

Progress of work and plan for 2022 of the Vessel Monitoring System (VMS) Working Group (WG)

PREPARED BY: IOTC SECRETARIAT¹, 26 JANUARY 2022

PURPOSE

To provide participants at the Working Party on the Implementation of Conservation and Management Measures (WPICMM) an update on the progress of work and plan for 2022 of the Vessel Monitoring System (VMS) Working Group (WG).

BACKGROUND

The CoC16 noted paper [IOTC-2019-WPICMM02-VMS Study](#), which provided options for strengthening the IOTC VMS and further noted paper [IOTC-2019-CoC16-05a](#), which summarised the work of the Steering Group, and subsequently recommended the formation of a VMS Working Group (VMSWG).

CoC16 (CoC16.33 Para 109) recommended the establishment of a VMS Working Group, chaired by Mr Stephen Ndegwa (Kenya), to progress the work associated with strengthening the IOTC VMS, as per the ToR in Appendix 8 of [IOTC-2019-CoC16-R](#). This was subsequently endorsed by S23 ([IOTC-2019-S23-RE_Rev1_FINAL](#)).

The VMS Working Group has held four meetings:

- 1st meeting – 19 May 2021, [IOTC-2022-VMSWG01-R](#)
- 2nd meeting – 17 September 2021, [IOTC-2022-VMSWG02-R](#),
- 3rd Meeting – 13 December 2021, [IOTC-2022-VMSWG03-R](#)
- 4th Meeting – 25 January 2022, [IOTC-2022-VMSWG04-R](#)

A fifth meeting is scheduled for 12 July 2022.

The report of the previous meetings of the VMS Working Group are available as resource documents through the above links.

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DISCUSSION

The Vessel Monitoring System (VMS) was established with the principal task of progressing the work to strengthen the IOTC VMS. The work plan of the VMS Working Group is guided by the responsibilities given in its ToRs. They are presented below with the status of the discussions on the IOTC Vessel Monitoring System (VMS) by the VMS Working Group.

VMS Objectives

VMSWG03 **AGREED** to the following objectives:

The objective of the VMS is to support the Commission in ensuring sustainable fisheries of the stocks covered by the organization. By providing accurate and reliable information on the location and activities of the vessels fishing those stocks the VMS will reinforce the Monitoring, Control and Surveillance mechanisms of the Commission and will:

- a) Improve monitoring, control and surveillance capabilities of CPCs to ensure compliance with the IOTC Conservation and Management Measures;
- b) Enhance the cooperation and coordination on monitoring, control and surveillance mechanisms in the IOTC Area between coastal, flag and inspecting CPCs;
- c) Increase transparency among CPCs and the IOTC Secretariat, and promote a level playing field on the control of fishing activities relating to IOTC regulated stocks;
- d) Prevent, detect and deter illegal, unreported and unregulated (IUU) fishing;
- e) Obtain accurate, reliable and easily usable positioning data to be used for scientific research and fisheries management.

Status

Concluded.

Preferred model for a future IOTC Commission VMS, including hosting options

VMSWG01 **NOTED** that while several parties prefer Option 3 Partially Centralised, some parties have a strong preference for Option 2 Shared Decentralised. A solution would be to allow parties to choose which system to apply, as long as reporting resulted in being near real time and tamper-proof.

VMSWG01 **CONCLUDED** that this flexibility comprises a hybrid option and **RECOMMENDED** this option be considered by the Compliance Committee.

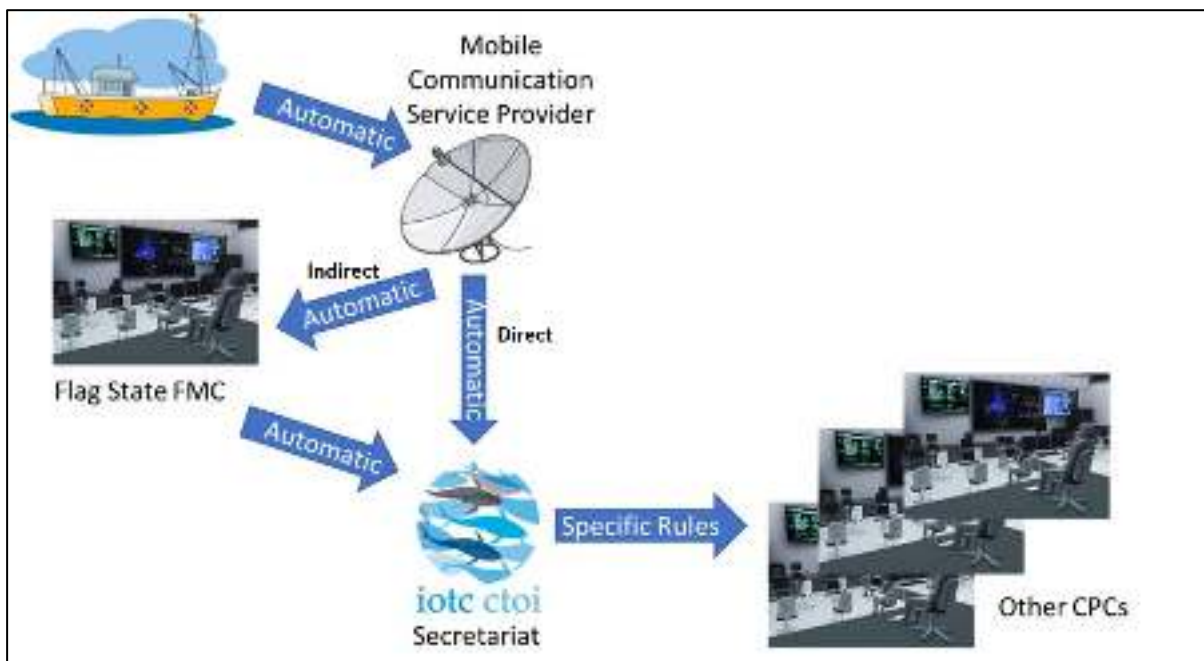


Figure 1. Adapted from *Options paper for strengthening the IOTC VMS, 2019*.

Figure 1, above, is a schematic representation of what the VMS Working Group had recommended for the Compliance Committee’s (CoC) consideration at its 18th Session in May/June 2021, but unfortunately the report was not adopted in time for the recommendation to be presented to the CoC18.

However, it can be concluded that this represents the **AGREED** option, at the level of the VMS Working Group.

Status
Concluded.

Scope and application of the VMS (e.g. vessel types and size, geographic scope)

VMSWG03 **AGREED** that the VMS should include all vessel types, including carrier, supply and support vessels.

VMSWG03 **AGREED** that non-CPC-flagged carrier vessels be requested to transmit VMS and if they fail to do so they can be excluded from the Record of Authorised Carrier Vessels.

VMSWG03 **AGREED** that all vessels above 12m length overall be the preferred option and included irrespective of whether they operate inside or outside the EEZ, and **FURTHER AGREED** that this may be achieved gradually by increasing VMS coverage from present requirements under Resolution 15/03, particularly for developing coastal States.

VMSWG03 **AGREED** that a buffer zone be set at 20nm from a coastal State’s EEZ or, as an alternative, reporting 24 hours prior to the entry to the EEZ

Status
Concluded.

Method for ensuring real time or near real time position reporting (e.g. direct, indirect or simultaneous polling)

VMSWG02 **NOTED** paper IOTC-2021-VMSWG02-03, prepared by Seychelles, assessing delays between vessels’ VMS reports and the receipt of same by the fisheries monitoring centre.

VMSWG02 **NOTED** that paper IOTC-2021-VMSWG02-03 deduced that the risk of delays of more than 10 minutes from the time the position is fixed by the VLD, to the time the coastal State receives the data, via the vessel’s flag State FMC, is minimal.

VMSWG02 **NOTED** a presentation prepared by the EU that showed the model in use in the EU.

VMSWG02 **NOTED** that information goes first to the EU Commission’s central node for communication to third parties and **FURTHER NOTED** that the average time from the vessel to the final destination is between three and four minutes.

VMSWG02 **NOTED** that the delays presented by EU (which has a very high volume of messages) and Seychelles (that has VMS on vessels smaller than 24m) are comparable and not significant.

VMSWG02 **AGREED** that risk of tampering in the case of Option 2 Shared Decentralised is negligible.

Status
Concluded.

Develop possible funding models and options.

Of the RFMOs/RFBs directly consulted, most (and certainly all of the RFMOs) have chosen to fund their VMS through their normal budget. That is, CPCs contribute to the costs of the VMS through the general contributions’ formula, rather than through any special arrangement for flag CPCs etc. This is likely to be the most appropriate funding avenue for IOTC, at least in the short term.

VMSWG03 **RECALLED** the analysis and three options presented in section 4.3.4 of the Options Paper ([IOTC-2019-WPICMM02-VMS Study](#)), namely (1) a simple increase in Commission budget, proportional to CPCs contributions, (2) a greater proportion of additional funds from flag CPCs and (3) some form of cost recovery from vessels.

VMSWG03 **RECALLED** the table on p33 of the Options Paper ([IOTC-2019-WPICMM02-VMS Study](#)), which presents three different total cost scenarios and **NOTED** that costs increase in accordance with the total number of vessels covered and with the frequency of VMS data transmission.

VMSWG03 **AGREED** that a simple increase in the Commission budget (Option 1) to finance the VMS was preferred, since it was the most equitable and practical option.

VMSWG03 **AGREED** that the current four-hourly reporting interval be maintained as a starting point, with the possibility of stepwise increases.

VMSWG03 **REQUESTED** that the IOTC Secretariat prepare a table presenting overall cost implications for each CPC, resulting from different numbers of vessels covered (depending on size ranges) and reporting frequencies.

VMSWG03 **AGREED** that an analysis be carried out to determine the staffing, infrastructure, extra costs and data security that would be required.

VMSWG04 **NOTED** paper [IOTC-2022-VMSWG04-03](#) on the Cost Implications for CPCs on the Agreed Funding Model for the IOTC VMS.

VMSWG04 **NOTED** that these are the cost implications of direct reporting to the IOTC Secretariat, which is a maximum satellite airtime cost scenario.

VMSWG04 **NOTED** that the additional costs of indirect reporting would be borne by the flag State and **FURTHER NOTED** that costs would be lower with the indirect reporting.

VMSWG04 **NOTED** that those CPCs that already have VMS and Vessel Location Devices, would not necessarily have to install a VMS and new Vessel Location Devices and **FURTHER NOTED** that smaller vessels might not have VMS at present and would be more likely to have to buy a new Vessel Location Device.

VMSWG04 **NOTED** that where States are already receiving transmissions, greatly increased costs to the flag State would not be incurred and **FURTHER NOTED** that the costs of forwarding the information to the IOTC Secretariat would not necessarily be greatly in excess of that of their existing internet connections.

VMSWG04 **NOTED** that the incremental costs to flag States of forwarding information to the IOTC Secretariat can vary depending on the satellite communication provider and **FURTHER NOTED** that some systems would not charge extra for forwarding the position information to the IOTC Secretariat.

VMSWG04 **NOTED** that the present analysis was not asked to consider the costs of centralised software and its maintenance, which would be extra costs.

VMSWG04 **AGREED** that the cost estimates in their current limited form would not be forwarded to higher levels before an analysis on the general costs is carried out.

VMSWG04 **RECALLED** that VMSWG03 had agreed that an analysis be carried out to determine the staffing, infrastructure, extra costs and data security that would be required.

VMSWG04 **AGREED** that the IOTC Secretariat draft Terms of Reference to be circulated intersessionally.

VMSWG04 **NOTED** that if the IOTC Secretariat cannot find extra budgetary funds for this study from existing sources, a proposal would have to go to the Standing Committee on Administration and Finance and the Commission.

Status
Ongoing. Further discussions to take place at the July 2022 meeting.

Consider improvements that can be made to Resolution 15/03.

VMSWG01 **AGREED** that changes to the Resolution should be decided at the Commission level not at the VMSWG.

VMSWG03 **NOTED** the proposed amendments in Attachment 2 in the Options Paper ([IOTC-2019-WPICMM02-VMS Study](#)), and **FURTHER NOTED** the proposals presented to VMSWG03 in the Proposed Draft VMS Objectives ([IOTC-2021VMSWG03-02](#)).

VMSWG03 **RECALLED** that any amendments to Resolution 15/03 should be submitted to the Commission by a CPC or co-sponsored by CPCs participating in the VMSWG.

VMSWG03 **AGREED** that scope in terms of vessel size would be decided at higher levels, based on proposed revisions in paragraphs 2 and 2bis of [Error! Reference source not found.](#), of the meeting report.

VMSWG03 **REQUESTED** the Secretariat to circulate a revised version of proposed amendment to Resolution 15/03 for consideration by the Members of the VMSWG.

VMSWG04 **RECALLED** Appendix 3 of the [IOTC-2021-VMSWG03 R](#) with the proposed revisions to Resolution 15/03.

VMSWG04 **AGREED** regarding new para 1 to include reference to the IOTC Agreement and to compliance with Conservation and Management Measures.

VMSWG04 **AGREED** to delete ex para 1 and **FURTHER AGREED** regarding para 2 (ex para 2) that VMS should cover all vessels of 12 metres in length overall and above, and listed in the IOTC Record of Authorised Vessels.

VMSWG04 **AGREED** regarding para 3 (ex para 2) to reduce the three-year period for full implementation of VMS to two years and **FURTHER AGREED** that after this date, vessels not equipped with VMS shall not be authorized to fish for tuna and tuna like species managed by the IOTC.

VMSWG04 **RECALLED** that Seychelles had agreed to provide clarification and what is meant by the term “antenna is blocked” and provide a proposal on the role of the IOTC Secretariat with respect to the handling of VMS data received, and **AGREED** Seychelles prepare guidelines for the registration, implementation and operation of VMS referred to in para 4 (ex para 4).

VMSWG04 **AGREED** that the IOTC Secretariat circulate the proposal on the role of the IOTC Secretariat and the guidelines for the registration, implementation and operation of VMS intersessionally for consideration at the next meeting of the VMSWG.

VMSWG04 **AGREED** regarding para 7 (ex para 7) in principle to a frequency of two hours, but in view of cost implications it would be subject to further discussion and **FURTHER AGREED** to add reference to the information being provided directly to the IOTC Secretariat or through the FMC.

VMSWG04 **AGREED** regarding subpara 9d (ex para 8) that the implementation of the provision on providing automated reports when the antenna is blocked be subject to a transition period.

VMSWG04 **AGREED** that new para 10 subpara b) on polling be subject to further discussion since it is a new requirement and **FURTHER AGREED** its implementation might be subject to a transition period.

VMSWG04 **AGREED** regarding para 12 (ex para 10) that vessels not already subject to Resolution 15/03 be included and that manual reporting be allowed for a maximum of two years, subject to further discussion.

VMSWG04 **AGREED** that para 13 (ex para 11) be qualified to refer to new para 3 on the delayed implementation.

VMSWG04 **AGREED** regarding para 14 (ex para 12) that the IOTC Secretariat prepare a report every year on the performance and operations of the VMS prior to the Commission meeting and present it to the Compliance Committee.

VMSWG04 **AGREED** regarding Annex 1 para B that CPCs shall require the elements indicated.

VMSWG04 **AGREED** regarding Annex 1 para C that (i) flag States’ consultation of port States on switching off when the vessel is in port and (ii) the period of being switched off, particularly for smaller vessels, both be subject to further discussion.

VMSWG04 **AGREED** regarding Annex 1 para D that there be an upper limit to the period of malfunction and **FURTHER AGREED** that the duration would be subject to further discussion.

VMSWG04 **AGREED** that consideration be given to those aspects of Annex 1 relating to malfunction (para E, para F and para G) be made into a separate annex.

VMSWG04 **AGREED** to the revisions made in [Appendix 3](#), subject to further discussion in the next meeting of the VMSWG on those elements in square brackets and where indicated in the points above.

VMSWG04 **AGREED** that it should aim to finalise a proposal on a revised Resolution 15/03 in 2023.

VMSWG04 **NOTED** that in view of the substantive discussion required on the use of VMS data, it is premature to present a revised proposal for Resolution 15/03 to the Commission and consequently no discussion was held on its presentation or co-sponsorship.

VMSWG04 **NOTED** that a progress report will be required for the next WPICMM and Compliance Committee meetings and **AGREED** that the IOTC Secretariat prepare the progress report with the elements agreed so far for presentation to the Compliance Committee and to the Commission.

Status
Ongoing. Further discussions to take place at the July 2022 meeting.

Develop rules and procedures for the sharing, use and protection of VMS data.

Establish an expertise-based intersessional working group to develop rules and procedures for the sharing, use and protection of VMS data. (Referenced from *Options paper for strengthening the IOTC VMS, 2019*)

VMSWG04 RECALLED that Seychelles had agreed to provide clarification and what is meant by the term “antenna is blocked” and provide a proposal on the role of the IOTC Secretariat with respect to the handling of VMS data received, and AGREED Seychelles prepare guidelines for the registration, implementation and operation of VMS referred to in para 4 (ex para 4).

Status
Ongoing. Further discussions to take place at the July 2022 meeting.

Develop mechanism for the smooth transition of the existing to the new system, if required.

Status
Outstanding. Consider at the January 2022 meeting

RECOMMENDATION/S

That the WPICMM05:

- 1) **NOTE** paper IOTC–2022–WPICMM05–08.
- 2) **NOTE** the slow progress made by the VMSWG and that further discussions are required to progress the work of the VMSWG.