

Summary of 2016/2017 Herring and Mackerel Fishery Electronic Monitoring Project

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Project Title: “Greater Atlantic Region Electronic Monitoring Implementation Project for the Atlantic Herring and Mackerel Midwater Trawl Fisheries”

Funding Source: Fishery Information System/National Observer Program

Funding Amount: \$406,000

Funding Allocated: Yes (to NEFSC/NEFOP)

Timing: Applied for funding in October 2015

Grant approved January 19, 2016

Grant funding allocated in May 2016

Solicitation for contract proposals issued May 9, 2016

Solicitation closed May 31, 2016

Contract award expected at the end of June (assuming we have an acceptable proposal)

Status: We received 4 proposals and those proposals are currently under review

Project Goals Overview: This EM project is designed simply to install systems on vessels and get them operational to support implementation of EM should the Council recommend it under the IFM Amendment. Once operational under this grant, and once we begin to receive data and information from video review, we will evaluate the full range of information we can gather with EM systems. This information should include verification of slippage events, and may be extended to include categorizing the type of slippage events and verification of other discard sources. We will need to determine if EM can help estimate the amount of catch retained (if not the entire codend, etc.). EM systems under this project will not be a tool for monitoring compliance (as it is likewise not a compliance monitoring tool under the IFM Amendment).

Contract-specific Goals:

- Develop EM program requirements;
- Develop data program and EM service provider performance standards;
- Establish roles and responsibilities for the industry, service providers, and NMFS;
- Explore and detail how EM data collected in this project could be integrated into other reporting requirements; and
- Provide information to finalize fishery-wide implementation requirements.

Contractor Deliverables:

- Installation and deployment of EM systems on up to twelve (12) Atlantic herring/mackerel midwater trawl vessels;
- Develop local infrastructure for vessel and program support;
- Develop Vessel Monitoring Plans, establish standards for equipment installations, and work with NEFSC to establish procedures for approving VMPs;
- Use EM to monitor fishing activity to determine if there are discards on herring and mackerel trips;

- Review sensor and video and data; and
- Work with NMFS to review program performance for refinement.

Contract Highlights (summary only, not a complete account of the contract requirements)

Time Period: 16 months (2 months setup; 12 months operation; 2 months analysis and final reporting)

Outreach: Contractor will hold regular meetings with participating vessels (EM installation, operation, data retrieval, equipment repairs and replacement, etc.) and will hold meetings with NMFS.

EM Units: Funds will be used to lease EM units from the contractor. EM units must meet or exceed EM technical specifications established by the NEFSC (provided in Solicitation as an attachment).

Installation, servicing of EM units aboard vessels, and field and project support: Establish local support for management of EM program in Northeast; establish installation schedule for vessels; install, test, and initialize systems; pay for alterations (except power supply); establish vessel monitoring plan for each vessel; log installation and alterations over the course of the project.

Data Analysis: The key data analysis and reporting tasks include:

- The Contractor shall assess the quality of image data on a per trip basis and shall develop categories of image quality that determine if the data is suitable for imagery review and data analysis;
- The Contractor shall analyze vessel sensor data for quality and completeness (e.g., no data gaps). The Contractor shall summarize all data gaps or periods of missing data (sensor or video) and include that information in the final report;
- The Contractor shall review 100% of the fishing activity at the trip level, beginning with the first deployment of the net (as detected by the sensors) until the vessel returns to port;
- Identify all fishing episodes, including the activity of both vessels involved in pair trawling operations;
- Identify discarding by net slippage (release of catch from the net in the water), operational discards (release of catch during operations to move fish from the net to the vessel's fish hold (for example during pumping operations)), discard of fish from the grate or deck of the vessel, or any other discarding event. The identification of discarded fish species is not necessary for the purpose of this project;
- Document the net/codend or purse seine and its contents after pumping has ceased to identify fish (presence/absence) remaining in the net;
- Identify all instances where the catch does not come onboard after a fishing event (gear issue, fish pumped to another vessel, etc.);
- Identify interactions (presence/absence) with protected species;
- Identify anomalous events in the data set that may warrant further investigation; and
- Submit data reports according to EM summary file standards (Section J, Attachment 2, Electronic Monitoring Data File Technical Specifications).

Removal of EM Units from Vessels: At the end of contract, the contractor is responsible for removing EM equipment and accessories completely from vessels.

Final Report: The Contractor will provide a final report on EM Systems, data collection, and analysis.

Ownership of Materials: All data will be owned by NMFS, and NMFS will adhere to confidentiality rules for collected data. Contractor may not share data without permission from NMFS.