### **Harmonizing Tuna RFMO Electronic Monitoring Standards**

This paper is part of a series that summarizes discussions from the 2022 Global Electronic Monitoring Symposium<sup>1</sup>, which convened more than 50 EM experts, both in person and virtually, for a three-day workshop. The symposium focused both on the use of electronic monitoring programs to increase oversight and transparency in international fisheries management and on existing barriers to the uptake of EM. Although this series of papers does not represent an exhaustive discussion of the issues, it includes the key points that symposium participants raised.

### Introduction

As of 2022, four tuna regional fisheries management organizations (TRFMOs) and their 92 member countries have begun drafting electronic monitoring (EM) standards via working groups and workshops. EM standards aim to provide guidelines for consistent implementation of EM at the national and subregional levels to ensure effective monitoring and data collection that supports evidence-based fisheries management. Given the global nature of much of the world's tuna fleet it's important for RFMOs to align EM standards and share information as these standards are developed. The Global Electronic Monitoring Symposium (GEMS) provided an initial platform for an exchange of ideas relevant to the four main TRFMOs; the organizations should work to continue efforts to coordinate developing EM standards. Collaboration among the chairs of the TRFMO EM working groups would help harmonize minimum EM standards and enable vessels to fish in a variety of areas with just one EM system.

# **Background**

Because most commercial tuna fleets operate in multiple jurisdictions, flag States are responsible for ensuring their vessels abide by the rules and regulations of the various coastal states and RFMOs where they operate. These RFMOs usually have the common objective of scientific data collection from vessels to inform fisheries management, and in some there is an additional objective of monitoring compliance with management measures. Multiple TRFMOs are exploring using EM programs to collect the necessary data to support these objectives and have made progress towards developing standards that will govern these programs.

<sup>&</sup>lt;sup>1</sup> GEMS Steering Committee members – Andrew Clayton, Claire van der Geest, Esther Wozniak, Eugene Pangelinan, Gerald Leape, Mark Zimring, Papa Kebe, Robert Gillett, Ruth Hoban

- In 2019, the Inter-American Tropical Tuna Commission (IATTC) directed its staff to develop a workplan for drafting EM standards; the plan was presented at the 2020 annual Commission meeting. Between 2021 and 2022, IATTC held a total of four EM workshops to discuss staff recommendations for institutional structures, goals and scope for an RFMO-wide EM program. At the 2022 annual meeting, members agreed to establish an EM working group (EM WG) in 2023 to provide recommendations based on workshop discussions and make progress on draft EM standards.
- In 2019, the International Commission for the Conservation of Atlantic Tunas (ICCAT) directed the Standing Committee on Research and Statistics (SCRS) and the Integrated Monitoring Measures Working Group to develop EM standards (ICCAT WG EMS). In 2021, at the ICCAT Commission meeting, members agreed to establish a Commission-wide EM working group, in addition to the SCRS electronic monitoring working group. In 2022, the two working groups met and will continue to develop draft standards based on objectives set by ICCAT on enforcement and scientific data collection needs.
- In 2018, the Western and Central Pacific Fisheries Commission (WCPFC) began developing standards for an EM program. In 2021, WCPFC members tasked the Commission's EM working group with finalizing standards for Commission review. In 2022, the EM working group formed subgroups to draft (1) a framework for how EM will complement the regional observer program and other data collection tools, (2) EM standards specification and procedures and (3) a conservation management measure for EM implementation.
- In 2019, the Indian Ocean Tuna Commission (IOTC) commissioned the International Seafood Sustainability Foundation to draft EM standards, which were presented at the 2020 IOTC meetings. In 2021 IOTC's Working Group on EM Standards developed a workplan, including terms of reference for the group, that were endorsed by IOTC's Scientific Committee. In addition, the working group discussed program objectives, roles and responsibilities, minimum technical specifications and provisions on how data is transferred and analyzed. Moreover in 2022, the WGEM developed EM definitions, program standards and minimum data standards for consideration by the IOTC Scientific Committee.

## Key elements of a successful EM development process

GEMS participants agreed on the need for three things in relation to the EM development process: an iterative process, output-based standards and compatibility among RFMOs.

As EM program standards are being developed, RFMO members and staff have recognized that the standards will need to evolve to meet the current and future needs of the EM program and the broader management regime; GEMS participants agreed that an iterative process would (1) enable stakeholder input throughout the design and implementation phase, (2) allow for the incorporation of new technologies and (3) fit into the framework of current regional monitoring programs.

Participants also agreed that, to the degree possible, standards should be formulated based on outputs (i.e., be non-prescriptive or performance oriented) rather than on inputs. Additionally, because there is a large overlap of members, and in some cases, an overlap in management areas between the RFMOs, the EM WG chairs in attendance agreed on the need to ensure compatibility between the various TRFMO's EM standards. Such EM compatibility efforts can be supported through coordination between the four TRFMO EM WG chairs with the aim of harmonizing basic standards such as minimum EM technology requirements and avoiding incompatibility between programs.

Organizing these efforts in the standards development phase will increase information sharing, avoid duplication of efforts (e.g., need for new trials), minimize unnecessary expenses and logistical delays in national EM programs, and promote efficiency between TRFMO electronic monitoring programs. For example, if EM programs are designed to be compatible across RFMOs, vessels operating in the Pacific Ocean will be able to fish in the Indian Ocean without changing or recalibrating EM equipment, and crossing RFMO Convention Areas would not drastically change EM reporting requirements for vessels.

### Next steps

Because all four TRFMOs have begun working on EM standards separately and are discussing similar questions, there is an urgent need to initiate a multi-RFMO process to improve coordination. Noting that the quest to have compatible standards should be streamlined to avoid slowing down the process of EM standards adoption at any TRFMO, EM working group chairs should consider meeting periodically to discuss how to harmonize their standards, which could help streamline the individual RFMO development processes. Resources are available from nongovernmental organization partners to host an in-person consultation during the first half of 2023, followed by annual virtual convenings.