

## Report of the VMS Working Group

The informal VMS working group recommends that the Commission:

- **Adopt** the tender at Annex 1.
- **Adopt** the tender evaluation process at Annex 2.
- **Requests** that the Secretariat publish the tender on the SPRFMO website and other appropriate advertising mediums within four weeks of the conclusion of this Commission meeting.
- **Encourage** all Members and CNCs to continue to work collaboratively in relation to VMS, in particular on the evaluation of tenders.
- **Encourage** Members and CNCs to notify potential tenderers of the Call for Proposals for a SPRFMO VMS.
- **Noting** that paragraph 7 of the current VMS-WG ToR state that, *'these terms of reference will be reviewed at SPRFMO 4 to ensure their ongoing suitability'* and further **noting** that the informal VMS working group could not resolve the issue of the VMS WG's mandate:
  - **Discuss** whether the work of the VMS-WG should continue and under what mandate;
  - **Endorse** the role of CNCs in the evaluation process; and
  - Either **agree** to disband the existing VMS-WG **or amend** its terms of reference and the tender evaluation process at Annex B accordingly to reflect its (potentially) revised mandate.
- **Note** that three Members have offered to lead particular VMS policy issues in the 2016 intersessional period in consultation with interested Members and CNCs:
  - Australia will develop procedures to prevent tampering
  - Chile will develop a policy for security, confidentiality and access requirements;
  - New Zealand will develop a manual reporting policy in case of ALC failure.
- **Note** that a number of policy issues remain outstanding, including:
  - consideration of direct and/or indirect polling and circumstances under which the Secretariat can interact with vessels
  - external vs internal hosting
  - the format, type and content of VMS data transmission and storage of VMS data.

## Call for Proposals for a SPRFMO VMS

### 1. Introduction

The South Pacific Regional Fisheries Management Organisation (SPRFMO) is inviting proposals for a Vessel Monitoring Solution (VMS) that enables the SPRFMO Secretariat to receive, administer and store VMS reports. The proposals should include a detailed description of the technical capabilities of the system and its user interface as well as cost estimates broken down by component.

The SPRFMO is in the process of developing its Vessel Monitoring System. The purpose of the SPRFMO VMS will be to cost-effectively and continuously monitor the movements of fishing vessels that are fitted with an Automatic Location Communicator (ALC) authorized by flag States to fish in the SPRFMO Convention Area. For authorised vessels operating in the SPRFMO Convention Area, Article 27.1(a) of the SPRFMO Convention requires that the Commission establish appropriate cooperative procedures for *“the reporting of vessel movements and activities by a satellite vessel monitoring system that shall be designed to ensure the integrity and security of near real time transmissions, including through the possibility of direct and simultaneous transmission, to the Commission and flag State”*.

In 2014, 800 vessels had been authorised to fish and were included in the SPRFMO Record of Vessels and of these 323 vessels were actively operating over the relevant reporting period in the SPRFMO Convention Area.

The current VMS standards and regulations are detailed in the SPRFMO Conservation and Management Measures (CMMs) 2.06 (Establishment of the Vessel Monitoring System in the SPRFMO Convention Area, APPENDIX 1) and 3.02 (Standards for the Collection, Reporting, Verification and Exchange of Data). The Commission is in the process of developing additional requirements to define its system. Thus, the SPRFMO VMS solution has to be flexible and easily adaptable to the Commission’s future requirements (depending on available technologies and ALC units operated by the SPRFMO Members and Cooperating non-Contacting Parties (CNCPS)).

Regarding the geographic area of application of a SPRFMO VMS, CMM 2.06 specifies under paragraph 1 that the SPRFMO Commission VMS shall have a buffer zone of 100 nautical miles outside the Convention Area (include link to map) as defined in Article 5 of the Convention. Also, paragraph 5 of the CMM 2.06 states that 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.

Furthermore, the SPRFMO Commission has defined minimum standards for ALCs and is in the process of developing rules and procedures on ALC failure alternatives and measures to prevent tampering (See CMM 2.06).

### 2. System Requirements

**General remarks:** All data must be stored in a secure, structured and standardised database which is consistent with confidentiality provisions of the SPRFMO Data Standards CMM 3.02. The SPRFMO VMS solution shall consist of a searchable database with a user-friendly interface and the ability to ingest by direct and indirect reporting of data from ALCs for the visual display of data on a geographic information system (GIS). The VMS reports required by the SPRFMO will be reviewed annually by the Commission and therefore the SPRFMO VMS application must be able to deal with a number of different report types, as determined by the Commission in the future. Any suitable application must include the regular updates of, and additions to, the database components.

**The basic elements of the SPRFMO VMS solution are:**

1. Ability to automatically receive, compile and store electronic reports obtained:
  - via HTTPS, html, FTP, FLUX, emails or through other data exchange protocols as determined by the SPRFMO Commission from national Fisheries Monitoring Centres (FMCs);
  - via different Satellite Airtime Providers.
2. Ability for the SPRFMO Secretariat to receive automatic and manual reports from the FMCs and/or individual vessels.
3. The solution would allow the system to poll a vessel, i.e. request additional position reports from an ALC at any time or/and set and change the frequency rate of a vessel's ALC.
4. The SPRFMO Record of Vessels authorised to fish in the SPRFMO Area which is managed and maintained by the SPRFMO Secretariat will be integrated into the VMS solution (preferably via automatic feed) and act as the main reference dataset. Maintenance and continuous update of the integrated vessel record should be easy.
5. The option to manually input positional reports. Such data should be stored and displayed in a manner that distinguishes them from VMS data received through automatic transmission, and it should be possible to add a reference to the archived source of the manually added information.
6. Alerts: A warning system should be in place to alert the SPRFMO Secretariat if:
  - Position reports are not being submitted at the intervals required or stop being submitted altogether.
  - Other defined events occur, e.g. movements across geo-coded areas (such as entry/ exit of EEZs), within area alert, overdue reports, ALC power on/off reports, ALC manually opened, ALC failure, and transshipment mode<sup>1</sup>.
7. System and confidentiality requirements:
  - The solution must provide the secure storage of all VMS and related data (e.g. ALCs, vessel details, fishery reports).
  - The tenderer must also be able to implement a comprehensive backup and disaster recovery plan.
  - The modification of original data reports or data logs must be prohibited.
  - The VMS solution should allow the remote access of various users at different levels of authorisation.
  - System security issues/events must be auditable by a third party at any time at the request of the Commission.
  - The solution must include comprehensive data validation capabilities to enable the detection of errors and bugs; this should include automated detection of dubious position reports, e.g. too far apart in too short a time, or outside range, and latency check of ALCs' positions from satellite airtime provider.
8. A GIS component for the visual display of VMS data with, if possible, overlays such as EEZ boundaries and bathymetry in near real time immediately after being received. The solution should independently determine and display a vessel's course (direction) and speed.
9. A solution that allows user-defined queries of vessel movements and fishing activities, e.g. transshipments, entering an area closed to fishing (e.g. Marine Protected Area). The queries should be possible for a single vessel or groups of vessels (groups definable by users) and be definable by area, dates, trip length, flag state, fishing gear and alerts.
10. The solution must allow authorised users to print, save and export (as csv format) the results of queries.

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<sup>1</sup> Transshipment is deduced using other parameters, such as nearby vessels and speed.

11. The solution should be compatible with existing SPRFMO Secretariat IT infrastructure. The SPRFMO Secretariat will provide this information upon request. In particular, all VMS information should be exportable for storage and/or analysis in other software applications of the Secretariat.
12. The solution must perform historical analysis of VMS data including the display of movements of vessels over time and, if possible, through the animation of positions.
13. The SPRFMO VMS solution must be fully supported by the supplier, in particular:
  - the installation of the VMS solution, including training of staff and the provision of system documentation and user manuals;
  - must be able to ensure low chance of system failure;
  - comprehensive helpdesk services including defined response time and quality standards, and an agreed escalation plan in the event of critical failure; and
  - software updates as required.

### 3. Guidelines for the tender and conditions for the contract

Tenders are expected to contain a detailed description including itemized pricing for the development of the VMS solution, and the subsequent running of the solution. All prices must be expressed in New Zealand dollars and exclusive of taxes. The tender should present alternative solutions, in particular regarding direct and indirect data transmission as well as internal and external hosting.

The successful tenderer shall deliver a totally integrated system, complete with licenses, documentation, training, repair, maintenance, and support services. Licenses should include third party software license costs (e.g. database software, data extraction software, etc.). The contract shall be governed by and construed in accordance with New Zealand law and the company must submit to the jurisdiction of the New Zealand courts.

The tender must include the following information:

- (a) System description and solution database table structures.
- (b) Development phase of the VMS solution which specifically considers all specifications given above. It should be presented as a roadmap describing each phase in detail, including time frames for completion of each individual step (in weeks).
- (c) Installation of the VMS database application at the SPRFMO Secretariat and specifications of all hardware and additional third party software necessary to run the VMS database application.
- (d) Provision of a Fabric Acceptance Test (FAT) to be performed at the company's venue before delivery.
- (e) Provision of a Client Acceptance Test (CAT) to be performed at SPRFMO premises after installations and before acceptance by SPRFMO.
- (f) Elaboration of user and maintenance manuals and updates as necessary.
- (g) Training of SPRFMO staff members in the use of the VMS solution.
- (h) Annual estimated costs and services (basic annual charges) for the routine running of the VMS solution after the trial phase. The basic annual charges should include itemized services, e.g.
  - license fees (for the server and work stations);
  - Satellite airtime and hosting costs
  - routine continuous monitoring of the system;
  - maintenance and repairs;
  - amount of included annual updates of database elements as specified by the SPRFMO;
  - amount of included other software updates;
  - customer support (specify hours, remote or onsite, manuals, technical assistance, etc.).

- (i) Cost listings for additional services not included in the basic annual charges such as
- hourly costs for additional customer support
  - hourly costs for additional programming, updates and repairs;
  - annual percentage for costs of living adjustment;

(j) Overhead costs to be listed separately.

Close cooperation with the SPRFMO Secretariat during all phases of the VMS database application development and subsequent running is expected.

Refer to relevant CMMS (2.06 and 3.02 and 2.05)

## 4. Section 4 -Information for the tenderer

### Submission requirements

1. The deadline for proposals is 5pm NZST 29 April 2016. Proposals from interested tenderers must be received by via email to [secretariat@sprfmo.int](mailto:secretariat@sprfmo.int) no later than this deadline
2. If a proposal includes information which can only be provided in hard copy (eg a cd with a software application); tenderers must post such information to the SPRFMO Secretariat using registered post by the deadline [c/o Level 26 Plimmer Towers, 2-6 Gilmer Terrace, Wellington 6011, New Zealand]
3. The SPRFMO Secretariat will acknowledge receipt of all proposals received and any hard copy information received in accordance with paragraph 2.
4. All proposals must be received in English and in a format compatible with Microsoft Office (eg Microsoft word, excel) and/or Adobe Reader (eg .pdf files). Hard copy information provided pursuant to paragraph 2 may be exempt from this requirement.
5. All measurements must be in New Zealand units of measurements.
6. All proposals must identify a designated Contact Point (including a name, phone number and email address).
7. SPRFMO is not obliged to accept any proposals that do not meet these submission requirements.

### Confidentiality

8. Tenderers should identify in their proposal any information which should be protected as confidential information under any contract between the tenderer and SPRFMO, including the reason for its confidentiality. If the tenderer fails to identify any information in the proposal, SPRFMO will consider that the respondent has no information which should be protected as confidential under the contract. SPRFMO reserves the right, at its discretion, to refuse the request to treat information as confidential. In this case, SPRFMO will notify the respondent in writing.

### Conflict of interest

9. Tenderers must disclose in their proposals any potential or actual conflict of interest in the course of delivering this service, and must specify how the tenderer proposes to address this conflict of interest. This will not automatically exclude the tenderer from consideration; however, SPRFMO reserves the right to consider the potential or actual conflict in relation to the proposal before the final decision is made.

#### Late proposals

10. Proposals received by email after the deadline of 5pm NZST, 29 April 2016 will be neither considered nor acknowledged by SPRFMO.

#### Modifications to Proposals

11. If a tenderer wishes to revise or modify any aspect of its submitted proposal, revisions must be in writing from the Contact Point, clearly identified and accompanied by a clear statement from the respondent about the action that the tenderer wishes SPRFMO to take with the original submission. All revisions must be submitted before the due date. If a revision is received after the deadline, the revision (but not the whole proposal) will be disregarded.

#### Process and Evaluation Method

12. Tenders will be assessed by the SPRFMO Commission. The SPRFMO Commission will select a VMS provider at its 5th Annual Meeting in January 2017 unless otherwise decided.
13. Tenderers must submit evidence of their legal, economic, financial, technical and professional capacity to perform the contract. The information must be signed by the tenderer. As proposals are submitted by email, electronic email signature is acceptable.
14. The assessment of technical quality of the proposal will be based on the ability of the tenderer to meet SPRFMO's requirements as described in the Call for Proposals.
15. Tenders will be evaluated based on the following criteria:
  - a. ability of tenderer to meet the objectives of the contract
    - i. experience
    - ii. qualifications
    - iii. technical capacity
  - b. technical solution proposed
    - i. comprehensive coverage of the requirements of section 2 of the Call for Proposals
    - ii. viability of solutions proposed
  - c. planning and implementation of projects
    - i. work organisation and planning
    - ii. project schedule
  - d. cost-efficiency
    - i. global cost
    - ii. licencing costs
    - iii. maintenance costs
16. The tenderer may provide a demonstration of their VMS solution via a web platform, accessible by the various Members and CNCs of SPRFMO. Their tender should indicate how this will be achieved.
17. SPRFMO may request additional information from one or more tenderers to aid its assessment. Additional information must be received by email within the timeframe requested. Additional information received for this purpose within the requested timeframe will be recorded as supplementary information received on request of the Commission. It will not be considered as a late submission or as a revision. Requests for additional information will be sent by email to the Contact Officer from the SPRFMO Secretariat.

Contact with SPRFMO regarding the VMS tender process

18. The SPRFMO Secretariat is the designated liaison point between the SPRFMO Commission (including its VMS-WG) and any potential tenders.
19. All enquiries should be directed to [secretariat@sprfmo.int](mailto:secretariat@sprfmo.int).
20. The SPRFMO Secretariat may respond to any enquiries received orally or in writing. The response will be provided to all tenderers that have submitted a proposal. The Secretariat will aim to respond within three working days but may need to consult the SPRFMO Commission in relation to specific technical enquiries, in which case a response may take more time.
21. The SPRFMO Secretariat will not accept or respond to requests for information on the status and progress of the evaluation and selection process. The outcome will be posted on the SPRFMO website following the 5<sup>th</sup> Annual Meeting of the SPRFMO Commission.

Selection

22. The successful tenderer can expect to be notified following the 5th Annual Meeting of the SPRFMO Commission, commencing in January 2017.
23. The successful tenderer will be expected to enter into a contract with SPRFMO for the provision of VMS services.

## Section 5 – Disclaimer

1. Tenderers are responsible for ensuring that:
  - a. They have examined this Call for Proposals and the requirements specified within.
  - b. They have examined any information made available to tenderers for the purpose of the proposal, including the relevant conservation and management measures referred to in this Call for Proposal.
  - c. The proposal submitted is complete, accurate and realistic in terms of its delivery and cost.
2. Tenderers are responsible for all costs incurred in the preparation and lodgement of any proposals; and in respect of any discussions, negotiations, enquiries or any work undertaken by them after the proposal has been submitted. SPRFMO is not liable for any costs or compensation in relation to these matters, regardless of whether SPRFMO terminates, varies or suspends the Call for Proposals process; or takes any other option under this Call for Proposals.
3. Proposals are submitted on the basis that the tenderer acknowledges that:
  - a. It does not rely on any representation, letter, document or arrangement, whether oral or in writing, or other conduct as adding to or amending these conditions.
  - b. It does not rely upon any warranty or representation made by or on behalf of SPRFMO, except as expressly provided for in this Call for Proposals, but the tenderer has relied entirely upon its own enquiries and inspection in respect of the subject of its proposal.
4. SPRFMO will not accept responsibility for any misunderstanding arising from the failure by a respondent to comply with the requirements set out in this Call for Proposals, or arising from any ambiguity, discrepancy, inconsistency, error or omission contained in a proposal.

5. Nothing in this Call for Proposals or any proposal submitted by a tenderer gives rise to contractual obligations between SPRFMO and the tenderer.
6. Any proposal submitted becomes the property of SRPFMO for the purpose of this Call for Proposals process and will be made available for use by SPRFMO and its Members and Cooperating non-Contracting Parties for any purpose connected with the proposal process.
7. Intellectual property owned by the tenderer or third parties in material contained in the proposal does not pass to SPRFMO with physical property in the submitted documents. However, SPRFMO is granted an irrevocable, royalty free licence to use, reproduce and circulate any material contained in the proposal, or provided by the tenderer in response to this Call for Proposals, to the extent necessary to conduct the proposal process.
8. SPRFMO reserves the right to enter into negotiations or discussions with any one or more tenderers.

## Annex 2: Process for Tender Evaluation

1. The SPRFMO Commission will approve the Call for Proposals.
2. SPRFMO Secretariat will publish the approved Call for Proposals on the SPRFMO website ([www.sprfmo.int](http://www.sprfmo.int)) no later than four weeks following the conclusion of the 4th Annual Meeting of the SPRFMO Commission.
3. Proposals from interested tenderers must be emailed to the SPRFMO Secretariat by 5pm New Zealand Standard Time, 29 April 2016. Information that is not able to be received electronically may be posted to the SPRFMO Secretariat.
4. The SPRFMO Secretariat will acknowledge receipt of all submissions and is only obliged to accept submissions received in English and in a format compatible for Microsoft Office (eg Microsoft word, excel) and/or Adobe reader (eg .pdf files). Information that is received in hard copy may be exempt from this requirement.
5. The SPRFMO Secretariat may respond to enquiries from interested tenderers that are of a general nature. The SPRFMO Secretariat shall seek advice from the CTC Chair before responding to enquiries of a technical nature.
6. The SPRFMO Secretariat will circulate all proposals by the deadline received to Members and CNCPs of the SPRFMO no later than 2 May 2016. Each Member and CNCP will acknowledge receipt of these proposal.
7. Members and CNCPs will evaluate the proposals received according to the evaluation criteria set out below and its capacity to meet the objectives in paragraph 3 of CMM 2.06. Members' and CNCPs' assessment should score each proposal out of 100 and describe the basis for each ranking. Members and CNCPs may make recommendations to exclude an application on the basis of an identified conflict of interest; but no exclusions will be made on this basis during the shortlisting process. Members and CNCPs are encouraged to exchange views regarding the received proposals via CTC contact points. Members and CNCPs shall provide their assessment to the SPRFMO Secretariat by 30 June 2016.
8. On the basis of responses received by 30 June 2016 the SPRFMO Secretariat shall prepare a summary of responses received and a proposed shortlist of the three highest scoring proposals and circulate this to the CTC by 29 July 2016.
9. Based on the proposed shortlist, the CTC shall prepare, intersessionally, a technical and financial analysis of the three best options and provide advice to the FAC and Commission by 29 November 2016. This report should also identify any declared conflicts of interest and a proposed course of action, as appropriate.
10. The SPRFMO Commission will select the VMS provider during its 5th Annual Meeting and authorise the Secretariat to commence contract negotiations with the successful provider on the basis of parameters set by the Commission, unless otherwise decided by the Commission.