



TECHNICAL AND COMPLIANCE COMMITTEE

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OUTCOMES FROM THE TCC3 VESSEL MONITORING SYSTEM WORKING GROUP (Revised)

WCPFC-TCC3-2007/34 (Rev.1)

1 October 2007

Prepared by the Chair of the TCC3 VMS Working Group

At TCC3 a Working Group met to elaborate standards, specifications and procedures for the further development of the Commission's Vessel Monitoring System (VMS) in accordance with WCPFC CMM2006/06. This group was chaired by David Marx from New Zealand.

The terms of reference for this working group were presented to and endorsed by TCC3 and are attached as Annex 1. The group focussed discussions on: ALC Malfunction Procedures; ALC registration and de-registration; Cost recovery and cost sharing; Data standards, formats and data to be transmitted; Data security and exchange.

A general theme from the discussions of the group was that the development and use of the system should be cost effective and to that end, there is merit in considering the use of existing standards, specifications and procedures, when developing those used for the Commission VMS.

The group:

1. Recommends that TCC3 endorse the points listed below:
2. Recommends to TCC3 that the material identified under "Data security and exchange" will be provided to the TCC3 Data Working Group to develop rules and procedures for VMS data.
3. Recommends to TCC3 that it be tasked to continue its work intersessionally, using electronic means, with the view to physically meeting in the margins of WCPFC4.

4. Notes that given time constraints there had not been an opportunity to discuss other items on the TORs in Annex 1 but that these points will need to be considered in the future.
5. Recommends that TCC3 task the Secretariat to develop papers as set out in the points below. The Group noted advice from the Secretariat that such work may cost up to 10,000 dollars should a technical specialist be needed. The group noted that instead of background documents, actual standards, specifications and procedures should be prepared for the consideration of the Group.

Specific points from the group discussions are recorded below:

ALC Malfunction Procedures:

ALC malfunction was discussed as *“Circumstances when the vessel stops sending data to the Commission VMS”*

The group identified the following points:

1. The group noted that it would be useful to draw from existing procedures being used such as those used by national and FFA systems. CCMs and FFA were invited to provide these procedures to the WCPFC Secretariat.
2. There is a need to develop secondary reporting options in the event of a malfunction. The two options discussed were manual reporting and the carriage of secondary ALC units. And the group noted that manual reporting would be the preferred option.
3. With respect to manual reporting, it is the responsibility of the flag State to ensure that this occurs.
4. That the procedures will need to include return to port requirements for the repair of malfunctioning ALC units, and that timeframes should be established to ensure that ALCs are repaired. It was suggested that repairs should be affected next time the vessel visits a port, or in the instance the vessel does not make port for a long period, within a fixed time period. Time periods suggested ranged from one to three months. In this regard, it was noted that vessels are not always aware their ALCs are malfunctioning.
5. The group recommended that it would be useful for the Secretariat to develop a paper further exploring ALC Malfunction procedures taking into account the points raised in the discussions above.

ALC registration and de-registration

The working group identified the following points in respect of Automatic Location Communicator (ALC) registration and de-registration:

1. In developing standards, specifications and procedures for ALC registration and de-registration, the group noted that it would be useful to examine what is being used within FFA and national VMS processes.
2. ALCs will need to be registered on a Commission ALC database such as the WCPFC Register of Fishing Vessels.
3. It is important that ALCs are linked to a specific vessel so that vessels can be identified via an ALC.
4. This linkage should be made using the WCPFC Vessel register maintained by the Commission
5. Registrations will not need to be made on an annual basis, but moreover will be linked to any changes or additions to ALC details as reported by CCMs.
6. There is a need to set a timeframe for notification of ALC changes to the Commission.
7. The Commission Secretariat should administer the ALC registration process
8. The group recommended that it would be useful for the Secretariat to develop a paper further exploring ALC registration and de-registration procedures taking into account the points raised in the discussions above.

Cost recovery and cost sharing

The working group identified the following points in respect of cost recovery and cost sharing:

1. Aside from the capital costs and additional maintenance and repair costs associated with ALC units, capital costs will be borne by the Commission
2. There are a number of different operational costs that need to be considered. These include: airtime costs for ALC, infrastructure support to data centre, security, on-going maintenance and personnel costs
3. The group noted that the operational costs will be borne by the Commission aside from who will bear the cost of transmitting data from

the ALC to the Commission which is an issue that remains unresolved. It was noted that further consideration needs to be given to who will bear the cost of retrieving data from the Commission VMS.

4. The group noted there were possible cost savings for vessel reporting to FFA VMS to route their high seas data to the Commission VMS (no additional registration costs or airtime, relatively small costs to get data from FFA to the Commission). It was suggested that a scaled levy could be applied for vessels choosing this procedure.
5. The group noted that different systems (Argos, Inmarsat, Iridium) are likely to incur different costs
6. The group recommended that it would be useful for the Secretariat to develop a paper further exploring cost recovery and cost sharing taking into account the points raised in the discussions above.

Data standards, format and data to be transmitted

The working group identified the following points in respect of data standards and formats:

1. The group noted that WCPFC CMM 2006/06 sets out in paragraph 1 of Annex 1 data to be transmitted to the Commission VMS from ALC units.
2. The group noted that international standards exist for VMS data formats and that many national and FFA systems utilize these standards. The group noted there could be utility in considering these standards as a basis for WCPFC VMS data formats.
3. The group also noted that a format would need to be developed for manual reporting should this become an agreed alternative procedure in the event of ALC malfunction.
4. The group noted that the data being received by the Commission VMS needs to be sufficient that the VMS will be able to usefully portray a vessels identity, location and a date and time for this location.
5. The group noted that course and speed is something that may be derived by the VMS.
6. The group agreed that establishing data standards and formats is a priority issue and that ideally these could be agreed by December 2007.

7. The group recommended that it would be useful for the Secretariat to develop a paper for consideration before December 2007, that further explores data standards and formats taking into account the points raised in the discussions above.

Data security and exchange

The working group identified the following points in respect of data security and exchange:

1. The group noted that there could be merit in taking into account existent standards, specifications and procedures when considering those for the WCPFC VMS. It was noted that both the FFA and CCAMLR have standards, specifications and procedures, as well as national VMS, and that the Commission should consider these.
2. It was also noted that there could be benefit in exploring standards, specifications and procedures used in other sectors, for example banking.
3. Further it was noted that the rules and procedures for VMS data should be developed within the Commissions process for developing rules and procedures for all Commission data, but that it would be very important that VMS and Compliance experts worked closely to ensure that sensitivities associated with VMS data were understood, and practical issues qualified/identified.
4. It was noted that VMS data will be used by the Commission and CCMs for both, including science and compliance purposes.
5. It was noted that it is very important that security procedures do not jeopardize the utility of VMS data and that a balance needs to be struck in this regard.
6. The group identified the following as being potential users, or parties engaged in processes associated with VMS data: vessels and vessel masters, CCMs, Commission, Service providers, 3rd party users, Flag State, Coastal State, Charter States and Secretariat.
7. The group also identified the need to consider the security of data routing in developing data security and exchange standards, specifications and procedures and found the schematic set out in the WCPFC VMS Business Plan to be useful for identifying data routes.

ANNEX 1

Terms of Reference for the TCC VMS Working Group to develop Standards, Specifications and Procedures for the WCPFC Vessel Monitoring System

Develop the following, including a schedule for time-frames and milestones, for the implementation of the WCPFC VMS

1. ALC malfunction procedures
2. ALC registration and de-registration
3. Cost recovery and cost sharing
4. Data standards and formats
5. Data security and exchange
6. Methods to ensure ALCs comply with standards set in Annex 1 of CMM 2006 06
7. ALC inspection protocol
8. Rules on polling
9. Vessel reporting including reporting frequencies
10. Data to be transmitted
11. Measures to prevent tampering
12. Obligations and roles of fishing vessels, CCMs, the FFA Secretariat and the Commission Secretariat.