



**TECHNICAL AND COMPLIANCE COMMITTEE**

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**VMS SMALL WORKING GROUP (SWG) REPORT TO TCC17**

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**WCPFC-TCC17-2021-15A**

**16 September 2021**

**Submitted by VMS-SWG Co-Chairs**

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**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). Since it was formed in early 2020, the VMS SWG has operated effectively through email correspondence.

**2. Recommendations to TCC16**

In its first year, the VMS SWG prepared to provide specific recommendations to TCC16 for its consideration (consistent with the WCPFC16 tasking). However, based on Heads of Delegation discussions, limited CCM availability and capacity to consider recommendations at TCC, the VMS SWG was unable to provide specific recommendations to TCC16. As a result, the VMS SWG proposed only a procedural recommendation to TCC16 that WCPFC17 support the continued work of the VMS SWG in 2021. This recommendation was supported by TCC16 and endorsed by WCPFC17.

**3. Overview of VMS SWG's work in 2020 and 2021**

Since inception, the VMS SWG has considered a number of papers (and substantial inputs from SWG participants and the Secretariat) that outlined existing VMS data gaps and offered potential solutions to address those gaps. A chronology of the VMS SWG's work and the evolution of its detailed drafts and reports can be reviewed on the WCPFC website ([https://www.wcpfc.int/2020\\_vms-swg](https://www.wcpfc.int/2020_vms-swg)).

**4. Current status**

The extension of the VMS SWG's work to TCC17 has allowed the VMS SWG participants the time to work through its issues to reach general support for specific recommendations to TCC17. These TCC17 recommendations are outlined below, seeking to fulfil the VMS SWG's tasking from WCPFC16. In its work leading up to these recommendations, the co-chairs grouped the comprehensive list of VMS data gap issues, to be considered by the VMS SWG, into six overarching issues:

- 1) Disparity between CCM-held and Secretariat-held VMS data;
- 2) Data gaps from VMS failure;
- 3) CCM's use of the VMS Reporting Status Tool (VRST);
- 4) ALC/MTU approval;
- 5) Assessing compliance with CMM 2014-02 para 9(a) VMS SSP 2.8; and
- 6) Review of Commission VMS.

Therefore, it is within this framework that the VMS SWG’s final recommendations to TCC are presented here for TCC17’s consideration. The VMS SWG notes that any future work proposed in these final recommendations is consistent with the current VMS reporting framework outlined in the Convention and CMM 2014-02 (i.e., the VMS SWG is not proposing future work to deviate from the current fundamental regulatory framework, instead potential enhancements to address remaining VMS data gaps).

For ease of review, the title of each issue below is coloured **blue**, and draft TCC17 recommendations are coloured **red**.

### **Issue 1: Disparity between CCM-held and Secretariat-held VMS data**

In the most recent VMS SWG update paper (16 July 2021), the proposed approach to address Issue 1 was to ‘*recommend exploring ways how direct simultaneous reporting could be implemented*’. This approach is one potential solution to reducing inconsistency between CCM-held and Secretariat-held VMS data whilst not compromising the reliability and accuracy of the Commission VMS data. Utilising a single feed (with a split forwarding system from the Mobile Communication Service Provider simultaneously to the Commission VMS and flag State VMS) will likely reduce the number of discrepancies between CCM-held and Secretariat-held data.

As noted in the co-chairs’ previous update papers, a direct simultaneous reporting framework is consistent with Article 24(8) of the Convention: “*The Commission, **directly, and simultaneously with the flag State where the flag State so requires, or through such other organization designated by the Commission, shall receive information from the vessel monitoring system in accordance with the procedures adopted by the Commission.***” [emphasis added]

Some VMS SWG participants saw value in a direct simultaneous reporting approach and suggested a scoping study/ preliminary analysis to explore how CCMs could implement this approach. However, several other participants noted cost and/or capacity concerns that would likely make implementation of this proposed approach impractical in the foreseeable future. Therefore, the proposed VMS SWG recommendations focus on initial steps that may incrementally increase CCM capacity to do so over time.

Some VMS SWG participants noted that they had phased out, or are in the process of phasing out, Data Network ID (DNID) based INMARSAT ALCs. This was due to various issues with these units (e.g. network issues, operating costs). Relevantly, these ALCs are also incompatible with the proposed direct simultaneous reporting. One participant noted that in their own experience, when they investigate ALCs that have stopped reporting, the vast majority of them are INMARSAT ALCs.

Other participants have noted frequent ALC non-reporting when INMARSAT ALCs must report to multiple entities (such as to WCPFC and national monitoring centers, vessel owners, vessel management companies, etc.), and that they have already phased out the use of DNID-based units to address efficiency and reporting reliability issues experienced nationally.

Therefore, the below VMS SWG recommendations are aimed at making direct simultaneous reporting viable for CCMs at some point in the future (noting that a direct simultaneous reporting framework is consistent with Article 24(8) of the Convention). Due to the wide deployment of DNID-based ALCs currently (see table below provided by the WCPFC Secretariat), it is anticipated that any transition should allow CCMs sufficient time (several years) to address practical near-term impediments to eventually implementing direct and simultaneous reporting.

The Secretariat has advised that, as at 16 June 2021, Inmarsat C MTUs make up 52% of the registered MTUs in WCPFC MTU Register. There are 740 Inmarsat C MTUs listed as WCPFC-Active (for direct reporting to WCPFC VMS). The breakdown by flag and by manufacturer are provided in the two tables below.

	AU	CN	EU	FJ	JP	KR	NC	NZ	PA	TW	TOTAL
<b>TOTAL "WCPFC-Active" Inmarsat C ALC/MTUs</b>	<b>36</b>	<b>72</b>	<b>17</b>	<b>1</b>	<b>352</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>20</b>	<b>233</b>	<b>740</b>

<b>Manufacturer:</b>	<b>JUE</b>	<b>FELCOM</b>	<b>Trimble</b>	<b>Thrane and Thrane / Sailor</b>	<b>ELB [Satlink]</b>	<b>TOTAL</b>
<b>TOTAL "WCPFC-Active" Inmarsat C ALC/MTUs</b>	<b>80</b>	<b>293</b>	<b>3</b>	<b>356</b>	<b>8</b>	<b>740</b>

### **Draft TCC17 recommendations to address Issue 1:**

- 1. TCC17 recommends that WCPFC18 task TCC18 to further consider future work to enable direct/simultaneous VMS reporting by vessels/ALCs reporting to the WCPFC VMS.*
- 2. TCC17 encourages any CCMs capable of utilising a direct/simultaneous reporting framework to consider doing so on a voluntary basis. Any such CCMs are requested to report their experiences to TCC in the future, particularly any information regarding changes in the number of discrepancies between CCM-held and Secretariat-held VMS data.*

### **Issue 2. Data gaps from VMS failure**

The VMS SWG's most recent update paper included two approaches to addressing data gaps arising from VMS failure that received general support from VMS SWG participants.

The first was to 'recommend tasking the WCPFC Secretariat to identify (or commission external support to identify) some suggested options to...facilitate automatic integration of VMS manual reports in to the Commission VMS including the feasibility and estimated costs of the options'

There was general support from SWG participants to pursue this approach notwithstanding some participants' concerns about costs or capacity burden on flag CCMs.

The Secretariat provided the SWG updates that it is working with Trackwell to explore automated integration of VMS manual reports into the Commission VMS. The most recent update from the Secretariat, including the proposed process and data formats, is included as **Attachment B** below.

The second proposed approach to address data gaps from VMS failure was to '*recommend a change to the Commission's VMS rules or consider options to incentivise vessels to carry a backup ALC/MTU*'.

SWG participants were concerned about the costs and feasibility of vessels carrying a backup ALC/MTU. However, participants were conceptually supportive of TCC exploring more general, non-binding options to incentivise CCMs to adopt "VMS best practices" at a later time.

A separate administrative matter related to the issue of data gaps from VMS failure, (but which was not originally tasked to the VMS SWG), is the extension of the WCPFC9 adopted amendment related to the reporting timeframes for manual reporting in the event of ALC malfunction. These provisions are outlined in paragraphs 4 and 5 of Section 5 of the VMS Standards, Specifications and Procedures (SSPs) at [www.wcpfc.int/doc/tcc-02/vessel-monitoring-system-standards-specifications-and-procedures-ssps](http://www.wcpfc.int/doc/tcc-02/vessel-monitoring-system-standards-specifications-and-procedures-ssps), and were incrementally extended at WCPFC11, WCPFC13 and WCPFC15.

Paragraph 4bis of the SSPs provides that the manual reporting standards '*will apply for the period 1 March 2013 to 1 March 2021 and will be reviewed for MCS effectiveness by TCC*'. Therefore, WCPFC18 must consider this important issue, including whether to approve further extension of the manual reporting standards (see specific recommendation below). This issue is currently listed for discussion at TCC17 under agenda item 7.1(a) *Expiry of VMS SSPs 5.4 - 5.5*.

Some VMS SWG participants have indicated their support for an extension of the current manual reporting standards, particularly due to the current virtual environment. This extension is reflected in recommendation 5 below.

### **Draft TCC17 recommendations to address Issue 2:**

*3. TCC17 notes the Secretariat's progress, and recommends that WCPFC18 support the WCPFC Secretariat's continued work, including with interested CCMs on a trial basis<sup>1</sup>, to facilitate automatic integration of VMS manual reports in to the Commission VMS within their existing budget. TCC17 recommends that WCPFC18 task the Secretariat to report on their further progress to TCC18.*

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<sup>1</sup> Ensuring that any VMS manual reports automatically integrated into the Commission VMS are clearly identifiable as manually generated reports, and can be distinguished from non-manually generated VMS positions.

4. TCC17 recommends that potential incentives for non-binding measures, including ‘VMS best practices’ that CCMs may adopt to minimise data gaps from VMS failures be considered by TCC18.

5. TCC17 recommends that WCPFC18 approve extension of the WCPFC9 adopted amendments to the VMS Standards, Specifications and Procedures (SSPs) that were previously extended (via attachment 1 of the SSPs) at WCPFC11, WCPFC13 & WCPFC15, through 1 March 2024, and that this remain in force thereafter unless the Commission directs otherwise. TCC17 also recommends that WCPFC18 task the Secretariat to update online references accordingly.

### Issue 3. CCMs’ use of the Secretariat’s “VMS Reporting Status Tool” (“VRST”)

The VMS SWG’s most recent update paper proposed a list of options for VRST enhancements and invited participants to suggest additional options to enhance this tool. The proposed approach was to ‘recommend that the Secretariat:

- Work with their VMS Service Provider (and/or others) to implement the suggested enhancements to the VRST.
- Work with CCMs and their Service Provider to harmonise flag CCM (and FFA) methods of automatically accounting for all vessels’ daily VMS status.’

Additionally, the paper proposed to ‘recommend that TCC (if / after VRST enhancements are completed):

- Consider amending Section 5, para 4 of the VMS SSPs to operationalise use of the VRST as the Secretariat’s and flag CCMs’ primary / default method of reconciling ALC reporting status (automatically highlighting to the Secretariat and Member FMC vessels which are not reporting reliably to the Commission VMS, and if feasible to automate, to the Member FMC VMS)
- Consider requesting the WCPFC Secretariat and FFA Secretariat continue work to harmonise their technical and administrative methods of monitoring vessel ALC daily reporting status with a goal of automatically highlighting and triggering action by appropriate authorities when vessels should be reporting to each system, but are not’.

**There was no VMS SWG agreement to require the operational use of the VRST through amendments to the SSPs, but participants supported progressing and improving the utility of the VRST.**

In the past few months, the Secretariat has implemented a new, interactive version of its VRST. This enhanced version not only provides automatic and passive daily notifications to authorized flag CCM VMS staff of their vessels that have stopped reporting in the Commission VMS, but also displays each of their vessels’ current VTAF data (“network ID”) in the Secretariat’s database. Since this new utility is directly related to data required under VMS SSPs para 2.8, the aspects related to that are covered in more detail in Issue 5, below.

This new version of the VRST will allow authorized flag CCM VMS staff to immediately compare the status of VMS data in the Secretariat’s database with the corresponding flag CCM

VTAF data. The new interactive functionality of the VRST then allows authorized flag CCM VMS staff to immediately input online and highlight to the Secretariat's VMS staff discrepancies between flag CCM and WCPFC VMS VTAF data. **These new features should enable transparent, voluntary Secretariat / flag CCM VMS processes and coordination, and facilitate objective analysis and timely management of VMS issues.**

The new VRST also includes several of the specific enhancements that SWG participants suggested previously (for example, including the unique VTAF VMS network identifier of each of the CCM's vessels for easy comparison with the relevant CCM's data). Therefore, the proposed recommendations for TCC17 on this issue no longer include those enhancements.

The Secretariat has indicated its commitment to engage with CCMs regarding their use of the VRST and its functionality to support both the Secretariat and CCMs in VMS management and monitoring.

The Secretariat, in close coordination with the VMS SWG co-chairs, has also provided draft updates of its VMS Standard Operating Procedures (SOPs) for consideration by TCC17. The draft SOPs may, among other benefits, clarify VRST features and processes.

### **Draft TCC17 recommendation to address Issue 3:**

*6. TCC17 recommends that WCPFC18 adopt the draft VMS SOPs in order to accurately reflect recent changes in technology and technical processes. TCC17 also notes that the new SOPs are also expected to greatly benefit (and reflect) other VMS technical work undertaken by the Secretariat and VMS SWG to address VMS data gaps.*

### **Issue 4. ALC/MTU Approval**

The most recent VMS SWG update paper proposed that, prior to TCC17, any CCMs that currently use ORBCOMM ST6100 or SKYWAVE IDP-690 MTU units share information with the VMS SWG regarding the steps it has taken to facilitate effective reporting to the Commission VMS.

The Secretariat advised that as at 16 June 2021, an interim arrangement was in place facilitated by Chinese Taipei to receive VMS data from 32 Chinese-Taipei vessels equipped with Skywave MTUs that are considered "WCPFC-Active" (and a further 4 vessels equipped with Skywave IDP-900 MTUs that are "FFA-Active"). Australia also has a small number of vessels equipped with Skywave MTUs that are now confirmed to be reporting reliably to the Commission VMS. Both CCMs have provided written updates to the VMS SWG regarding how its ALCs are able to effectively report to the Commission VMS. Further, these CCMs have suggested proposed text in the VMS SOPs to reflect the process for successful activation and reporting of these units.

The co-chairs have previously noted that paragraph 2.7 of the VMS SSPs already outlines steps for ensuring an MTU/ALC 'has the ability to successfully report to the Commission VMS', and specifically includes reference to the FFA methodology for type approval. However, some



participants suggested that the steps for ensuring an ALC/MTU ‘has the ability to successfully report to the Commission VMS’ could be further clarified and defined, perhaps using a checklist similar to the FFA Secretariat’s checklist. The Secretariat has taken these inputs on board in its draft updates to the VMS SOPs for consideration by TCC17.

#### **Draft TCC17 recommendations to address Issue 4:**

*7. TCC17 notes the successful steps taken by the Secretariat and CCMs to facilitate the reporting of ORBCOMM ST6100 and/or SKYWAVE IDP-690 MTU units to the Commission VMS. TCC17 encourages any other CCMs using either if these units to follow similar steps to ensure successful VMS reporting to the Commission.*

*8. TCC17 notes that the Secretariat, in close coordination with the VMS SWG co-chairs, has developed and provided new draft VMS SOPs for consideration and adoption by WCPFC18. This document includes details on the standard processes used to assess the ability of an MTU/ALC and its communication / satellite service provider / gateway to successfully report to the Commission VMS.*

*9. TCC17 notes that the draft VMS SOPs outline in detail how the VMS Manager will work with relevant vendors and CCMs to assess proposals for inclusion of additional MTU/ALC units and their communication / satellite service provider / gateway, against the new MTU/ALC type approval checklist. The VMS SOPs outline how the Secretariat shall provide this information to CCMs, along with any other documentation provided by the flag CCM or vendor, to better inform their consideration of any units proposed for listing or delisting.*

#### **Issue 5. Assessing compliance with CMM 2014-02 para 9(a), VMS SSP 2.8**

The most recent VMS SWG update paper proposed three broad options to address this issue. Participants provided feedback on the following three proposed options:

1. Support ways to enhance the Secretariat’s administrative processes and facilitate a more transparent process;
2. Amend the obligation; and/or
3. Develop audit points to assess compliance with the obligation.

**There was no agreement amongst SWG participants to amend the obligation but there is a clear need to clarify the process at the Secretariat, flag CCM and TCC level.**

During the course of the VMS SWG’s work, it became clear that the challenge with assessing flag CCMs’ compliance with VMS-related obligations is broader than just one element (i.e. SSPs 2.8). Consequently, the co-chairs considered a range of inputs from various VMS SWG participants to streamline TCC’s long-standing challenge assessing CCMs’ compliance with the various VMS requirements.

The requirement in SSPs 2.8 that each flag CCM, for each of its vessels, provide the Secretariat “all necessary data to complete its data file in the Commission’s VMS database” is clear. The



new version of the VRST now allows all flag CCMs and the Secretariat to continuously monitor and immediately determine the flag CCM's (and their vessels') compliance at any given time, and easily share status updates in a single online interface. For example, the flag CCM VMS POC (or authorized designee) and/or the Secretariat can view the "Active VTAF with WCPFC" column of the VRST, check for any "No" entries, and easily determine vessel-level VTAF-submitted status. This can now be completed within a few seconds' time with three mouse clicks on a Wi-Fi internet enabled device. As noted in the draft "*VMS template for TCC17 to consider recommending to WCPFC18 as a new annex to CMM 2014-02*" (below), assessing a flag CCM's compliance with SSPs 2.8 could now be automated.

Similarly, the challenge with assessing flag CCMs' compliance with para 9a of CMM 2014-02 (that ALCs "meet Commission requirements") may be greatly facilitated and substantially streamlined by flag CCMs and the Secretariat reliably using the new interactive VRST facility as outlined in the draft "VMS template..." below.

The other traditionally difficult and time-consuming assessment of flag CCMs' adherence to the timeline and process for responsibly managing ALC failures (CMM 2014-02 9a and VMS SSPs 5.4 – 5.5), could also be substantially improved by reliable use of the new interactive VRST facility as outlined below (and in the draft VMS SOPs).

At the flag CCM level, some participants suggested exploring options to submit and process VTAFs electronically to reduce possible data inputting errors. The co-chairs have also sought advice from the Secretariat about what further information flag CCMs could provide to clarify the steps and processes they have in place to meet their VMS obligations (all VMS obligations in addition to CMM 2014-02 para 9(a), VMS SSP 2.8). The Secretariat suggested a VMS reporting template for CCMs to respond to in their annual Part 2 Report. This may improve flag CCMs ability to verify that they are meeting their VMS obligations, while potentially streamlining the VMS portion of the CMR process.

**Following input from SWG participants, the VMS SWG proposes TCC17 support the use of the VMS reporting template (Attachment A), as a new Annex to CMM 2014-02.**

The development of audit points is a related body of work that will assist TCC in objectively assessing the information CCMs provide to confirm that they have met their VMS obligations. Some VMS SWG participants suggested options for potential audit points for VMS obligations, and referenced specific work being completed to progress audit point work. One option considered was a score-based system to reflect degrees of relative flag CCM compliance rather than the current "pass/fail" framework that routinely frustrates TCC in vessel-level VMS details. The advent of recent automation work (notably, the enhanced VRST) may allow TCC to consider such a framework in the future. However, the VMS SWG did not agree on any specific audit points for VMS obligations. Therefore, the VMS SWG suggests that TCC use the attached reporting template until VMS audit points are agreed in the Commission.

## **Draft TCC recommendations to address Issue 5:**

*10. TCC17 recommends WCPFC18 task the Secretariat to provide a report to TCC18 with suggested options and, if practical, an estimated timeline and costs to facilitate electronic (online) submission and processing of new and updated VTAFs. Any process shall track progress transparently with the relevant flag CCM that provides the VTAF.*

*11. TCC17 recommends that WCPFC18 approve the streamlined VMS reporting template below as Annex 2 of CMM 2014-02 for use in CCM's Annual Part 2 Report submissions beginning with TCC18 until such time as the Commission's work developing Audit Points (including for VMS) may be completed.*

## **Issue 6. Review of Commission VMS**

The most recent VMS SWG update paper proposed a Secretariat-focused approach to 'recommend the WCPFC Secretariat consider including the following issues in its VMS Annual Report:

- *Whether this problem appears to be specific to, or more prevalent with, particular MTU types?*
- *Whether there appears to be a relationship between how often MTUs are audited by flag CCMs and the flag CCM's VMS data reliability?*
- *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 CCM's VMS days not reporting to the WCPFC VMS)?*
- *Whether other service providers could address this issue and information on how other RFMOs deal with this problem?*
- *Whether there are any differences between FFA VMS and WCPFC VMS in terms of frequency of VMS data gaps, and in terms of technical/operational aspects?'*

**There was general support from VMS SWG participants for the Secretariat to provide more information and analysis of possible causes/ trends related to VMS data gaps in the Secretariat's VMS Annual Report.** Participants also suggested the Secretariat provide information on other core issues not strictly related to data gaps, such as challenges the Secretariat faces while handling VMS matters (e.g. manpower, budget, or relevant agreements with other parties) and any opportunities/options to address these challenges. Further, the proposed recommendations 10 and 11 in relation to Issue 5 may also assist in identifying any required additional analyses and content in the VMS Annual report.

## **Draft TCC recommendation to address Issue 6:**

*12. TCC17 recommends that WCPFC18 task the Secretariat to provide further information in the VMS Annual Report to TCC18 on the status of implementing VMS SWG recommendations.*

## **Attachment A**

### **Draft VMS template for TCC17 to consider recommending to WCPFC18 as a new annex to CMM 2014-02**

*Annex2: Template for reporting implementation of this CMM. Each CCM shall include the following information in Part 2 of its annual report:*

CMM paragraph	Brief description	Annual Reporting list/question
<b>CMM 2014-02 04</b>	Vessels shall continue to report to Commission VMS after moving into Northern Quadrant	AR Pt 2 (prior year implementation) PR-045
<b>CMM 2014-02 9a</b>	Fishing vessels comply with the Commission standards for WCPFC VMS including being fitted with ALC/MTU that meet Commission requirements <sup>2</sup>	AR Pt 2 (prior year implementation) PR-046  (Proposed New): "Have flag CCMs adopted national measures or management plans to implement CMM 2014-02 9a? Please specify such mechanism, including the measures requiring vessels to install ALC units that are on the Commission ALC/MTU Approval List, and actions when vessels that are "fishing in the Convention Area beyond their area under national jurisdiction" unexpectedly stop reporting to the Commission VMS."
<b>CMM 2014-02 9a VMS SSPs 2.8</b>	Provision of current <sup>3</sup> ALC/MTU 'VTAF' data	AR Pt 2 (prior year implementation) PR-047

<sup>2</sup> Monitoring CCMs' compliance with this item can be streamlined if 1) CCMs monitor and update their vessel's status (e.g., "In Port", "Out of Convention Area", "Manual Reporting", "new VTAF data submitted to Secretariat", etc.) using the new interactive utility in the VRST at least every 31 days, and 2) the Secretariat updates all vessels' VTAF submission status on a daily basis as outlined in the draft revised VMS SOPs. In that case, CCMs may simply refer to their VRST review/update process in response to relevant AR Pt 2 questions.

<sup>3</sup> Monitoring CCMs' compliance with this requirement can now be automated via the VRST if 1) CCMs monitor and update their vessel's status (e.g., "In Port", "Out of Convention Area", "Manual Reporting", "new VTAF data submitted to Secretariat", etc.) using the interactive utility in the VRST at least every 31 days, and 2) the Secretariat updates all vessels' VTAF submission status on a daily basis as outlined in the draft revised VMS SOPs.

<b>CMM 2014-02 9a VMS SSPs 5.4 - 5.5</b>	VMS Manual Reporting procedures - applies until 1 March 2021	AR Pt 2 (prior year implementation) PR-048
<b>CMM 2014-02 9a VMS SSPs 7.2.4</b>	Protocol for inspecting CCMs to inspect ALCs/MTU of other CCMs vessels at sea, includes reporting requirements for inspecting CCMs	AR Pt 2 (prior year implementation) PR-049
<b>CMM 2014-02 9a VMS SSPs 7.2.5</b>	Report to Secretariat any ALC/MTU, and associated details, that appear to not be in compliance with applicable CMMs related to VMS reporting	AR Pt 2 (prior year implementation) PR-050
<b>CMM 2014-02 9a VMS SSPs 7.2.2</b>	CCMs to conduct periodic audits of ALC/MTUs of its vessels and report results to the Commission (AR Pt 2)	Reporting checklist in AR Pt 2 (2020 Specific)  (Proposed NEW): "What checks and procedures do flag CCMs presently use to inspect ALC/MTUs of its vessels that are authorised to "fish in the Convention Area beyond their area under national jurisdiction"?" "On what basis (e.g., under certain circumstances as they may occur, based on the vessel's fisheries compliance behaviour, randomly, etc.) do flag CCMs schedule audits of ALC/MTUs?"

## **Attachment B**

### *Summary of the status of work by the Secretariat to automate integration of VMS manual reports into the Commission VMS*

Pending approval by the Commission, the process in development to automate integration of VMS manual reports is based on the relatively common North Atlantic Format (NAF). In this framework, VMS manual report messages would be submitted to the Commission's VMS via email. Correctly formatted data received would then automatically be integrated into the Commission VMS.

The current proposal is to use the following message syntax:

Field-code	Data-element	Syntax	Contents	Examples
SR	Start record	No data	No data	//SR//
TM	Type of message	Char*3	POS	//TM/POS//
SQ*	Sequence number	Num*6	1-999999	//SQ/001//
ID**	Vessel ID	Num*7	WCPFC Vessel ID	//ID/12054/
IM**	IMO Number	Num*7	IMO Vessel ID	//IM/9321421//
NA*	Vessel Name	Char*50	Vessel Name	//NA/AT LUCKY//
LT	Latitude (decimal)	Char*7	+(-)DD.ddd	//LT/45.544// or //LT/-23.743//
LG	Longitude (decimal)	Char*8	(-)DDD.ddd	//LG/-044.174// or //LG/+166.000//
DA	Date	Num*8	YYYYMMDD	//DA/20210825//
TI	Time	Num*4	HHMM	//TI/1555//
SP*	Speed (knots*10)	Num*3	0-999	//SP/105//
CO*	Course	Num*3	1-360	//CO/270//
ER	End record	No data	No data	//ER//

Sample string:

```
//SR//TM/POS//SQ/001//ID/12054//IM/9321421//NA/AT LUCKY//LT/-2.150//LG/-  
179.000//DA/20210825//TI/1555//SP/105//CO/270//ER//
```

**Notes:**

- Fields marked with an asterisk \* are optional all other fields are mandatory
- At least one of the two vessel-identification-related fields (ID and IM) \*\* must be provided. ID takes precedence over IM when both are provided
- Though vessel name may be included for readability, it is not used for data matching
- Speed and Course are optional and will be automatically derived if not provided based on last known position
- Do not include separators in the date and time fields
- Do not include seconds in the time fields
- Multiple NAF messages can be included in the body of an email (each identified by a unique SQ within the email)
- Attachments will be ignored
- Response messages will not be generated on success or fail of a message