

INTER-AMERICAN TROPICAL TUNA COMMISSION
3RD WORKSHOP ON AN ELECTRONIC MONITORING SYSTEM (EMS) IN THE
EPO: EMS MANAGEMENT CONSIDERATIONS

(by videoconference)
25-27 April 2022

DISCUSSION SUMMARY

The 3rd Workshop on an Electronic Monitoring System (EMS) in the EPO: EMS Management considerations, was held by videoconference from 25 to 27 April 2022. A list of participants is provided in Annex A.

1. Opening of the meeting

The meeting was facilitated by Mr. Brad Wiley of the IATTC Policy and Compliance Division.

The draft agenda was adopted without modification.

It was recalled that the 3rd EMS workshop was convened in accordance with the terms of reference adopted by the Commission in [Resolution C-21-02](#) for a series of workshops to discuss the aspects of an eventual EMS program to be approved by the Members. The goals of these workshops are to educate and familiarize participants on topics that will need to be elaborated in the eventual creation of a Commission EMS and where possible, to facilitate an initial exchange of views on these topics that can inform the work of the IATTC *Ad Hoc* Working Group on Electronic Monitoring. Participants were asked to consider and comment broadly on discussion topics related to the five EMS Management considerations subcomponents presented in this workshop, but also to contemplate the application of these EMS concepts to the differentiated components of the EPO tuna fleets.

As with the first two EMS workshops, these discussions were convened using Chatham House Rules, meaning that comments would not be attributed to any individual, government or other affiliation, unless attribution was explicitly requested by the speaker.

2. Discussion of [EMS-03-01](#), EMS Management considerations

Mr. Marlon Roman introduced document EMS-03-01 that had been prepared by the IATTC staff. Among others, he called the attention of the participants on the various recommendations that were included in the document with the objective of focusing and stimulating the discussion on a number of specific topics, as referred to below.

2.1. Coordination and compatibility

Staff Recommendation: *The EPO EMS should, to the extent practicable, be designed to operate as part of, or in close coordination with, the existing observer programs and other relevant data-collection programs, to maximize efficiency and avoid unnecessary duplication of effort and/or data collected.*

- The participants were asked the type of entity that would be in charge of coordinating the type of coverage a particular fishing trip should receive. And also, asked whether the current capabilities of EM on the collecting of data fields for both purse-seine and longline fisheries, presented in Appendices 2 and 3 of document SAC-11-10, (and compiled in the Annex 4 and 5 of document EMS-01-01) be considered as a starting point for allocating data fields to be covered by EM to complement observers' duties.

- One participant recalled that resolution C-19-08 defined in its paragraph 9 the applicable mandate in terms of EMS for longline vessels. So, any data requirements for this fishery would have to be consistent with that Resolution.
- Another participant mentioned that, in order to define the categories of data fields which would be collected by EM on an observed vessel, it would be helpful to consider which data fields could be collected via EMS that the observer cannot (e.g. data that could be collected when the observer sleeps, or the number of hooks in a longline set).
- Some participants pointed out that, on vessels with an observer on board, EMS would complement the work of that observer. One participant stressed that this was a costly redundancy, and that EMS should be used only on vessels that do not carry an observer. Another participant stated that, be the EMS a way to complement the work of an on-board observer or to be used instead of an observer, the Commission might be flexible regarding the EMS coverage of class 6 purse seiners in the light of the number of smaller purse seine vessels that have no human observer on board. For those sharing this view, the focus should be on utilizing EMS to increase the observation of vessel classes or types that have little or no human observer coverage. With regards to the potential use of EMS instead of a human observer on Class-6 vessels a participant raised the issue of the compatibility of this approach with the obligations set forth in the AIDCP and in the Antigua Convention and other instruments adopted by the AIDCP Parties and IATTC Member.
- A participant stressed that the EMS could not have the versatility of a human observer and enquired on the number of cameras that would be necessary to do an adequate job both on longline and smaller class purse seiners which do not have an observer on board. This led to another question by that participant on the estimates of equipment costs and the time required for installation of the EM equipment – on this specific issue the IATTC staff responded that this would be addressed in the future workshop, on the basis of estimates derived from the experience gathered during the implementation of the pilot EMS projects.

2.2. Confidentiality

Staff Recommendation: *The Commission should consider whether it is necessary to clarify or amend IATTC and AIDCP data confidentiality rules to ensure that they are adapted to the circumstances and requirements related to the implementation of an EMS, in particular to guarantee the personal and commercial privacy and confidentiality of EM records and EM data.*

- A participant expressed the view that EMS should be considered as supplementing the observer program and be treated thus equally: all data compiled should be sent to the Secretariat, which should then handle it and use it in strictly compliance with the IATTC confidentiality rules.
- A participant stressed that it would be up to each flag State EMS program (both for purse seine and longline vessels) to send the EM records to the regional EM review center and send afterwards to the Secretariat the resulting data.
- A participant stated that the IATTC confidentiality rules should be adjusted to accommodate the handling of EM records and data, including to ensure that the use of each CPC's EM data would be consistent with its national legislation.
- Another participant emphasized that there were strong concerns regarding the

confidentiality of the EM records, particularly the video records, and that consequently it would be very difficult to consider the possibility of making them available to a third party. Even the situation of the resulting data remained unclear, regarding the way it should be used.

2.3. Compliance

2.3.1. Staff Recommendation: *Non-compliance with EM standards and requirements by the Commission should be referred to the relevant CPCs for investigation and further consideration, and also reported to the Review Committee for possible recommendations to improve compliance, or other actions, as appropriate.* The staff also asked the participants to consider whether EMS capabilities for monitoring vessel activity should be used for compliance monitoring, in addition to scientific purposes.

2.3.1.1. On the question put forward by the staff on the use of EMS for science and for compliance:

- Some participants stressed that EMS should be used both for scientific and compliance purposes, including in accordance with the Antigua Convention e.g. Article XVIII, while several others emphasized that EMS should be used only to collect scientific data, even when the individual flag CPC might decide to use the EM records and data from its vessels for the purpose of compliance. This is clearly a challenging issue that remains to be solved. A way forward was proposed by a participant or suggested a gradual approach: EMS would start for scientific purposes only and then later, at a time to be decided by the Commission, expanded to compliance.
- Among those in favor of using EMS both for science and compliance, some participants stressed that no distinction should be made between vessels or fleets of different characteristics and types. All vessels and fleets should be treated equally in this respect.
- Among those against the use of EMS for compliance, a participant noted, based on experience, that such use would imply a considerable increase in costs due to the need for a greater number of cameras as well as the expense related to the review and analysis of the additional data generated by those cameras
- On the question of compliance and non-compliance with the EM standards and requirements there were no comments from the participants excepting a question raised by one of them, whether the breaking down of any EMS component, e.g., a camera, would be considered not as a case of possible non-compliance and when it would be so.

2.3.2. Staff Recommendation: *The Commission will take all appropriate measures to promote and improve compliance, including through the appropriate capacity-building activities.* The staff asked the participants whether capacity-building activities with stakeholders are considered a useful tool for improving compliance with the EMS implementation, or any other mechanisms that could be explored for this purpose. Also, in addition to the economic-incentive example provided, what kind of incentives would be desirable, should incentives be created to incentivize and improve compliance?

There were no comments by the participants.

2.4. EM equipment

2.4.1. Staff Recommendations:

The Commission should establish policies and procedures for installation, use, and repair of EM equipment malfunctions, and prevention of tampering.

The EM equipment should be capable of detecting, recording and reporting malfunctions, and instances of possible tampering.

A number of specific issues were raised by participants during the discussion:

- A participant stressed the need to establish and adopt general standards regarding the installation of the EM equipment and its maintenance. That participant also expressed that it was necessary to define the term “tampering” in order to clarify what actions can be undertaken by the crew in terms of repair or maintenance of the equipment.
- Regarding the technical characteristics of the equipment:
 - A participant mentioned the importance that the equipment can detect and report on any tampering attempt.
 - A participant expressed that to avoid any malfunctions, the vessel should have backup units, which would be reflected in the costs.
 - Another participant mentioned that, to minimize costs in terms of data storage and reviews, the systems shouldn’t record continuously. While in agreement with this statement, the staff responded that this question should be addressed more appropriately in the future EMS workshop on technical and logistical standards, during which more details will be provided on the EM equipment requirements, including with a view at bringing down the cost of maintenance as well as other variables of interest.

2.4.2. Staff Recommendation: ***EM records storage devices should be tamper-proof. Cameras and other sensors should be tamper-resistant as well, but also capable of allowing repair by vessel crew when at sea in coordination with EM service providers, as needed.***

- A participant remarked that EM equipment is not made tamper-proof. So, it's important to use appropriate language, and that the equipment must be well tested by the installers.

2.4.3. Staff Recommendations:

Vessels should be prohibited from leaving port unless their EM equipment is functioning properly.

If the EM equipment ceases to record useful or sufficient data, the vessel should be required to return to port within a reasonable timeframe when at-sea repair is not feasible.

- One participant expressed a concern in relation to some longline fisheries, where vessels may stay at sea for a long period of time- months or even years. In this regard, it would be important to understand how long EM systems can be expected to function without repair or replacement. The staff suggested that it would be necessary to establish a reference time period indicating for how long a vessel should be allowed at-sea with nonfunctional EM

equipment, EM coverage and review rate.

- Another participant considered that it is important to first determine if the EMS in the EPO will be a centralized system, as well as to estimate the cost of technicians for EM equipment damage and/or maintenance assistance.
- Finally, one participant expressed agreement with the staff's recommendations and said it would be important to obtain feedback from EM equipment providers in terms of repairs and maintenance intervals.

2.4.4. Staff Recommendations:

The objective of EM coverage should be 100% coverage for all long-line and purse-seine vessels and trips, with an interim objective of making sure that programmatic coverage at less than 100% must be representative of all fleets and fishing strategies.

When a vessel has operational EM equipment, it should be used to monitor all fishing activities conducted by that vessel for the entire trip.

Separate EM review rates should be established for compliance and for science, taking into account costs and feasibility.

For those EM data fields that do not require an EM review rate of 100%, the review rate should be established on a scientific basis (e.g., through the analysis of EM data provided by the Projects D.2.a, C.2.b).

EM review rates would be reviewed periodically so that they are revised, if necessary, following results of analysis of EM data.

- In response to a comment made by a participant, the staff clarified once again that EMS should not mean to substitute the human observers that are placed on board vessels in compliance with the AIDCP and IATTC resolutions, in the case of class 6 purse seine vessels for instance, with 100% human coverage, the EM would complement the work done by these observers, for instance doing tasks that the human observer cannot do or freeing them from some of their activities, so they can carry out others such as collecting biological samples for instance. In smaller vessels, EMS would generate an important amount of information that is presently collected only through more basic processes, such as utilization of the vessel logbooks.
- EM coverage:
 - In response to a question made by a participant, the staff clarified that no decision had been taken formally yet on a 100% EM coverage, which it recommended for several reasons, including to avoid disparities between vessels and fleets and maximizing the amount of information potentially to be used.
 - The same participant who had already intervened on this topic reiterated that priority should be given to smaller purse seine vessels and afterwards consider if there would be value to include the class 6 purse seiners which already have 100% human observer coverage.
 - Another participant pointed out that any decision on the coverage rate anyway was to be taken by the Commission itself, and that both staff and the workshops could only make recommendations in this respect. The staff recalled that contacts and discussions

were ongoing on the convenience for the Commission to establish an ad hoc working group on EMS which would be able to discuss and negotiate at another level this kind of issues, which cannot be decided upon by the staff or in the framework of a workshop. Such is the case for instance of some of the institutional aspects which needed to be defined yet, while consideration of the technical aspects can move forward through the agreed workshops process.

- Rate of review:
 - A participant wondered if, in addition to a coverage of 100%, the rate of review should not be also 100%, particularly if EMS is used for compliance purposes. The staff clarified that, in its opinion, the review rate could be less than 100%, so long as it was randomized, and everyone was subject to the same likelihood of review.
 - Another participant stressed that the discussion process on the establishment of an EMS was still in its very early stage, and it was therefore too soon to reach any meaningful conclusion, including in terms of the metrics to be used.
 - Nonetheless, a participant mentioned some percentages, as an illustration of the possible variation of the percentage rate of review in view of the objective of the sampling. For instance, if this objective is science, a 5% review rate would be clearly insufficient, a 20% has been proposed but has not been agreed upon yet and in the longline fishery for swordfish there is a coverage of 100%.