## **Biannual Review of GARFO ET Implementation Plan**

1. The number of FMPs with defined fishery-dependent data collection monitoring goals?

All 15 FMPs in the Greater Atlantic Region have fishery-dependent data collection monitoring goals; all vessels are eligible to use electronic vessel trip reports and vessel monitoring systems are used in many FMPs for catch reporting and data collection. Despite all GARFO permitted vessels being authorized to use electronic vessel trip reporting, acceptance of eVTR has been slow. We are currently exploring ways in which we can make the use of eVTR more appealing in order to broaden its use. The concept of mandatory electronic reporting has been discussed and is a topic met with much industry resistance. We continue to explore the possibility of mandatory eVTR.

2. The number of FMPs reviewed to identify fisheries where the adoption of additional electronic technologies would be appropriate for achieving data needs?

All 15 Greater Atlantic Regional FMPs also include an observer or at-sea monitoring component and are considered eligible for the adoption of additional technologies for achieving data needs. Further, our fishery dependent data modernization initiative will advance integrated electronic reporting in all fisheries.

Currently, only three fisheries have been formally reviewed for electronic monitoring applications:

- Northeast Multispecies FMP
- Atlantic Herring FMP
- Atlantic Mackerel, Squid, and Butterfish FMP (Atlantic Mackerel fishery only)
- 3. For fisheries where additional electronic technologies are identified as appropriate, the number of FMPs with electronic technologies incorporated into fishery-dependent data collection programs?

The Greater Atlantic Region and Northeast Fisheries Science Center already make broad use of electronic technologies in fishery-dependent data collections and reporting (e.g., pre-trip notification system, vessel monitoring system, vessel monitoring system forms, electronic dealer reporting, and electronic trip reports). For the three FMPs reviewed for the use of electronic monitoring, all have electronic technologies incorporated as part of the authorization to use electronic vessel trip reports. Specific to electronic monitoring, pre-implementation is underway in the Northeast Multispecies FMP and early development is ongoing for the herring and mackerel fisheries as part of the industry funded observer amendment.

4. Address progress at the fishery level that better reflects the application of electronic technologies.

GARFO and the NEFSC continue working with our groundfish EM partners in developing an EM program with the intention of going operational in May 2016. The existing project includes 2 out of the existing 17 groundfish sectors and also includes project partners The Nature Conservancy, Ecotrust Canada, and the Gulf of Maine Research Institute. Although only two sectors have thus far expressed an interest in utilizing EM in 2016, the agency is supportive of additional sectors either joining the existing project or developing new projects.

Additionally, GARFO is engaged with industry members and the Councils in the development of an EM program in the herring/mackerel midwater trawl fleet. There is generally wide spread interest in using EM in the midwater trawl fleet for the purpose of increasing monitoring levels in an industry funded monitoring program. The adoption of EM in herring and mackerel will need to be directed by the Councils because the herring and squid, mackerel, and butterfish FMPs will require amendment to consider and allow the use of EM.

5. Why other FMPs are not being considered for the incorporation of electronic technologies.

EM is generally thought of as an alternative to human observers. While EM is not intended to supplant the Northeast Fisheries Observer Program (NEFOP), it is viewed as an alternative to other types of monitoring programs for the purpose of monitoring catch caps. In addition to the groundfish, herring, and mackerel fisheries, other GAFRO managed fisheries with catch cap monitoring programs include scallop and *Loligo* squid. The scallop FMP has a long-standing successful industry funded monitoring program with very little industry support for a switch to EM. A catch cap monitoring program for *Loligo* squid is a future possibility and may be considered once we have developed our EM systems in groundfish and herring.

6. A significant element of GARFO's ET Implementation Plan is our fisheries data collection modernization initiative. That initiative seeks to review and analyze our existing data collection systems so that we may develop a modernized, integrated and comprehensive reporting system that meets current and future data needs. Progress on that endeavor continues as we are in various stages of analysis of existing systems and planning of new systems including the development of the system architecture. Progress on the development of system architecture will continue this fall and into the winter. An important note regarding our modernization is that we are partnering with ACCSP in this activity to coordinate with system improvements they are carrying out under their own visioning project.