

VESSEL MONITORING SYSTEM IN TUNA RFMOS
(submitted by the ICCAT Secretariat)

The International Commission for the Conservation of Atlantic Tunas (ICCAT) has minimum standards for VMS systems operated by CPCs for vessels flying their flags in the ICCAT Convention area. It covers all commercial fishing vessels exceeding 20 meters between perpendiculars or 24 meters length overall, and from 1 January 2020, on all vessels above 15 meters length overall that are authorised to fish beyond national jurisdiction.

These VMS data can be made available to the SCRS for scientific purposes, upon request and to CPCs engaged in operations under the ICCAT Scheme of Joint International Inspection. There are rules established to protect confidentiality of these data and they are to be transmitted at least once every hour for purse seiners and at least once every two hours for all other vessels. They must include Vessel ID, position, date and time.

Minimum standards for ALCs tamperproof and operational at all times have been set, as well as procedures for inoperable or defective ALCs.

The list below is intended to give a brief summary of the state of play on the VMS systems implemented in other RFMOs:

Tuna RFMOs

The Commission for the Conservation of Southern Bluefin Tuna (CCSBT)

The CCSBT VMS requires CPCs to adopt and implement satellite-linked VMS for vessels fishing for southern bluefin tuna according to requirements of the Convention area where they are fishing (IOTC, WCPFC, CCAMLR, ICCAT), or the requirements of the coastal State of any EEZ not covered by an RFMO.

The data are to be transmitted at least once every 4 hours and must include Vessel ID, position, date and time. There are rules established to protect confidentiality of these data.

Minimum standards for ALCs tamperproof and operational at all times have been set, as well as procedures for inoperable or defective ALCs.

The Inter-American Tropical Tuna Commission (IATTC)

The IATTC has a decentralised VMS, which is implemented through national programs. It covers all vessels greater than 24m length operating in the Eastern Pacific Ocean (EPO) and harvesting tuna or tuna-like species.

These VMS data are not available to RFMO scientists either compliance committee. However, there are rules established to protect confidentiality of these data. The data are to be transmitted at least once every 4 hours and must include Vessel ID, position, date, time, speed and course.

Minimum standards for ALCs tamperproof and operational at all times have been set, as well as procedures for inoperable or defective ALCs.

The Indian Ocean Tuna Commission (IOTC)

The IOTC has a decentralised VMS, which is implemented through national programs. It covers all vessel types engaged in fishing related activities which are greater than 24m fishing on the high seas for species covered by the IOTC and vessels less than 24m operating outside of its EEZ and fishing for species covered by the IOTC Agreement. IOTC is empowered to establish guidelines for the registration, implementation and operation of VMS in the IOTC area with a view to standardizing VMSs implemented by each CPC.

These VMS data are not available to either RFMO scientists or the compliance committee. Besides, there are not rules established to protect confidentiality of these data. The data transmitted must include Vessel ID, position, date and time.

Minimum standards for ALCs tamperproof and operational at all times have been set, as well as procedures for inoperable or defective ALCs.

In 2016 the IOTC started a process for strengthening its VMS in order to provide an effective platform for the monitoring and controlling IOTC fisheries, consistent with the Commission's management regime. The establishment of a regional or Commission VMS should also be considered, taking into account the costs and benefits, the existing national VMS approaches as well as regulatory framework, technical, confidentiality and Secretariat staffing requirements.

There were considered two main options:

- **Shared decentralized system**, similar in construct to a completely decentralized system, but with automatic sharing of data from the CPC's FMC to the Commission Secretariat and specific rules in place for how and when other CPCs can access it and what they can use it for.
- **Partially centralized system**, similar to the previous option, but with data to be sent directly to the Commission Secretariat by the VMS satellite service providers contracted by each CPC (not through the CPCs' FMCs).

The costs are impossible to accurately estimate until fundamental policy questions are answered, but it could cost anywhere between USD380,000 – 810,000/annum. This budget includes system acquisition, airtime costs, VMS specific staff.

Western and Central Pacific Fisheries Commission (WCPFC)

The WCPFC operates its VMS as a centralized system (i.e., it provides for simultaneous transmission of reports to the Secretariat and flag State). The structure of the WCPFC VMS allows vessels to report to the WCPFC through two ways: directly to the WCPFC VMS, or through the Pacific Islands Forum Fisheries Agency (FFA) VMS.

It covers all vessel types of at least 20m LOA fishing for highly migratory fish stocks in the high seas of the Convention area, and EEZs where the coastal State has requested inclusion in the scheme. The system must be capable of transmitting data hourly, but this frequency can vary depending upon the fishery, applicable measures or for monitoring, control and surveillance purposes.

These VMS data are available to RFMO scientists and the compliance committee. There are rules established to protect confidentiality of these data. The data are to be transmitted at least once every 4 hours and must include Vessel ID, position, date and time.

Minimum standards for automatic location communicators (ALCs) types, tamperproof and operational at all times have been set, as well as procedures for inoperable or defective ALCs.

Other RFMOs

The Commission for the Conservation of Antarctic Living Resources (CCAMLR)

CCAMLR VMS covers all fishing vessels licensed to operate in the CCAMLR Convention area for the duration of the license. Flag States establish and operate the VMS for vessels flying their flag, but CCAMLR measures prescribe detailed operational requirements, including transmission frequencies for different fisheries, minimum standards for ALCs, procedures for ALC transmission failure, etc.

The North East Atlantic Fisheries Commission (NEAFC)

The NEAFC VMS covers all fishing vessels greater than 24m total length or greater than 20m between perpendiculars, fishing in the Regulatory Area, which does not include EEZs.

The data are to be transmitted at least every hour, and on entry and exit from the Regulatory Area. They must include Vessel ID, position, date, time, speed, course, catch and transshipment data where applicable.

The NEAFC regulations also prescribe minimum operational requirements for these national programs.

The Northwest Atlantic Fisheries Organization (NAFO)

The NAFO VMS covers all fishing vessels used or intended for use for the purposes of commercial fishing activities conducted on fisheries resources in the NAFO Regulatory Area. Flag States establish and operate the VMS for vessels flying their flag and fishing in the NAFO Regulatory Area.

The data are to be transmitted no less than once an hour, plus entry and exit. They must include Vessel ID, position, date, time, speed and course.

The NAFO regulations also prescribe minimum operational requirements for these national programs.

The South East Atlantic Fisheries Organization (SEAFO)

The SEAFO VMS covers all fishing vessels used or intended for use for the purposes of commercial fishing activities conducted on fisheries resources in the SEAFO Convention area. Flag States establish and operate the VMS for vessels flying their flag and fishing in the SEAFO area. The SEAFO regulations also prescribe minimum operational requirements for these national programs, including manual reporting in the event of a unit breakdown, reporting frequencies, etc.

The South Pacific Regional Fisheries Management Organization (SPRFMO)

The SPRFMO VMS is not yet operational and fully developed. It will be a centralized system (i.e., it provides for simultaneous transmission of reports to the Secretariat and flag State) and covers all vessels fishing in the high seas of the Convention area, plus a buffer of 100 nautical miles, excluding vessels flagged to adjacent coastal States fishing in their own waters. Members can request that their EEZ be included in the Commission VMS.

SPRFMO VMS data can be used for scientific purposes. The SPRFMO will develop rules to prevent ALC tampering, security standards, and rules and procedures for the access, use and release of VMS data.

Sources:

- <https://iss-foundation.org/what-we-do/influence/rfmo-best-practices-snapshots/download-info/rfmo-best-practices-snapshot-2019-vessel-monitoring-systems/>
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