



# Vessel Monitoring Systems

## What Is VMS?

A **vessel monitoring system** (VMS) is a satellite-based **observation system** that, at regular intervals, provides fisheries authorities data on the **location, course and speed of its fishing vessels**.

## Benefits of a VMS Program

VMS are integral to effective fisheries management. They enable monitoring, control and surveillance of the activities of vessels involved in the catch and transportation of fisheries resources. VMS also provide additional information to fisheries scientists and are important for estimating CPUE.

## How Does VMS Work?

On-board transceiver units (automatic location communicators or ALCs) automatically transmit, via satellite, reports to a land based receiver stations. These reports can be either simultaneously transmitted, or re-reported, to flag State Fisheries Management Centres, coastal States and/or RFMO Secretariats.

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For comprehensive review of tuna RFMO **VMS** and the suggested best practices please refer to [ISSF Technical Report 2022-06](#)



## Assessment of Vessel Monitoring Systems by RFMO Recommended Best Practices

















The following tables show the progress of each tuna RFMO in implementing the recommended best practices.

### Color Coding Key

	Element(s) are consistent with the suggested best practices.		Some element(s) are present, but amendments or a change in procedure is needed to be consistent with best practices.		Element (s) are missing or inconsistent with best practices.
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RFMO	Design and Scope				Data				Use of Data and Confidentiality		ALCs and Procedures	
	Simultaneous or immediate & automated re-reporting in "near real time" to the RFMO	Covers vessels of at least 20m LOA operating on the high seas or any vessel capable of operating outside its flag State EEZ	Clarity on geographic coverage (EEZs, HS only, Coastal State opt-in)	Covers all vessel types engaged in fishing related activities, e.g., transshipment	Core data transmitted (e.g., vessel name, vessel ID, vessel position, date/time)	Data exchange formats	Reporting Frequency (every 2 hours or less)	Recipients (e.g., flag State FMC, coastal State where vessel operating, RFMO)	Two-way systems & polling	Available to RFMO scientists & compliance committee	Rules established to protect confidentiality of data	Minimum standards for ALC types established & Tamper-proof & operational at all times
IOTC												
	✗	Vessels >24m fishing on the high seas for species covered by the IOTC & vessels <24m operating outside of its EEZ and fishing for species covered by the IOTC Agreement	✔	✔	✔	✗	✗ Every 4 hours	✔	✗	✗	✗	✔ Tamper-proof & operational at all times
IATTC												
	✗	✗ 24m or greater LOA	✔	✔	✔	✗	Every 4 hours for longliners & 2 hours for other vessels Flag State FMC only	✗	✔	✔	✔ Starting in 2023 CPCs/vessels are required to report to the IATTC Secretariat complete VMS data for all vessels required to carry VMS, which will be used by the IATTC Scientific Staff	✔ Tamper-proof & operational at all times

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ICCAT	Only for Bluefin fisheries	 20m between perpendiculars or 24 m LOA.  As of 1 Jan 2020, vessels >15m LOA authorized to fish in waters beyond the jurisdiction of its flag State					 At least once every hour for PS and at least once every two hours for all other vessels	Flag State FMC and relevant coastal State(s)		Not consistent among ICCAT fisheries (tropical tunas vs. bluefin) / Data provided to Sect can be made available to SCRS, upon request. / Data 3 years old or more is provided to the SCRS for scientific purposes only for eastern Bluefin. / For the bluefin fishery, reports can be made available by Sect to CPCs engaged in operations under the ICCAT Scheme of Joint International inspection. For tropical tuna fisheries, CPCs are encouraged to share VMS data to support MSC activities			
WCPFC						 Must be capable of transmitting data hourly.  This standard can vary depending upon the national laws for vessels fishing in an EEZ, applicable measures or for MCS purposes.  The default reporting rate is 4 hours while in the Convention Area. During FAD closures, purse seine vessels must report at 30 minute intervals while in the Convention Area (20N/20S).	