TECHNICAL AND COMPLIANCE COMMITTEE
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VMS SMALL WORKING GROUP (SWG) STATUS REPORT

WCPFC-TCC16-2020-16
11 September 2020

Submitted by VMS-SWG Co-Chairs

VMS Small Working Group (SWG)

Status report

10 September 2020

1. Background to VMS SWG

WCPFC16 established the VMS SWG to develop recommendations for TCC16's consideration that "address VMS data gaps and improve the number of vessels reporting to the Commission VMS" (para 543, WCPFC16 Summary Report). The SWG is co-chaired by the USA (Terry Boone) and Australia (Viv Fernandes).

During 2020, the SWG has been operating effectively through email correspondence. The co-chairs proposed to conduct the SWG electronically due to the busy annual meeting schedule and the uncertainty regarding international travel restrictions caused by COVID-19.

2. Recommendations to TCC16

Initially, the SWG was preparing to provide specific recommendations to TCC16 for its consideration (consistent with the WCPFC16 tasking). However, based on recent Heads of Delegation discussions and limited CCM availability and capacity to consider recommendations at TCC, the SWG is not providing specific recommendations to TCC16. In addition, the ongoing work of the SWG has indicated that participants would benefit from further detailed discussion of some of the VMS data gaps and potential solutions to those gaps.

As a result, the co-chairs propose that the SWG seeks only a procedural recommendation from TCC16 as follows:

> *TCC16 recommends that the VMS SWG continue its work in 2021 and develop recommendations for TCC17's consideration to address VMS data gaps and improve the number of vessels reporting to the Commission VMS.*

3. Overview of SWG's work in 2020

Throughout this year, the SWG has considered a number of papers that outline existing VMS data gaps and offer potential solutions to address those gaps. A chronology of the SWG's work prior to TCC16 is provided below. The referenced documents (co-chairs' draft concept paper, WCPFC Secretariat paper, and SWG status document) are available on the VMS SWG page on the WCPFC website (www.wcpfc.int/2020_vms-swg).

Date	Description
February 2020	WCPFC Circular distributed calling for nominations for SWG participants.
March 2020	WCPFC Secretariat posted a VMS Background Paper in relation to the Commission VMS and covering a range of VMS updates and issues relevant to the work of the SWG.

March 2020	Co-chairs distributed VMS SWG Concept Paper to SWG participants for comment.
April 2020	SWG participants provided comments on the draft Concept Paper.
May 2020	Co-chairs distributed a revised Concept Paper (v2) based on comments and feedback from SWG participants.
June 2020	SWG participants provided comments on the revised draft Concept Paper (v2).
August 2020	Co-chairs distributed a Status Update document outlining the range of participants' positions on the range of VMS options discussed to date.
September 2020	VMS SWG report to TCC16

4. Co-Chairs' draft concept paper (v1 and v2)

To assist the SWG's development of targeted recommendations, the co-chairs provided a draft Concept Paper for participants' consideration. The draft Concept Paper outlined three main VMS data gap issues, along with corresponding potential options to address these. The co-chairs sourced these issues from previous discussions and records from TCC and WCPFC, including as part of the Compliance Monitoring Scheme (CMS).

The co-chairs used the below four categories to frame potential solutions to VMS data gap issues (noting that some solutions may cover more than one category).

A. **"Technical"**: Aspects / issues which may require new technical work by the Secretariat, CCMs and/or their technical service providers (e.g. software adjustments).

B. **"Regulatory"**: Changes that may be needed to WCPFC rules or regulations (e.g. CMM(s), rules, SOPs, SSPs, etc.).

C. **"Administrative"**: Changes to VMS administrative processes that may be needed either at the CCM or Secretariat (or their service providers) level.

D. **"VMS Compliance Monitoring & Assessment"**: Potential methods or approaches to improve CCMs' ability to effectively monitor and assess VMS compliance.

5. VMS SWG Status Update document – August 2020

The Co-Chairs received a significant amount of feedback and commentary from SWG participants on the draft Concept Paper (both v1 and v2). Participants' comments covered a wide range of views and positions regarding each of the proposed options. As a result, in August 2020, the Co-Chairs provided a VMS SWG Status Update document. This document presented the status of each VMS

issue/proposed option contained in the draft Concept Paper, and outlined participants' respective positions on each.

Extracted below are the key sections of the August VMS SWG Status Update document:

a) three tables providing an overview of each issue (Issues 1 to 3), proposed option and participants' positions. It also provides a conclusion and recommended approach for participants' consideration; and

b) a list of additional issues (Issues 4 to 12) drawn from the WCPFC Secretariat's VMS Background Paper.

Some participants have provided comments on the Status Update in September 2020, however due to limited time prior to TCC16, these comments have not been reflected in this report.

Issue 1	Disparity between CCM-held and Secretariat-held VMS data
Proposed Option in Concept Paper	Recommend that the Commission designate other organization(s) through which it may receive VMS information (e.g. CCM's FMCs, their VMS software service providers, or their MCSP), similar to the way FFA VMS positions work currently.

Participants' positions regarding Proposed Option	**Support**
	- A number of participants supported this as an additional VMS reporting option. Reasons for supporting this option included:
	    o Increased level of flag State accountability for VMS reporting;
	    o Provides a useful option for those CCMs with well-functioning national FMCs; and
	    o Improves transparency/visibility of CCMs as to their vessels' direct reporting to WCPFC.
	- These participants also identified some further areas requiring work or assessment in order to implement this option:
	    o Cost implications;
	    o Ability/Capacity for Secretariat to manage this reporting process;
	    o Establishment of protocols to credibly audit flag State VMS data transmission (quantity and quality).
	
	Reservations
	- However, a number of participants have strongly indicated that they are not in a position to support this Proposed Option (particularly designating a CCM's FMC). The main reasons for this are:
	    o A lack of satisfaction that VMS reporting via an FMC can be undertaken in a manner that provides the necessary level of assurances regarding VMS data integrity, independence and security
	    o No assurance that this Proposed Option will actually address Issue 1 (disparity between Secretariat and CCM-held VMS data)
	    o Potential resourcing and cost implications for implementing the Proposed Option
	
	Other areas for consideration
	- Participants that do not support the Proposed Option did suggest that the VMS SWG can still positively work to improve the current VMS data gaps through:
	    o taking steps to enhance technical and administrative elements of the current VMS framework. This can be achieved through addressing the various issues raised in the WCPFC Secretariat's VMS Background Paper (available on the VMS SWG page - www.wcpfc.int/2020_vms-swg).

	o encouraging use, by CCMs' vessels equipped to do so, of 'direct-simultaneous' VMS reporting (i.e. VMS reporting from a vessel's satellite service provider simultaneously to the WCPFC and to a national FMC).
Status	- **No consensus** between participants regarding the Proposed Option to Issue 1. - Conceptually, some participants are open to exploring this Option (despite raising questions regarding the technical and regulatory implementation of this Option). - A number of participants have indicated that they will not support any form of designation of other organizations (FMC or otherwise). - Some participants have suggested focusing on other options for addressing VMS data gaps e.g. as outlined in the WCPFC Secretariat's VMS Paper, and exploration of CCMs' using a direct-simultaneous VMS reporting approach.
Co-Chairs' conclusion and recommended approach	**No consensus between participants to pursue the Proposed Option to Issue 1 further**. VMS SWG to instead focus on other Options to address VMS data gaps through exploring: a) Other options outlined in the Concept Paper; and b) Issues, including those highlighted in the WCPFC Secretariat's Background VMS Paper (see end of this document).

Issue 2	Data gaps relating to delays associated with establishing manual reporting
Proposed Options in Concept Paper	The Co-Chairs proposed three options to address Issue 2. Option 1 and 2 each depend on participants' positions regarding Issue 1 (see above). Option 3 is a standalone option (technical/administrative) to improve inputting of submitted manual reports. • ***If participants support designation of 'other organizations' to receive VMS info** –* - adopt procedures to allow for temporary reporting via AIS in the event of VMS non-reporting - remove requirement for Secretariat to 'exhaust all reasonable steps' to re-establish connection • ***If participants <u>do not</u> support designation of 'other organizations' to receive VMS info*** - adopt procedures to allow for temporary reporting via AIS in the event of VMS non-reporting • **Standalone option** - Automate input of manual reports into the Commission VMS
Participants' positions regarding Proposed Option	<u>Support</u> - All participants supported the need to address VMS Manual Reporting Gaps. Some participants supported the use of AIS for automatic temporary reporting, noting the following: - The effectiveness of this Proposed Option is largely dependent on whether the Issue 1 Proposed Option is accepted (i.e. allowing the designation of 'other organisations'). If no agreement regarding Issue 1, then the current difficulties with direct reporting connections will remain, and the WCPFC Secretariat will still be required to '*exhaust all reasonable steps to establish normal automatic reception of VMS positions*'.

	- The use of AIS positional data complements VMS particularly when units fail while the vessel is still at sea. While VMS reporting remains the primary means of monitoring the vessel, AIS provides a good backup and an alternative source of knowing the location of the vessel. Almost all vessels have an AIS unit installed and most keep reporting. **Reservations** Some participants expressed reservations regarding the use of AIS as an automated means to temporarily report positions to the Commission. Reasons for their reservations included: - The lack of standards, specifications and procedures (SSPs), standard operating procedures (SOPs) or any other WCPFC-approved reporting guidelines for AIS. - The need to clarify any technical issues in order to effectively utilise AIS data; - Potential difficulty of establishing a system and contract with service providers for timely transmission of AIS position data from relevant vessels to the Commission on a timely basis; - Concerns regarding the reliability of AIS data Participants agreed that manual reports should be automatically inputted into the Commission VMS. In this regard, some participants noted that manual reports being submitted via email may be problematic (e.g. may still require manual input, be inefficient, and have data gaps) and should be phased out in favour of more automated/efficient methods.
Status	**No consensus** from participants regarding incorporation of AIS data as a temporary reporting solution. **General agreement** as to a range of work areas that ease the discomfort of Members not currently supportive of the use of AIS positional data to complement VMS data when units fail while the vessel is still at sea: - consideration of appropriate SSPs, SOPs and reporting guidelines; - review of contractual implications with service providers; and - consideration of the reliability of AIS data.
Co-Chairs' conclusion and recommended approach	**No consensus** to allow AIS data to be used as a temporary reporting solution to address manual reporting VMS gaps **Recommend** the WCPFC Secretariat is tasked to develop (or commission) a feasibility study regarding the potential use of AIS data to address any existing data gaps and to supplement the Commission's existing data sets for consideration by TCC. **General agreement** that manual reports submitted to the WCPFC Secretariat should be (ideally automatically) integrated into the Commission VMS through technical solutions. **Recommend** the WCPFC Secretariat is tasked to identify (or commission external support to identify) some suggested options to implement the necessary steps to facilitate automatic integration of VMS manual reports in to the Commission VMS, and to present these in a paper for consideration by TCC, and include the feasibility and costs of the options.

| **Issue 3** | Compliance review of VMS (particularly data gaps). |

Proposed Option in Concept Paper	**Administrative / VMS Compliance Monitoring & Assessment:** Operationalize and utilize an automated web-accessible report as a tool for mutual (flag State & Secretariat) ongoing compliance monitoring (rather than once/year compliance monitoring). **Technical / VMS Compliance Monitoring & Assessment:** Consider how the above tool can be used to help the flag State and Secretariat (automatically) focus on vessels *Note: This proposed option does not seek to focus the Compliance Monitoring Scheme on vessel-level scrutiny. Instead, it seeks to improve the transparency of VMS reporting to assist flag States in meeting and demonstrating compliance with VMS reporting obligations.*
Participants' positions regarding Proposed Option	**Support** Participants generally supported the Proposed Option. Many participants identified the new VMS Reporting Status Tool (VRST), developed by the Secretariat and issued in April 2020, as being helpful to addressing VMS compliance review issues. In particular, participants: - See this automated report as supporting increased efficiency and convenience; - Supported developing and using the VRST as a platform to facilitate communications between the Secretariat and the flag States; - Were interested to get further feedback regarding use and development of the VRST. In addition, one participant recommended developing/reviewing clear audit points for assessment of VMS compliance (at the CCM-level). This aligns with one of the key 'future work' areas outlined in CMM 2019-06 (Compliance Monitoring Scheme). **Reservations** While most participants supported the proposed option and use of the VRST, a number of qualifying statements were made including: - While the Proposed Option will ultimately have net benefits to improving transparency (to CCMs and Secretariat) regarding VMS reporting and CCM compliance, it will still require Secretariat and/or CCM action in order to address any VMS reporting issues (e.g. technical issues); - Need to better acknowledge the legitimate times that vessels are not reporting VMS positions (e.g. when in EEZs, in port); - Reservations using the tool for the purposes of TCC compliance monitoring, instead of as a platform to facilitate communications between the Secretariat and the flag States; - Need to ensure that the tool improves efficiency and does not place additional burden on flag States.
Status	**General support** for the continued use and development of the VRST to facilitate/improve CCM compliance monitoring and transparency of VMS reporting status for CCMs' flagged vessels. The use and development of the VRST must take into account a number of potential concerns regarding efficiency, communication, limitations and the need for clarity regarding the VRST's role in compliance monitoring. Link to the importance of the CMS audit point work regarding VMS obligations.

Co-Chairs' conclusion and recommended approach	**General agreement** and support for the continued use and development VRST to facilitate improve CCM compliance monitoring and transparency of VMS reporting status for CCMs' flagged vessels. **Recommend** that the Secretariat: - Continue to work with CCMs to develop and refine the VRST to best assist CCMs and the Secretariat's communication and compliance monitoring; - Engage with CCMs (through a paper or otherwise) to seek CCM feedback on the VRST, including any suggested enhancements to improve the tool in relation to efficiency, communication channels, limitations of the tool, as well as considering the specific role of the tool in the Commission's compliance processes, including consideration of the determined audit points in the Compliance Monitoring Scheme. **Recommend** that TCC prioritise the development of audit points regarding VMS obligations in the Compliance Monitoring Scheme (as contemplated under 'future work' outlined in CMM 2019-06).

Other potential work related to the WCPFC Secretariat Background Paper (Issues 4 to 12)

Some participants also suggested that the VMS SWG explore some issues highlighted in the WCPFC Secretariat's VMS Paper. Therefore, participants are now asked to provide comments on their positions on the following:

- **Issue 4: VMS trends**: Potential utility of a request to WCPFC Secretariat for an analysis based on the new report (VRST) on proportion of vessels with 'stop' (not reporting) by MTU type as well as some summaries from the Article 25-2 list of alleged infringements related to VMS to see what trend, if any, there might be.

- **Issue 5: Audit of WCPFC VMS system:** Potential utility of an audit of the current WCPFC VMS system (similar to the audit carried out in 2011). Among other things, this may also assist in better identifying potential weaknesses and opportunities to improve the current system.

- **Issue 6: WCPFC Secretariat engagement with FFA Secretariat**: Is there general support for the WCPFC Secretariat to continue close engagement with FFA Secretariat (as WCPFC VMS service provider) to address potential VMS data gaps including by:
  - o FFA Secretariat ensuring that the current list of Good Standing vessels continues to be made available through the existing application programming interface (API) technical solution that supports the VRST tool, and so that the WCPFC Secretariat has automated access to the list for cross checking purposes; and
  - o FFA Secretariat following up on any query from the WCPFC Secretariat regarding FFA VMS and MTU/ALC unit troubleshooting.

- **Issue 7: Vessels active on MTU register but not reporting to Commission VMS:** Would it assist in identifying the root cause of this issue, to request the WCPFC Secretariat provide input on:
  - o Whether this problem appears to be specific to, or more prevalent with, particular MTU types?

- o Whether there appears to be a relationship between how often MTUs are audited by flag States and the flag State's VMS data reliability?
- o Whether there are any trends that can be observed in the completeness of the Secretariat's records of WCPFC VMS reporting due to the implementation of the annual processes under the Compliance Monitoring Scheme (e.g., the pre-CMR and/or post-CMR percentage of flag State's VMS days not reporting to the WCPFC VMS)?

- **Issue 8: VMS Gateway development:**
  - o Would the SWG support asking the WCPFC Secretariat, relevant flag CCMs and Trackwell to expedite work to develop a VMS Gateway between ORBCOMM/Skywave for ORBCOMM ST6100 and Skywave IDP-690 services? Or should TCC consider removing either or both of these units from the WCPFC Approved MTU/ALC List?

- **Issue 9: Contracts with MCSPs:**
  - o Should the WCPFC Secretariat be tasked to provide any additional information as to the implications (including benefits) of establishing contracts with the four MCSPs without existing contracts?
  - o Should the WCPFC Secretariat be tasked to establish contracts with the four MCSPs without existing contracts?

- **Issue 10: Use of FFA Good Standing information**:
  - o Should the WCPFC Secretariat be tasked and appropriately resourced to: a) automate the process of identifying vessels that have recently lost FFA Good Standing, and b) take the necessary steps to ensure any vessels that have recently lost FFA Good Standing are reporting to the WCPFC VMS?
  - o Might this be supported by potential efforts to further enhance the new WCPFC VRST tool and/or its associated processes used by flag CCMs, the WCPFC Secretariat and where appropriate the FFA Secretariat?

- **Issue 11: CCMs' use of available tools:**
  - o Consider whether the SWG should support tasking or recommending flag State CCMs regularly utilise the tools made available by the WCPFC Secretariat such as the 'VRST' facility to check for any VTAF or other data gaps and to proactively work with the WCPFC Secretariat to address gaps identified

- **Issue 12: WCPFC Secretariat engagement with flag CCMs on VMS non-reporting matters**
  - o Consider whether flag CCMs, should be requested to officially advise the WCPFC Secretariat of contact points for matters related to the WCPFC VMS reporting, and to keep the Secretariat informed of any changes to these contacts?

6. Conclusion and potential TCC16 recommendation

As outlined above, the VMS SWG has been working consistently throughout 2020 to respond to its tasking from WCPFC16. Due to impacts of COVID-19, and the complexity of addressing Commission VMS data gaps, the SWG requires further time to refine its recommendations to TCC.

The co-chairs propose that the SWG seek only the following procedural recommendation from TCC16:

TCC16 recommends that the VMS SWG continue its work in 2021 and develop recommendations for TCC17's consideration to address VMS data gaps and improve the number of vessels reporting to the Commission VMS.