Introduction

1. The Fifth Regular Session of the Commission (WCPFC5) held at Busan, Korea in December 2008 approved the standards, specifications and procedures (SSPs) for the operation of the Commission’s near-real time satellite-based vessel monitoring system (Commission VMS) for all fishing vessels that fish for highly migratory fish stocks on the high seas within the WCPF Convention Area in 1 April 2009. Paragraph 7.3.9 of the SSPs requires the Secretariat to monitor and report annually to the TCC the performance of the Commission VMS and its application and, as necessary, make recommendations for improvements or modifications to the system, standards, specifications or procedures established to support it, in order to ensure the Commission VMS continues to function as a stable, secure, reliable, cost effective, efficient, fully maintained and supported system. This paper has been prepared in compliance with this requirement.

Enhancement Options for the Commission VMS

High Seas Vessel Day Scheme

2. WCPFC-TCC5-2009/21 [Options for a High Seas Vessel Day Scheme] notes that the Commission VMS has operated without interruption since its activation on 1 April 2009. At the time of writing that paper, the Commission VMS was receiving position reports for high seas fishing activity via the FFA VMS for 214 purse seine fishing vessels, and from a single purse seine vessel reporting direct to the Commission VMS.

3. WCPFC-TCC5-2009/21 further notes that the WCPFC Secretariat has had initial discussions with experts associated with the development of systems for the management of a Vessel Day Scheme (VDS). The time-frame for development of a high seas VDS for the WCPFC is estimated as 30 days at an estimated cost of $30,000.

E-forms Activation and Evaluation

4. WCPFC catch and effort data, and observer data is currently recorded and transmitted in hard-copy, despite the long-standing existence of technology that would allow its electronic recording and transmittal. The use of Electronic Forms (E-Forms) for transmitting a wide range of reports from fishing vessels via the Commission VMS has the potential to improve efficiency, and reduce transcription errors and data-handling costs.
5. It is estimated that the one-off cost of activating of E-forms per vessel using the Commission VMS is $150 per E-form type, while the incremental cost to support E-form transmission via the Commission VMS is estimated to be $0.50 per E-form.

6. It is suggested that the potential use of E-Forms for electronic observer data collection could be cost-effectively evaluated using the Regional Observer Programme’s Cadre of Observers. This trial could be conducted over a three-month period in 2010 at an estimated cost of $25,000.

Electronic Vessel Registration

7. The current Commission VMS registration process for Mobile Transceiver Units (MTUs) involves the manual submission by CCMs of a Vessel Tracking Agreement Form (VTAF) for each authorized fishing vessel. The VTAF contains details of the MTU that will report vessel positions to the Commission VMS and a signed authorization by the MTU’s owner for the WCPFC Secretariat to electronically monitor the MTU, and disseminate data from it, in accordance with Commission policy.

8. Efficiency of MTU registrations on the Commission VMS could be markedly improved by the institution of an Electronic Vessel Registration (EVR) process. Because the activation fee per MTU for the Commission VMS is already factored into EVR deployment there is no additional cost to the Commission for EVR development.

Redundancy

9. Should the current service provider be temporarily unable to deliver the services described in the existing SLA the Commission will require in-built redundancy to ensure the uninterrupted provision of services. The time-frame for development of redundancy for the Commission VMS is estimated as 30 days at an estimated cost of $30,000.

SSPs – Resolution of issues relating to bracketed text and proposals for modification

10. In their current form, some sections of the SSPs constrain the WCPFC Secretariat from effectively managing the Commission VMS. These sections include bracketed text in paragraphs 5.4 and 5.5 of the SSPs, part of paragraph 5.3 and the need for an additional paragraph (7.3.11).

11. Although WCPFC5 recommended that CCMs work to resolve issues relating to bracketed text in paragraphs 5.4 and 5.5 of the VMS SSPs prior to TCC5, the Secretariat has not been advised of any such resolution.

12. Paragraph 5.3 states in part, “Vessels subject to the Commission’s VMS must be reporting to the Commission VMS through automatic means upon entry into the high seas of the Convention Area.” It is proposed that this section be modified to state, “Vessels subject to the Commission’s VMS must be reporting to the Commission VMS through automatic means prior to entry into the high seas of the Convention Area.”

13. At present the WCPFC Secretariat is hampered in its management of the Commission VMS because it does not have administrative rights/privileges that would enable it to know the on/off status of an MTU/ALC in the high seas in the WCPFC Convention Area. This lack of oversight could result in increased costs when MTU/ALCs over-report. To remedy this constraint it is proposed that a new section (7.3.11) is added to the SSPs, as follows:

“The WCPFC Secretariat shall have administrative rights/privileges to all Commission VMS hardware, software and data in order to effectively manage the system.”
Conclusion

14. TCC5 is invited to consider the following proposals for enhancement of the Commission VMS:

   a) development of a high seas VDS based on the Commission VMS;
   b) evaluation of the potential of E-forms for electronic collection of data, including observer data;
   c) development of an EVR for the Commission VMS;
   d) development of redundancy for the Commission VMS; and
   e) proposed modifications of the SSPs, as above.