating VMS approved by NMFS for use in the South Atlantic rock shrimp fishery on board **when on a trip in the South Atlantic**. An operating VMS includes an operating mobile transmitting unit on the vessel and a functioning communication link between the unit and NMFS as provided by a NMFS-approved communication service provider.



Questions?

