



5th Meeting of the Commission
Adelaide, Australia, 18 to 22 January 2017

COMM 5 – Prop 03
(~~Clean~~Tracked changes)
Revisions to CMM 2.06

Australia, Chile and New Zealand

Australia, Chile and New Zealand are pleased to propose revisions to CMM 2.06.

We have circulated drafts in the intersessional period. We have appreciated the support of Members and CNCPs in the development of these proposed amendments.

The proposed revisions include:

- New provisions to prevent tampering of ALC units (amendment to Annex 1);
- A new annex that provides rules for data security, confidentiality and maintenance (new Annex 2);
- A new annex that provides rules for manual reporting in case of ALC failure (new Annex 3);
- Minor revisions throughout the CMM to ensure consistency in terminology;
- Updating the review provisions, noting that the Commission will undertake the review currently mandated in CMM 2.06 as part of its consideration of this measure, and other VMS issues, at the 2017 annual meeting.
- Importing paragraph 3 of CMM 4.02 into CMM 2.06 to ensure VMS obligations are included in one place.
 - In that respect we also suggest amending the existing obligation in Paragraph 3(b)iii of CMM 4.02 to read “*under normal satellite navigation operating conditions, positions derived from the data reported are to be accurate to **within 100 square metres***” and deleting the (now duplicative) requirement in paragraph 11 of Annex 1 of CMM 2.06.
 - We suggest this change because if the Commission has agreed that positions must be accurate to within 100 square metres for compliance purposes and this is the current obligation, then there is no value separately citing that 500 metres would be sufficient for scientific purposes.

We note that that there are a range of decisions for the Commission to make regarding VMS in 2017, including the three new policies under development by Members, selecting a VMS provider and the unresolved question of whether polling should be indirect or direct. We note that this may necessitate further amendments to CMM 2.06 – in particular, paragraphs 1, 8 and 9 - and look forward to discussing this further with Members and CNCPs.

Proposed amendments to SPRFMO CMM 2.06

Proposed new text in blue

CMM 2.06

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

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);

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 (~~Commission VMS~~):

A SPRFMO ~~COMMISSION~~ VESSEL MONITORING SYSTEM

1. The **SPRFMO Vessel Monitoring System** shall ~~commence to~~ be activated at a date to be decided by the Commission and shall cover the area ~~of the Convention~~ 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~~ **Area**.

DEFINITIONS

2. 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.**

PURPOSE

3. The purpose of the SPRFMO Commission VMS Vessel Monitoring System (VMS) should be ~~is~~ to ~~cost-effectively~~ continuously monitor the movements ~~and activity~~ of fishing vessels authorised by flag States to fish in the SPRFMO Convention Area ~~in a cost-effective manner~~ in order ~~to, inter alia, to~~ support the implementation of SPRFMO CMMs.

APPLICABILITY

4. The SPRFMO Commission VMS shall apply to all fishing vessels as defined in Article 1 ~~paragraph (1)(h)~~ of the Convention. The system shall be ~~operate~~ operating on a permanent basis.
5. 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

6. The Commission VMS shall be developed and administered by the SPRFMO Secretariat under the guidance of the Commission.
7. Data collected by the SPRFMO Commission VMS ~~will~~ shall be securely stored ~~by the Secretariat for at least three years 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.
8. In accordance with Articles 25 (1)(c) and 27 (1)(a) of the Convention, in establishing the ~~Commission~~ VMS under this CMM, the Commission, after analysing costs, compliance objectives as well as technical and other factors, will determine whether vessels shall report VMS data automatically by one or more of the following means:
 - a) to the Secretariat via their flag State's Fisheries Monitoring Centre (FMC);
 - b) directly to the Secretariat; or
 - c) simultaneously to both the Secretariat and via their flag State's FMC.
9. The Commission shall develop rules and procedures for the operation of the SPRFMO Commission VMS taking into account the provisions of Annex 1, including, *inter alia*:
 - a) vessel reporting, including the specifications of the data required ~~and~~ its format ~~and reporting frequencies~~;
 - b) 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;
 - g) ~~measures to prevent tampering;~~
 - h) obligations and roles of fishing vessels, Members, CNCPs and the ~~Commission Secretariat~~;
 - i) use and release of data for purposes within scope of the Convention.
10. Security standards of the SPRFMO Commission VMS ~~All Members, CNCPs and the Secretariat~~ data shall be developed by the Commission, consistent with confidentiality provisions of the Data Standards CMM 4.02 (Data Standards; 2016) ~~manage VMS data in accordance with the Policy for Security, Confidentiality and Access in Annex 2.~~

VESSEL MONITORING SYSTEM DATA

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.

Implementation of Member/CNCP Vessel Monitoring Systems (Member/CNCP VMS)

12. Members and CNCPs are to shall develop, implement and improve domestic Vessel Monitoring Systems to ensure:
- a. Ensure that all of their vessels flying its flag that are fishing in the Convention Area are fitted with fully operational Automatic Location Communicators (ALC) ALCs reporting back to the flag State that comply with the minimum standards for ALCs described in Annex 1;
 - b. Ensure that ALCs on their vessels flying its flag remain operational, and report in accordance with this standard measure; at all times while such vessels are within and in all areas while operational in the Convention Area;
 - c. a record of all reported vessel position information reported while these vessels are operational in the Convention Area is maintained, such that this information may be used to document vessel activity in the Convention Area, and to validate fishing position information provided by those vessels; and
 - d. the continuous and systematic monitoring of the data, and, when data are found to be inaccurate or incomplete, shall act promptly to resolve the inaccurate or incomplete data.

Frequency and Accuracy of VMS Position Reports

13. Members and CNCPs are to ensure that:
- e. VMS position reports are reported [to the Commission VMS or to the Member/CNCP VMS] by each of their vessel flying their flag:
 - i. at least once every two hours if trawling fishing using benthic or benthopelagic trawling¹ or if operating within 20 nm of an EEZ boundary;
 - ii. at least once every four hours in other circumstances²;
 - f. all VMS position reports are made in accordance with the specification in paragraph 14 of this standard measure;
 - g. Under normal satellite navigation operating conditions, positions derived from the data reported are to be accurate to within 500m³-100 square metres.

Content of VMS position reports

14. Members and CNCPs are to ensure that all VMS position reports made by their vessels flying their flag include at least the following information:

Category	Data	Remarks
Vessel information	Static unique	For example, FAO 3 alpha or 2 alpha, country code followed by national vessel registration number

¹ Benthopelagic trawling is interpreted here to mean trawling with a mid water net where the net has a likelihood of coming into contact with the seabed at any time during the trawling operation.

² As at February 2013 China has advised that it is not able to report more frequently than twice daily according to domestic regulation.

³ 500 m should be adequate for scientific purposes but for compliance purposes a greater accuracy may be required

Activity detail	Latitude	Position latitude (decimal degrees, to the nearest 0.01 degrees)
	Longitude	Position longitude (decimal degrees, to the nearest 0.01 degrees)
Message	Date	Position date (UTC)
	Time	Position time (UTC)

MEASURES TO PREVENT TAMPERING OF ALCs

15. Members and CNCPs shall implement measures to prevent tampering of ALCs in accordance with the relevant paragraphs of Annex 1.
16. Until 1 January 2019, Members and CNCPs may continue to install and use ALCs on board vessels flying their flag which have not been sealed by the manufacturer or do not prohibit access to internal components or interference with default configurations provided that the Members or CNCPs have fulfilled the conditions described in paragraph 3 of Annex 1.
17. By no later than 1 January 2019, Members and CNCPs shall only approve the installation and use of ALCs on board vessels flying their flag which are sealed by the manufacturer and prohibit access to internal components and interference with default configurations.
18. Members and CNCPs shall report on their implementation of either paragraphs 16 or 17, as applicable, through the Implementation Report prepared in accordance with paragraph 5 of CMM 4.10.
19. In accordance with paragraph 2(u) of Annex 1 of CMM 4.05, Members and CNCPs shall report the brand, model, features and identification of the ALC approved for use pursuant to paragraph 16 or 17 for each vessel flying its flag.
20. In the event that a Member or CNCP has reason to suspect that an ALC does not meet the requirements of Annex 1, or has been tampered with in any way, it shall immediately notify the SPRFMO Secretariat and, in the event that the ALC is installed onboard a vessel flying the flag of another Member or CNCP, the flag State of the vessel concerned. The relevant Member or CNCP shall also, as soon as practicable:
 - h. investigate the suspected breach of this measure as soon as possible;
 - i. suspend the vessel from fishing until an ALC that meets the specifications outlined in Annex 1 is operational onboard the vessel; and
 - j. communicate actions taken to the Commission, including the outcome of the investigation undertaken pursuant to subparagraph 20(a) of this measure.
21. Nothing in this measure shall prevent a Member or CNCP from applying additional or more stringent measures to prevent tampering of ALCs onboard vessels flying its flag.

MANUAL REPORTING

- ~~22. In the event of failure of automatic reporting, the Commission shall develop clear guidelines and templates for manual reporting.~~
- ~~23. In the event that the Secretariat has not, for 48 consecutive hours, received the relevant data transmissions, it will notify the Flag State.~~
22. In the event of failure of automatic reporting, the procedure for manual reporting outlined in Annex 3 of this measure shall apply.

REVIEW

- ~~23. After two years of implementation, the~~ The Commission shall conduct a review of the implementation of this CMM considering its efficiency and effectiveness and consider further improvements to the system as required ~~at its annual meeting in 2020.~~

Annex 1

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

1. The provisions below shall apply to all ALCs on board vessels flying the flag of a Member or CNCP operating within the SPRFMO Convention Area.
2. Members and CNCPs shall ensure that each ALC on board vessels flying its flag include the following tamper-resistant features:
 - a. are of a type and configuration that prevent the input or output of false positions, are not capable of being over-ridden, whether manually, electronically or otherwise;
 - b. are capable of detecting specific or multiple tampering events; and
 - c. are capable of transmitting satellite alerts if the antenna sensor device is opened (“intrusion”) or disconnected from the antenna signal cable (“dismounting”) or the power is removed.
3. Where Members or CNCPs decide to authorise the use of ALCs that have not been sealed by the manufacturer in accordance with paragraph 16 of this measure, that Member or CNCP shall ensure that:
 - a) The ALC is secured with official, individually identifiable seals issued by the flag State, and that those seals are applied to any bridge or antennae component that alone, or in conjunction with another component, transmits data. A bridge component means any hardware connected to an antennae component necessary for the function of the ALC; and
 - b) the flag State issuing such official seals shall maintain a registry of all seals issued to any vessel flying its flag which:
 - i. records the unique reference number of each seal issued to each vessel flying its flag; and
 - ii. records the details of any replacement seals issued to any vessel flying its flag, in particular the date the replacement seal was issued and installed, and the circumstances leading to the replacement of any seals.
4. The ALC shall be capable 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 accurate to within 100 square metres;
 - c. the date and time (expressed in Coordinated Universal Time [UTC]) corresponding to the position of the vessel in paragraph 4(b) of this measure Annex;
 - d. the course and speed of the vessel.
5. The data referred to in subparagraphs 4(b), (c) and (d) of this measure Annex shall be obtained from a satellite-based positioning system.
6. ALCs fitted to fishing vessels must be capable of transmitting data ~~within an interval to be determined by the Commission~~ at least every 15 minutes.
7. The data referred to in paragraph 4 of this Annex shall be received by the Commission within an interval determined by the Commission.
8. ALCs fitted to fishing vessels must be protected so as to preserve the security and integrity of data referred to in paragraph 4 of this Annex.
9. Storage of information within the ALC must be safe, secure and integrated under normal operating conditions.

10. It must not be reasonably possible for any individual to alter any of the VMS data stored in the ALC, including the frequency of position reporting to the FMC.
11. An alternate power supply must be available on the vessel to ensure that the ALC continues to function if deprived of the vessel's main power supply.
12. 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. The FMC shall have the capacity of polling the information of each of its fishing vessels authorised in the SPRFMO Convention area.
13. 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 by a certified marine technician. Members and CNCPs shall ensure that appropriate security systems have been implemented to prevent such actions.
14. 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.
15. All ALCs ~~units~~ shall be installed on vessels in accordance with their manufacturer's specifications and applicable standards. Following the entry into force of this measure, for every new ALC installed onboard a vessel flying their flag, Members and CNCPs shall ensure that the company/individual that has installed the ALC provides written assurance to the relevant flag State that the ALC has been installed correctly and meets the standard described in this measure.
16. ~~Under normal satellite navigation operating conditions, positions derived from the data forwarded must be accurate to within 100 square metres.~~
17. The ALC and/or forwarding service provider must be able to support the ability for data to be sent to multiple independent destinations.
18. The satellite navigation decoder and transmitter shall be fully integrated and housed in the same tamper-proof physical enclosure.

Annex 2

Policy for Security, Confidentiality and Access 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 Secretariat transmitting and receiving VMS data shall take all necessary measures to comply with these security, confidentiality and access requirement provisions.
4. Each Member and CNCP shall designate a Point of Contact for the purposes of any communication regarding the VMS system. It shall transmit the name, email and any other contact information for its Points of Contact to the SPRFMO Executive Secretary no later than 60 days following the conclusion of the 5th Commission meeting. Any subsequent changes to the contact information shall be notified to the SPRFMO Executive Secretary at least 20 days before such changes take effect. The SPRFMO Executive Secretary shall promptly notify Members and CNCPs of any such changes.
5. 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 SPRFMO website.
6. The Secretariat shall inform all Members and CNCPs of the measures taken by the Secretariat to comply with these security, confidentiality and access requirement provisions.
7. Each Member and CNCP shall guarantee the Secretariat the right to obtain, as appropriate, the rectification of VMS reports, the processing of which does not comply with the provisions of CMM 2.06, or any rules and procedures adopted by the Commission regarding the operation of the Commission VMS.
8. All requests for VMS data must be made to the Secretariat in writing. Requests for VMS data must be made by the Member or CNCP's Point of Contact, or an alternative contact nominated by the main Commission Point of Contact of the Member or CNCP concerned. The Secretariat shall only provide VMS data to be downloaded from a secure server by the declared Point of Contact.
9. Upon the 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 to be undertaken by a Contracting Party in the Convention Area;
 - b. active surveillance operations and/or inspections at sea to be undertaken by a Contracting Party in the Convention Area.
10. For the purpose of implementing paragraph 9, each Contracting Party shall make available such VMS data only to their authorised inspectors, and any other government official for whom it is deemed necessary to access the data. 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 the data was used no later than 15 days after the inspection procedure.
11. 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);
 - c. maintaining situational awareness in waters under a Member or CNCP's national jurisdiction.
12. The Secretariat shall ensure the secure treatment of VMS data in its electronic data processing facility, in particular where the processing involves transmission over a network. The Secretariat must implement the measures contained in this Annex in order to protect VMS data against accidental or unlawful destruction or accidental loss, alteration, unauthorised disclosure or access, and against all inappropriate forms of processing.
13. Having regard to modern VMS systems and the cost of their implementation, such measures shall ensure a level of security appropriate to the risks represented by the processing of VMS data.

System Access Control

14. The following features are the mandatory requirements for the VMS [installation located at the Secretariat/system established by the Secretariat]:
- a. Access to the information in the system shall be restricted to operators of the monitoring centre established by the Secretariat, including any external operators, for the analysis of operations where required. All operators of the monitoring centre shall be appointed by the Executive Secretary.
 - b. A stringent password and authentication system: each operator is assigned a unique user identification and associated password. Each time the operator logs on to the system he/she has to provide the correct password. Even when successfully logged on, the user operator only has access to those and only those functions and data that he/she is configured to have access to. Only a privileged operator has access to all the data.
 - c. [Physical] access to the computer system is restricted [*to be reviewed based on the type of application the successful VMS provider uses*]
 - d. System security issues/events must be auditable by a third party at any time at the request of the Commission.
 - e. Terminal access control: each workstation shall have designated operators who are authorised to access it.
15. Submission of VMS data for the purpose of CMM 2.06 shall use cryptographic protocols to ensure secure communications.
16. 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 Points of Contact and the Secretariat in order to resolve security matters.

Annex 3

SPRFMO Rules on the manual reporting of positions when an ALC fails 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 steps⁴ 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 15 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)

⁴ 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 VMS 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.

Proposed amendments to SPRFMO CMM 4.02

Proposed new text in blue

CMM 4.02

Conservation and Management Measure on Standards for the Collection, Reporting, Verification and Exchange of Data

With regard to the fishing vessels flying their flag and fishing for non-highly migratory fishery resources in the Convention Area,

1. Data on fishing activities and the impacts of fishing

Members and Cooperating non-Contracting Parties (Members and CNCPs) are to develop, implement and improve systems to:

- a) ensure that for each calendar year, Members and CNCPs collate annual catch totals raised to “live” weight for all species/ species groups caught during that year, and that these are collated as described in Annex 13. Members and CNCPs will provide by the 30 September, their previous year’s (January to December) annual catch totals raised to “live” weight for all species/ species groups caught;
- b) ensure that data on fishing activities are collected from vessels according to the operational characteristics of each fishing method;
 - i. for trawling methods, Members and CNCPs are to collect the data described in Annex 1;
 - ii. for purse seining methods, Members and CNCPs are to collect the data described in Annex 2;
 - iii. for bottom long lining methods, Members and CNCPs are to collect the data described in Annex 3;
 - iv. for squid jigging, Members and CNCPs are to collect the data described in Annex 4;
 - v. for potting methods, Members and CNCPs are to collect the data described in Annex 5;
 - vi. for drop/ dahn lining methods, Members and CNCPs are to collect the data described in Annex 6.
- c) ensure that data to assess the impacts of fishing on non-target and associated or dependent species are collected from vessels;
- d) ensure that data on landings and transshipment are collected from vessels according to Annexes 11 and 12 respectively;
- e) compile data on fishing activities and the impacts of fishing and provide these in a timely manner to the Secretariat of the South Pacific Regional Fisheries Management Organisation (SPRFMO). Such data are to be provided in sufficient detail to facilitate effective stock assessment. Members and CNCPs will provide by the 30th June, their previous (January to December) year’s data on fishing activities and the impacts of fishing described in sections 1b) – 1d) above.

2. Observer Data

- a) Implementation of observer programmes

Members and CNCPs are to develop, implement and improve observer programmes to attain the following objectives:

- (i) To collect vessel information, effort and catch data for all fisheries and fished species in the Convention Area, including target, by-catch and associated and dependent species.
- (ii) To collect biological or other data and information relevant to the management of fishery resources in the Convention Area, as specified in these standards, or as identified from time to time by the Scientific Committee or through processes identified by the Commission.
- (iii) To collect relevant scientific information related to the implementation of the provisions of the Conservation and Management Measures (CMMs) adopted by the Commission.
- (iv) To collect representative data, including length-frequency and biological samples, across the Convention Area, distribution of fishing effort, seasons, fishing fleets and fleet types.

b) Information and Data to be Collected

All national observer programmes operating in the Convention Area should provide the information in Annex 7 (Parts A to N). Observer information on SPRFMO managed species collected from landings, or from vessels while they are in port, may be collected and provided on a voluntary basis, by referring to part O of Annex 7.

c) Data Provision

Observer data should be provided to the Secretariat of the SPRFMO in a standardised format, to be included in a SPRFMO Observer Database. Specifications and standards for observer data submissions are on the SPRFMO website. Until the Secretariat determines a change is needed, observer data will be submitted in Microsoft Excel format. Members and CNCPs will provide by 30 September, their previous (January to December) year's data.

d) Annual Reporting

All SPRFMO Members and CNCPs should provide annual observer implementation reports, which should include sections covering: observer training, programme design and coverage, type of data collected, and any problems encountered during the year. These reports shall be adequate enough to allow the Compliance and Technical Committee, the Scientific Committee or the Commission to evaluate the implementation and effectiveness of observer programmes implemented under this standard.

e) Maintenance of Confidentiality

The Secretariat of the SPRFMO is to compile and disseminate accurate and complete observer data to ensure that the best scientific evidence is available, while maintaining confidentiality where appropriate. In doing so, the Secretariat is to follow the procedures specified in Section 7.

3. Vessel Monitoring System data

a) ~~Implementation of Vessel Monitoring Systems (VMS)⁵~~

~~Members and CNCPs are to develop, implement and improve systems to:~~

- ~~i. — Ensure that all of their vessels fishing in the Convention Area are fitted with fully operational Automatic Location Communicators (ALC) reporting back to the flag State.~~
- ~~ii. — Ensure that ALC on their vessels remain operational, and report in accordance with this standard, at all times and in all areas while operational in the Convention Area.~~
- ~~iii. — Maintain a record of all vessel position information reported while these vessels are operational in the Convention Area, such that this information may be used to document vessel activity in the Convention Area, and to validate fishing position information provided by those vessels.~~

b) ~~Frequency and Accuracy of VMS Position Reports~~

~~Members and CNCPs are to ensure that:~~

- ~~i. — VMS position reports are reported by each of their vessels:
 - ~~1. at least once every two hours if fishing using benthic or bentho pelagic trawling⁶ or if operating within 20 nm of an EEZ boundary;~~
 - ~~2. — at least once every four hours in other circumstances⁷;~~~~
- ~~ii. — all VMS Position reports are made in accordance with the specification in paragraph (c) of this standard;~~
- ~~iii. — Under normal satellite navigation operating conditions, positions derived from the data reported are to be accurate to within 500⁸m.~~

⁵ ~~Until the SPRFMO Commission VMS is implemented as specified in CMM 2.06 (Commission VMS; 2014)~~

⁶ ~~Bentho pelagic trawling is interpreted here to mean trawling with a mid water net where the net has a likelihood of coming into contact with the seabed at any time during the trawling operation.~~

⁷ ~~As at February 2013 China has advised that it is not able to report more frequently than twice daily according to domestic regulation.~~

⁸ ~~500 m should be adequate for scientific purposes but for compliance purposes a greater accuracy may be required.~~

a) Content of VMS Position Reports

Members and CNCPs are to ensure that all VMS position reports made by their vessels include at least the following information:

Category	Data Element	Remarks
Vessel registration	Static unique vessel identifier	For example, country code followed by national vessel registration number
Activity detail	Latitude	Position latitude (decimal degrees, to the nearest 0.01)
Activity detail	Longitude	Position longitude (decimal degrees, to the nearest 0.01)
Message detail	Date	Position date in UTC
Message detail	Time	Position time in UTC

3. Historical data

Members and CNCPs are to:

- a) collate pre-2007 data on fishing activities in the Convention Area and provide these to the Secretariat of the SPRFMO by 30 September 2007, in sufficient detail to facilitate effective stock assessment and in a format as close as is practical to that described in annexes 1 - 6;
- b) because of the value of such data for stock assessments - at their discretion collate pre-2007 data on fishing activities by vessels flying their flag and fishing within areas under their national jurisdiction, and provide these to the Secretariat of the SPRFMO by 30 September 2007 in sufficient detail to facilitate effective stock assessment and in a format as close as is practical to that described in Annexes 1 – 6;
- c) collate pre-2008 vessel data and provide these to the Secretariat of the SPRFMO by 30 September 2007.

4. Data verification

Members and CNCPs are to ensure that fishery data are verified through an appropriate system. Members and CNCPs are to develop, implement and improve mechanisms for verifying data, such as:

- a) position verification through vessel monitoring systems;
- b) scientific observer programmes to collect verification data on catch, effort, catch composition (target and non-target), discards and other details of fishing operations;
- c) vessel trip, landing and transshipment reports; and
- d) port sampling.

5. Data exchange

Members and CNCPs are to report all data required by this measure to the Secretariat in accordance with the specifications and format described in Annex 8 of this measure, using the templates created by the Secretariat and stored on the SPRFMO website.

6. Maintenance of confidentiality

The Secretariat of the SPRFMO is to compile and disseminate accurate and complete statistical data to ensure that the best scientific evidence is available while maintaining confidentiality where appropriate. Specifically, the Secretariat is to:

- a) compile and disseminate the following “public domain” data:
 - i. data on fishing activities, aggregated by flag state and month and 1 degree by 1 degree areas, except in those cases where such data describes the activities of less than 3 vessels (in which case a lower resolution will be used);
 - ii. data for vessels authorised by Members and CNCPs shall include current flag, name, registration number, international radio call sign, IHS-Fairplay (IMO) number, previous names, port of registry, previous flag, type of vessel, types of fishing methods, when built, where built, length, length type, moulded depth, beam, gross tonnage (and/ or gross register tonnage), power of main engine(s), hold capacity, vessel authorisation start and end dates;
 - iii. the occurrence of bottom fishing within a 20 minute block (without specifying flag, any vessel identification, or measure of fishing effort).
- b) operate comprehensive and robust processes to maintain the confidentiality of the non-public domain data that Members and CNCPs provide to it. These processes will be based on the ISO/IEC27002:2005 (updates ISO/IEC 17799:2005) international standard for information security management⁹. SPRFMO specific data security standards will be developed over time;
- c) compile and disseminate to Members and CNCPs or their designates non-public domain data (being any data not described in 7(a)):
 - i. In response to a written request from Commission, for the purposes documented by the Commission; and
 - ii. In the absence of a written request from the Commission - only with the authorisation of the Participant(s) that originally provided that data.

These standards will be reviewed periodically to ensure that they are adequate for the current and foreseeable needs of the SPRFMO.

7. This measure replaces CMM 3.02 (Data standards; 2015).

⁹ www.iso.org/iso/en/prods-services/popstds/informationsecurity.html