



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northeast Fisheries Science Center
166 Water Street
Woods Hole, MA 02543-1026



Electronic Monitoring System (EMS) Pilot Study

Frequently Asked Questions

Q: Who is administering the pilot study?

A: The Fisheries Sampling Branch (FSB) of the Northeast Fisheries Science Center (NEFSC) has initiated the study in cooperation with Archipelago Marine Research, Ltd, a research organization who specializes in data collection programs in support of commercial fisheries management.

Q: How much does it cost to equip a fishing vessel with the EMS system?

A: The cost of the hardware is dependent on vessel size and gear type and ranges from \$8,000-\$10,000. This is a baseline estimate for the equipment, management structure and EMS requirements could impact costs. FSB is incorporating a cost analysis as part of the pilot study.

Q: Do study participants get to keep the equipment?

A: FSB is leasing the equipment for the duration of the study. At the conclusion of the study or a participant's involvement, the equipment will be returned to Archipelago.

Q: What requirements must the vessel meet in order to run EMS?

A: The EMS control box must be continuously powered at sea, therefore, the system requires either a power source of 110-240 AC (minimum 400 watts) or a dedicated 12-volt circuit with a 20-amp fuse.

Q: What is the duration of the study?

A: The study runs for an 18 month period beginning May 1, 2010 and can extend for two more optional 18 month periods.

Q: Are participants compensated?

A: Yes, participants receive monetary compensation for meeting project requirements and attending quarterly EMS study participant meetings. Project requirements necessary for compensation include:

1. Keeping EMS powered for the entire fishing trip.
2. Monitoring EMS system performance and completing a function test prior to each trip.
3. Contacting EMS staff within 24 hours of detecting a system problem.
4. Providing prompt and efficient vessel access to EMS staff to service the equipment and retrieve hard drives.
5. Working with program staff to develop onboard catch handling methods suitable for the program.
6. Completing a vessel questionnaire upon study completion.

Q: When will the technology be approved?

A: Amendment 16 suggests that EMS technology may be an option for sector managers in 2013. Approval is pending study results and final authorization by the National Marine Fisheries Service.

Q: Are vessels equipped with EMS required to carry observers and At-Sea-Monitors (ASM)?

A: Until EMS is approved as an alternative to observers and ASMs, all participating vessels are still required to carry human observers and monitors. Pending approval, and management structure, EMS may be a valid alternative to reduce or supplement human coverage.

Q: Will the EMS equipment be used for enforcement purposes?

A: EMS data is not collected for enforcement purposes; however, data can be requested by enforcement agencies.

Q: What happens if the equipment fails while out at sea?

A: Participants continue to fish as normal. The technology is not approved at this time and is purely experimental. Fishermen would not be required to cancel their trip or come in early if the system failed to work (during the pilot study phase). Participants are required to notify Archipelago within 24 hrs of landing to let them know the system has failed and provide access to the vessel to rectify the problem.

Q: What information is collected by EMS?

A: The system collects fishing location and duration, vessel speed, kept and discarded catch, incidental takes, and hydraulic pressure readings. Fishing activity is the primary information recorded.

Q: Does EMS record audio?

A: No EMS does not record audio.

Q: Is the data collected confidential? What is done to protect the privacy of fishing industry members?

A: All data collected as part of the EMS pilot study is treated as confidential observer data and is protected under the Magnuson Act. The National Marine Fisheries Service (NMFS) owns all the data and maintains the information in a secure facility.

Q: Who owns the data?

A: NMFS owns the data. Study participants may request clips of video, data summaries, or interpreted data for their personal use.

Q: How long does it take for collected information to be made available to managers?

A: Regions using EMS as part of a management strategy process and disseminate data in 4-5 days. How the technology will be implemented in New England fisheries and managed is yet to be determined. If the technology is approved,

EMS would need to conform to the time restrictions applied to groundfish sector data in order to manage quotas effectively.

Q: Where is EMS used?

A: EMS is used in certain fisheries in British Columbia, Alaska, Australia and the U.S. (Seattle, Washington).

Q: How long does it take to analyze a haul?

A: Data analysis is dependent on the fishery and how the vessel sorts catch. For gillnet and longline vessels, fish come up as individual pieces and thus are easier to view. Analysis time is associated with haul duration, for each hour of hauling and catch handling approximately 1.5 hours is required for analysis. Trawl trips require more time as the catch comes up as one unit as opposed to individual pieces. Analysis time on trawl vessels is roughly 3 times the haul duration.

Q: Could EMS be used for other purposes, such as security, dockside monitoring, etc.?

A: These and other functions are being explored as part of the pilot study.

Q: What is the fishing industry's reaction to the EMS pilot study?

A: Reactions have been mixed, with some members in favor, others ambivalent, and some against the study. In general there is a genuine interest in the technology and its potential function. Some feel as though this is a method to obtain better data, while others feel it degrades privacy.

Q: Is lighting an issue for the cameras?

A: Most vessels are equipped with sufficient deck lights or are able to add lighting as needed. In general, if the crew is able to work and see at night, the cameras are too.

Q: Does changing gear types affect the EMS?

A: Each gear type has its challenges. There is a standard set-up template for each gear type, however, the size and vessel configuration determine exactly how the

system will work on each vessel. Cameras and other equipment can be adjusted to account for various gear types (i.e. gillnet to longline).