

COMM 5 - Report - ANNEX 9a

Terms of Reference for the South Pacific Regional Fisheries Management Organization Working Group on VMS

(COMM5-WP07)

Background

The Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean (the Convention) was adopted on 14 Nov 2009 and entered into force on 24 August 2012. The objective of the Convention is the long term conservation and sustainable use of fishery resources in the South Pacific Ocean and the protection of the marine ecosystems in which the resources exist.

At SPRFMO2, recalling the relevant provisions of the Convention, in particular Articles 25(1)(c) and 27(1)(a), the Commission adopted CMM2.06 on the Establishment of the Vessel Monitoring System in the SPRFMO Convention Area. CMM2.06 sets out a framework for establishing an SPRFMO Commission Vessel Monitoring System (or VMS). Paragraph 3 of CMM2.06 provides that the purpose of the SPRFMO VMS should be to cost effectively continuously monitor the movements of fishing vessels authorized by flag States to fish in the SPRFMO Convention Area in order, inter alia, to support the implementation of SPRFMO CMMs.

Paragraph 9 of CMM2.06 provides that particular considerations shall be taken into account when developing rules and procedures for the operation of the VMS, including the draft Minimum Standards for Automatic Location Communicators (ALCs) used in the Commission VMS (as set out in Annex I) and:

a. vessel reporting, including the specifications of the data required, its format and reporting frequencies; b. Automatic Location Communicators (ALCs) minimum standards, including automation standards and the specifications of the ALCs; c. rules on polling; d. ALC failure alternates; e. cost recovery; f. cost sharing; and g. measures to prevent tampering. h. obligations and roles of fishing vessels, Members, CNCPs and the Secretariat, and i. use and release of data for purposes within the scope of the Convention.

Establishment and functions of the CTC Working Group on VMS

At SPRFMO2, the Compliance and Technical Committee (CTC) recommended to the Commission that an intersessional working group be created to develop rules and procedures for the operation of the SPRFMO VMS, in accordance with the considerations outlined at paragraph 9 of CMM 2.06. The CTC1 report was adopted by the Commission but this work has not yet commenced. The Commission agrees that the responsibilities of the VMS Working Group (VMS-WG) will be expanded to those set out below.

The VMS -WG will be chaired by the Chair of the Compliance and Technical Committee and coordinated by the SPRFMO Secretariat. The VMS-WG is open to all interested Members and CNCPs who may nominate one or more suitably qualified representatives for the VMS-WG. Interested Members and CNCPs will need to ensure that the VMS-WG has sufficient technical expertise as well as expertise in project and contract management. If agreed by the VMS-WG, the Group may also invite experts including from other intergovernmental organisations who are working on VMS matters, such as the Commission for the Conservation of Antarctic Marine Living Resources, and relevant RFMOs. The VMS-WG will undertake its work electronically

Responsibilities

1. The VMS -WG will identify the specific requirements of the SPRFMO VMS that will give effect to the objectives and considerations outlined in the Convention, and paragraph 3 of CMM 2.06.
2. The VMS-WG will continue work on the outstanding issues on the basis of the text at Annex 9(b) of the SPRFMO 5 Meeting Report.

3. The VMS-WG will develop the rules and procedures for the SPRFMO VMS according to paragraph 9 of CMM2.06. This work is to be undertaken in the intersessional period between SPRFMO-5 and SPRFMO-6.
4. The VMS-WG will consider the obligations relating to VMS in CMM 4.02 to ensure their compatibility with CMM 2.06.
5. These Terms of Reference will be reviewed at SPRFMO-6 to ensure their ongoing suitability.

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CMM 2.06 Conservation and Management Measure for the Establishment of the Vessel Monitoring System in the SPRFMO Convention Area

(COMM5-Prop03-rev7 [with bracketed text])

The Commission of the South Pacific Regional Fisheries Management Organisation;

RECALLING the relevant provisions of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean, in particular Articles 25 (1)(c) and 27 (1)(a);

[REITERATED the integrity of the provisions of the Article 27, the VMS data may be used to further facilitate the Contracting Parties to implement the Article 27 (1)(b), Article 27 (3) as well as the CMM 3.04]

NOTING the importance of the vessel monitoring system as a tool to effectively support the principles and measures for the conservation and management of fisheries resources within the Convention Area;

MINDFUL of the rights and obligations of Commission Members and Cooperating Non-Contracting Parties (CNCPS) in promoting the effective implementation of Conservation and Management Measures (CMMs) adopted by the Commission;

FURTHER MINDFUL of the key principles upon which the vessel monitoring system is based, including the confidentiality and security of information handled by the system, and its efficiency, cost-effectiveness and flexibility;

ADOPTS the following CMM to provide for the implementation of the SPRFMO Vessel Monitoring System:

A COMMISSION VESSEL MONITORING SYSTEM

The Commission Vessel Monitoring System (Commission VMS) shall be activated on the date agreed in the contract between SPRFMO and its chosen provider.

The Commission VMS shall cover the area as defined in Article 5 of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean and have a buffer zone of 100 nautical miles outside the Convention Area.

DEFINITIONS

1. For the purposes of interpreting and implementing these procedures, the following definitions shall apply:
 - (a) "Convention" means the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean;
 - (b) "Convention Area" means the Area to which this Convention applies in accordance with Article 5 of the Convention;
 - (c) "Commission" means the Commission of the South Pacific Regional Fisheries Management Organisation established by Article 6 of the Convention;
 - (d) "Automatic Satellite Position Device/Automatic Location Communicator" (ALC) means a near real-time satellite position fixing transceiver;
 - (e) "Commission VMS" means the SPRFMO Vessel Monitoring System that is established under this CMM;
 - (f) "Member/CNCP VMS" means the domestic Vessel Monitoring Systems that each Member and CNCP are obliged to develop in accordance with this CMM;
 - (g) "Fisheries Monitoring Centre" (FMC) means the government authority or agency responsible for managing VMS for its flagged fishing vessels.

PURPOSE

2. The purpose of the Commission VMS is to continuously monitor the movements and activity of fishing vessels that are on the Commission Record of Vessels and are authorised by flag States to fish for fisheries resources in the SPRFMO Convention Area in a cost-effective manner in order to, *inter alia*, support the implementation of SPRFMO CMMs.

APPLICABILITY

3. The Commission VMS shall apply to all fishing vessels as defined in Article 1 (1)(h) of the Convention. The system shall operate on a permanent basis or until decided otherwise by the Commission.
4. Any Member or CNCP may request, for the Commission's consideration and approval that waters under its national jurisdiction be included within the area covered by the Commission VMS. Necessary expenses incurred in the inclusion of such area into the Commission VMS shall be borne by the Member or CNCP that made the request.

NATURE AND SPECIFICATION OF THE COMMISSION VMS

5. The Commission VMS shall be administered by the SPRFMO Secretariat under the guidance of the Commission.
6. Data collected by the Commission VMS shall be securely stored by the Secretariat for at least three years and for a period to be determined by the Commission, and shall be used by the Members and CNCPs to achieve compliance with CMMs. VMS data may also be used by the Scientific Committee for analysis to support specific scientific advice requested by the Commission for sound fisheries management decision-making in the Convention Area.
7. Without prejudice to the principle of flag State responsibility, each Member and CNCP shall require vessels flying its flag to report VMS data automatically either:
 - (a) to the Secretariat via their flag State's FMC; or
 - (b) simultaneously to both the Secretariat and its FMC.
8. Each Member and CNCP shall notify the Executive Secretary of its chosen means of reporting (option (a) or (b) under paragraph 9) before the Commission VMS is activated.
9. The Commission shall develop rules and procedures for the operation of the Commission VMS taking into account the provisions of Annex 1, including, *inter alia*:
 - (a) measures to prevent tampering; and
 - (b) use and release of data for purposes within scope of the Convention.
10. Security standards of the SPRFMO Commission VMS data shall be developed by the Commission, consistent with confidentiality provisions of the Data Standards CMM 4.02 (Data Standards; 2017).
11. All Member and CNCP fishing vessels required to report to the SPRFMO Commission VMS shall use a functioning ALC that complies with the Commission's minimum standards for ALCs in Annex 1.
12. The Commission shall, as soon as practicable, agree on the roles and responsibilities of fishing vessels, Members, CNCPs and the Commission Secretariat for the operation of the Commission VMS.

All Members, CNCPs and the Secretariat shall manage VMS data in accordance with the Security and Confidentiality Requirements in Annex 2.14 bis. The Commission shall review the requirements for accessing VMS data for inclusion in this CMM at its annual meeting in 2018.

PROCEDURE IN CASE OF MANUAL REPORTING

13. In the event of failure of automatic reporting, the procedure outlined in Annex 3 of this measure shall apply.

REVIEW

14. At each annual meeting, the Secretariat shall provide the Commission with a report on the implementation and operation of the Commission VMS.
15. The Commission shall conduct a review of the implementation of the Commission VMS at its annual meeting in 2019 and shall consider its efficiency and effectiveness and consider further improvements to the system as required.

Annex 1

Minimum Standards for Automatic Location Communicators (ALCs) used in the Commission Vessel Monitoring System

1. The ALC shall automatically and independently of any intervention on the vessel communicate the following data:
 - (a) ALC static unique identifier;
 - (b) the current geographical position (latitude and longitude) of the vessel;
 - (c) the date and time (expressed in Coordinated Universal Time [UTC]) corresponding to the position of the vessel in paragraph 1 b);
2. The data referred to in paragraphs 1 b), c) and d) shall be obtained from a satellite-based positioning system.
3. ALCs fitted to fishing vessels must be capable of transmitting data at least every 15 minutes.
4. The data referred to in paragraph 1 shall be received by the Commission within an interval determined by the Commission.
5. ALCs fitted to fishing vessels must be protected so as to preserve the security and integrity of data referred to in paragraph 1.
6. Storage of information within the ALC must be safe, secure and integrated under normal operating conditions.
7. The flag State shall ensure that its FMC receives VMS positions at least with the frequency adopted according to this CMM and shall be able to request the VMS information at a higher frequency.
8. It shall be prohibited to destroy, damage, render inoperative or otherwise interfere with the ALC unless the competent authorities of the Flag State have authorised its repair or replacement.
9. Any features built into the ALC or terminal software to assist with servicing shall not allow unauthorised access to any areas of the ALC that could potentially compromise the operation of the VMS.
10. All ALCs shall be installed on vessels in accordance with their manufacturer's specifications and applicable standards.
11. Under normal satellite navigation operating conditions, positions derived from the data forwarded must be accurate to within 100 square metres.
12. The ALC and/or forwarding service provider must be able to support the ability for data to be sent to multiple independent destinations.
13. The satellite navigation decoder and transmitter shall be fully integrated and housed in the same tamper-proof physical enclosure.

Annex 2

Security and Confidentiality Requirements

1. The provisions set out below shall apply to all VMS data received pursuant to CMM 2.06.
2. VMS data from vessels operating within the SPRFMO Convention Area shall be treated as confidential information.
3. All Members, CNCPs and the Secretariat¹ shall ensure the secure treatment of VMS data in their respective electronic data processing facilities, in particular where the processing involves transmission over a network. All Members, CNCPs and the Secretariat shall implement appropriate technical and organisational measures to protect reports and messages against accidental or unlawful destruction or accidental loss, alteration, unauthorised disclosure or access, and against all inappropriate forms of processing.
4. The Secretariat shall take all the necessary steps to ensure that the requirements pertaining to the deletion of VMS data handled by the Secretariat are complied with.
5. Each Member and CNCP shall designate a Point of Contact for the purposes of any communication regarding the VMS system (VMS Point of Contact). It shall transmit the name of the individual or office holder, email and any other contact information for its Points of Contact to the SPRFMO Executive Secretary no later than 180 days after the conclusion of the annual Commission meeting in 2017. Any subsequent changes to the contact information shall be notified to the SPRFMO Executive Secretary within 21 days after such changes take effect. The SPRFMO Executive Secretary shall promptly notify Members and CNCPs of any such changes.
6. The SPRFMO Executive Secretary shall establish and maintain a register of Points of Contact based on the information submitted by the Members and CNCPs. The register and any subsequent changes shall be published promptly on the Members only area of the SPRFMO website.
7. The Secretariat shall inform all Members and CNCPs of the measures taken by the Secretariat to comply with these security and confidentiality requirement provisions at the annual meeting following the establishment of the Commission VMS. Such measures shall ensure a level of security appropriate to the risks represented by the processing of VMS data.
8. All requests for VMS data must be made to the Secretariat by electronic means. Requests for VMS data must be made by a VMS Point of Contact, or an alternative contact nominated by the VMS Point of Contact. The Secretariat shall only provide VMS data to a requesting Member or CNCP where the VMS data relates to vessels flagged to other Members or CNCPs and all relevant Members and CNCPs have provided written consent through their VMS Point of Contacts for the data to be shared. The Secretariat shall only provide VMS data where it will be downloaded from a secure server by the relevant VMS Point of Contact.
9. [Upon request of a Contracting Party, the Secretariat shall only provide VMS data without the permission of the flag State for the purposes of:
 - a. planning for active surveillance operations and/or inspections at sea; or
 - b. active surveillance operations and/or inspections at sea
 - c. to be undertaken by Contracting Parties in the Convention Area on each others' vessels in accordance with Article 27(1)(b), Article 27 (3) and in accordance with CMM 3.04.]
10. [For the purpose of implementing paragraph 9:
 - a. each Contracting Party shall only make available such VMS data to their authorised inspectors, and any other government officials for whom it is deemed necessary to access the data;
 - b. VMS data shall be transmitted by the VMS Point of Contact of the Contracting Party to the inspectors and government officials referred to in paragraph 10(a) no more than 48 hours

¹ And the Commission's VMS vendor

prior to the commencement of any active surveillance operations and/or inspection activities.

- c. Contracting Parties shall ensure that such inspectors and government officials keep the data confidential and only use the data for the purposes described in paragraph 9. The Contracting Party that requested the data shall inform the Secretariat if that data was used no later than 15 days after the inspection procedure.
 - d. Contracting Parties may retain VMS data provided by the Secretariat for the purposes described in paragraph 9 until 24 hours after the vessels to which the VMS data pertain have departed from the SPRFMO Convention Area.]
11. [Contacting Parties requesting VMS data for the purposes of paragraph 9(a) shall provide the geographic area of the planned surveillance and/or inspection activity. In this case, the Secretariat shall provide the most recent available VMS data for the identified geographic area at a specified point in time no more than 48 hours prior to the planned commencement of each surveillance and/or inspection activity. In the event the planned surveillance/inspection activity does not proceed, the data provided shall be destroyed, and confirmation of the data destruction shall be provided in writing to the Secretariat, without delay. Regardless of whether the planned surveillance and/or inspection activity was conducted or not, the Secretariat shall notify the flag State(s) that the VMS data were provided no later than seven working days after the VMS data provision and, if applicable, that they have received confirmation that the data have been destroyed.]
 12. [For the purposes of paragraph 9(b), the Secretariat shall provide VMS data from the previous ten days, for vessel detected during surveillance, and/or inspection activity, and VMS data for all vessels within 100nm of the surveillance and/or inspection activity location. The Contacting Party/ies conducting the active surveillance and/or inspection activity shall provide the flag State(s) concerned with a report including the name of the vessel or aircraft on active surveillance and/or inspection activity and the full name(s) of the inspectors and their designated authority. This information shall be made available without undue delay after the surveillance and/or inspection activities are complete.]
 13. [Paragraphs 9 to 12 shall be reviewed by the Commission when the Commission adopts a specific SPRFMO high seas inspection regime.]
 14. [Upon the request of a Member or CNCP, the Secretariat shall also provide VMS data without the permission of the flag State for the purposes of:
 - a. supporting search and rescue activities undertaken by a competent Maritime Rescue Coordination Centre (MRCC) subject to the terms of an arrangement between the Secretariat and the competent MRCC. The Member or CNCP requesting the information shall ensure that the data will only be used only for the purposes described in this paragraph;
 - b. [maintaining situational awareness of high seas areas adjacent to and not more than 100 nautical miles from their exclusive economic zones (EEZs);] and
 - c. [maintaining situational awareness in waters under a Member or CNCP's national jurisdiction.]
 15. The Commission VMS shall have the following security features as a minimum:
 - a. The system shall be able to withstand a break-in attempt from unauthorised persons.
 - b. The system shall be capable of limiting the access of authorised persons to a predefined set of data only.
 - c. The system shall be capable of ensuring that VMS data are securely communicated and that all VMS data that enter the system are securely stored for the required time and that they will not be tampered with.
 16. Security procedures shall be designed addressing access to the system (both hardware and software).

17. The following features are the mandatory requirements for the Secretariat's staff use of the Commission VMS:
 - a. Each user shall be assigned a unique user identification and associated password. Each time the user logs on to the system he/she has to provide the correct password. Even when successfully logged on, the user only has access to those and only those functions and data that he/she is configured to have access to.
 - b. System security issues/events must be auditable by a third party at any time at the request of the Commission.

The Executive Secretary shall develop a process for authorising users who are not Secretariat staff, to be reviewed by the Commission at its 2018 meeting.

18. Submission of VMS data for the purpose of CMM 2.06 shall use cryptographic protocols to ensure secure communications.
19. The Secretariat shall nominate a Security System Administrator. The Security System Administrator shall review the log files generated by the software, properly maintain the system security, and restrict access to the system as deemed necessary. The Security System Administrator shall also act as a liaison between the VMS Point of Contact and the Secretariat in order to resolve security matters.

SPRFMO Rules on the manual reporting in the SPRFMO Convention Area.

1. In the event of non-reception of four consecutive, programmed VMS positions, and where the Secretariat has exhausted all reasonable steps² to re-establish normal automatic reception of VMS positions, the Secretariat shall notify the Member or CNCP whose flag the vessel is flying. That Member or CNCP shall then direct the vessel Master to begin manual reporting.
2. The manual report shall either be sent by the vessel to the Secretariat via their Fisheries Monitoring Centre (FMC) or directly to the Secretariat.
3. Following the receipt of a direction from a Member or CNCP in accordance with paragraph 1, the vessel Master shall ensure the vessel manually reports its position every 4 hours. If automatic reporting to the SPRFMO VMS has not been re-established within 60 days of the commencement of manual reporting that Member or CNCP shall order the vessel to cease fishing, stow all fishing gear and return immediately to port in order to undertake repairs.
4. The vessel may recommence fishing in the SPRFMO Convention Area only when the ALC has been confirmed as operational by the Secretariat. Four consecutive, programmed VMS positions must have been received by the Secretariat to confirm that the ALC/MTU is fully operational.
5. The format for manual reports to be used is as below. Vessels are encouraged to use email as the primary means of communication and shall send these messages to secretariat@sprfmo.int.
6. The standard format for manual position reporting in the event of ALC malfunction or failure shall be as follows:
 - a. IMO number (if applicable)
 - b. International Radio Call Sign
 - c. Vessel Name
 - d. Vessel Master's name
 - e. Position Date (UTC)
 - f. Position Time (UTC)
 - g. Latitude (decimal degrees, to the nearest 0.01 degrees)
 - h. Longitude (decimal degrees, to the nearest 0.01 degrees)
 - i. Activity (Fishing/Transit/Transshipping)
7. Members are also encouraged to carry more than one ALC when operating in the SPRFMO Convention Area in order to avoid the need to manually report if the primary ALC fails.
8. The Secretariat shall publicise vessels that are reporting in accordance with this Annex in the SPRFMO Website.

² The Member or CNCP, in coordination with the Secretariat and through communication with the vessel master as appropriate, will endeavour to re-establish normal automatic reception of VMS positions. If such efforts reveal that the vessel is successfully reporting to the Member or CNCP's VMS (indicating that the vessel's ALC hardware is functional), the Secretariat, in coordination with the Member or CNCP will take additional steps to re-establish automatic reporting to the Commission VMS.