



**SCIENTIFIC COMMITTEE  
FIFTH REGULAR SESSION  
Port Vila, Vanuatu  
10-21 August 2009**

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**HIGH SEAS VESSEL DAY SCHEME:  
High Seas Purse Seine Fishing Effort**

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**WCPFC-SC5-2009/GN-WP16  
23 July 2009**

**Introduction**

1. Para. 325(d) of the Summary Record of the Fourth Regular Session of the Commission (WCPFC4) states:

“the Executive Director will commence a process in early 2008 to support the implementation of similar measures [*sic.* Vessel Day Scheme (VDS)] to limit purse seine effort on the high seas, consistent with paragraph 9 of CMM 2005-01, and in waters under the national jurisdiction of non-PNA members of the Commission, consistent with paragraph 10(ii) of CMM-2005-01;”

2. The Fourth Regular Sessions of the Scientific Committee (SC4) (WCPFC-SC4-2008/ST-WP04) and the Technical and Compliance Committee (TTC4) (WCPFC-TCC4-2009/WP-15 and WP-15 Suppl.) in 2008 were invited to consider the:

- a. unit of measurable fishing effort to apply to purse seine vessels; and
- b. availability of data for a suggested unit of purse seine effort in the high seas and the waters under the national jurisdiction of non-PNA members of the Commission.

3. The status of consideration of this issue at SC4 and TCC4 was reported to the Fifth Regular Session of the Commission (WCPFC5) at Busan, Korea in December 2009 (WCPFC5-2008/13). Para. 168 and 169 of the Summary Record of WCPFC5 invited Members, Cooperating Non-members and Participating Territories (CCMs) to provide comments on the options and recommendations contained in WCPFC5-2008/13 and referred the issue of a high seas VDS to SC5 and TCC5 for further discussion.

**Related developments**

*High seas pockets*

4. CMM 2008-01 (para. 22) provides that two high seas pockets will be closed to fishing from 1<sup>st</sup> January 2010, unless the Commission decides otherwise at WCPFC6 in December 2009. At that meeting the Commission will also consider the closure of all high seas pockets in the Convention Area between 20° North and 20° South. The fate of the historical effort (in fishing days) for those pockets in relation to whether i) they are removed from the fishery, or ii) they remain available for use in other areas of high seas areas, remains uncertain.

### *Contributions from CCMs*

5. In the first five months of 2009 the Secretariat received written comments from i) Chinese Taipei (Attachment A), ii) the PNA (Attachment B), iii) the Philippines, and iv) the United States (Attachment C).

6. The communications with the Philippines were in relation to operational data submitted to substantiate the preliminary information that was provided to TCC4 in September 2008. The Secretariat has evaluated the operational data provided for suitability in determining high seas effort and the current status of this work is summarized in Table 1. Complete operational catch/effort logsheet data were provided to the WCPFC by Japan in accordance with CMM 2008-01 on 16<sup>th</sup> April 2009. These data provide much better coverage than the operational logsheet data previously available to the WCPFC and the high seas effort days have therefore been revised using these recently-provided data.

7. No other data were received with the result that only the high seas days for Japan have been revised in Table 1 presented in WCPFC-2008/13, although the high seas days for the Philippines will be revised once all suitable operational data have been received by the WCPFC. Table 2 provides the latest version of the limit estimates for the high seas and the zones of non-PNA CCMs based on the information currently available.

### *Commission Vessel Monitoring System (VMS)*

8. The Commission VMS has operated uninterrupted since it became operational on 1<sup>st</sup> April 2009. Since then the Commission has received reports for high seas purse seine fishing activity via the FFA VMS (214 vessels) and from a single purse vessel reporting direct to the Commission.

9. The Commission Secretariat has had initial discussions with experts associated with the development of systems for the management of a VDS. On the basis of experience with the PNA VDS a system can be developed in a reduced time frame. No costing information has been requested to date.

### **Advice and recommendations**

10. Para. 21 of Conservation and Management Measure 2008-01 (CMM 2008-01) adopted at WCPFC5 invites SC5 and TCC5 to provide advice and recommendations to the Commission at its annual session in December 2009 (WCPFC6), for the consideration of the development of a high seas VDS to be compatible with the Parties to the Nauru Agreement (PNA) VDS to provide a common currency for managing purse seine fishing effort.

11. SC5 is invited to:

- a. Further consider the metric for the measurement of a fishing day;
- b. Confirm that the information contained in Table 2 is an accurate representation of high seas purse seine fishing effort for the period 2001-2004; and
- c. Provide any other advice or recommendations for TCC5 or WCPFC6 that might support the Commission's consideration of the development of a high seas VDS at its 2009 session at Papeete, French Polynesia in December.

**Table 1. Status of the appraisal of operational purse-seine data from the Philippines to determine high seas days (CMM 2005-01)**

Company	No. Of vessels	Logsheets data adequate to determine high seas days ?	Provisional high seas days effort	High seas days effort (after logsheet has been entered)
Company #1	8	No – Logsheets provided are missing positional information	Not yet available	Not yet available
Company #2	2	No - The logsheets provided appear to show only the activity and positions for what they understand to be on the “high seas” and no activity for all days at sea, which is required by the WCPFC to determine high seas days (as has been done for per other CCMs).	Not yet available	Not yet available
Company #3	4	Yes. Good example of what is required.	Pending ...	Not yet available
Company #4	2	Possibly. Need to confirm from the company whether days recorded on the logsheet represent all days at sea. In any event, activities appear to be confined to the Philippines EEZ.	0	0
Company #5	6	Yes. Good example of what is required.	Pending ...	Not yet available
Company #6	4	Yes. Good example of what is required.	Pending ...	Not yet available
Company #7	4	Yes. One vessel does not appear to have provided positional information for all days at sea – request BFAR to follow up.	Not yet available	Not yet available
Company #8	4	Yes. It will be possible to determine high seas effort. However, information on ‘School association’ and start set time are missing and this may ultimately be required for other analyses conducted by the WCPFC (e.g. high seas days by set type) – request BFAR to follow-up	Pending ...	Not yet available
Company #9	3	Yes. Good example of what is required.	Pending ...	Not yet available
Company #10	9	No - The logsheets provided appear to show only the activity and positions for the sets undertaken on the “high seas” and no activity for all days at sea, which is required by the WCPFC to determine high seas days (as has been done for per other CCMs). Note that “days searching only” is included in the WCPFC definition of PURSE SEINE EFFORT.	Not yet available	Not yet available
Company #11	4	Yes. It will be possible to determine high seas effort. There are a large number of days for each vessel listed with activity code ‘4 –No fishing due to breakdown’ – we have assumed that this refers to days when vessels stand-off and do not set on FADs and no searching was undertaken – request BFAR to follow-up.	Pending ...	Not yet available
Company #12	4	No – Logsheets provided for three of the four vessels are missing positional information. The WCPFC require the positions to confirm activity of the high seas, as has been undertaken for the other CCMs with purse seine fleets.	Not yet available	Not yet available
Company #13	5	No – the data provided are monthly summaries and not operational (daily) set data. Even though positions are provided, the WCPFC need the daily set and position information in order to determine high seas activities.	Not yet available	Not yet available
Company #14	5	Yes. It will be possible to determine high seas effort. However, the days where ‘searching only’ occurred do not have positional information. “Days searching only” is included in the WCPFC definition of PURSE SEINE EFFORT, so the WCPFC requests that positions be provided for, the at least, activity codes = ‘2’ to ensure that days searching only is included in their high	Pending ...	Not yet available

Company	No. Of vessels	Logsheet data adequate to determine high seas days ?	Provisional high seas days effort	High seas days effort (after logsheet has been entered)
		<a href="#">seas effort estimates.</a>		
Company #15	4	No - The logsheets provided appear to show only the activity and positions for what they understand to be on the "high seas" and no activity for all days at sea, which is required by the WCPFC to determine high seas days (as has been done for per other CCMs). Precise positions are not provided so it would be difficult to determine whether activities are within the high seas of EEZ with the current range of position for each day.	Not yet available	Not yet available
Company #16	1	No - The logsheets provided appear to show only the activity and positions for what they understand to be on the "high seas" and no activity for all days at sea, which is required by the WCPFC to determine high seas days (as has been done for per other CCMs).	Not yet available	Not yet available
Company #17	4	Yes. Good example of what is required.	<b>813</b>	<b>813</b>

**Table 2. Limit estimates for the high seas and the zones of non-PNA CCMs (and non-WCPFC members) established by CMM-2005-01 and CMM-2006-01 between 20°N and 20°S average vessel days 2001-2004 or 2004)<sup>1</sup>**

Entity	Vessel days				SEE NOTE
	National Waters		High Seas		
	2004	2001-2004	2004	2001-2004	
AMERICAN SAMOA	-	-	-	-	
AUSTRALIA	-	-	-	-	
CANADA	-	-	-	-	
CHINA	-	-	428	200	
CHINESE TAIPEI	-	-	1,913	1,809	
CNMI	-	-	-	-	
COOK ISLANDS	6	73	-	-	
ECUADOR	-	-	12	4	(1)
EL SALVADOR	-	-	-	17	
EU-SPAIN	-	-	90	58	(2)
FIJI	27	13	-	-	
FRENCH POLYNESIA	-	1	-	-	
FSM	-	-	383	257	
GUAM	-	-	-	-	
INDONESIA	6,363	-	500	-	(3)
JAPAN	-	-	1,859	1,567	(4)
KIRIBATI	-	-	35	42	
KOREA	-	-	1,531	1,571	(5)
MARSHALL ISLANDS	-	-	398	303	
NAURU	-	-	-	-	
NEW CALEDONIA	-	-	-	-	
NEW ZEALAND	-	-	210	224	
NIUE	-	-	-	-	
PALAU	-	-	-	-	
PHILIPPINES	5,477	-	4,659	239	(6)
PNG	-	-	1,005	633	
SAMOA	4	6	-	-	
SOLOMON ISLANDS	-	-	-	17	
TOKELAU	67	149	-	-	
TONGA	1	1	-	-	
TUVALU	-	-	-	-	
USA	342	396	987	1,066	(7)
VANUATU	23	7	571	245	
WALLIS AND FUTUNA	-	3	-	-	
Other Non-WCPFC CCM	-	-	33	33	(8)
<b>LIMIT ESTIMATE [CMM 2005-01]</b>		12,519		14,788	

**NOTES**

Where not stated, the estimates of high seas effort have been determined using raised operational logsheet data held by the SPC. Subject to interpretation of paragraph 6 and footnote 1 of CMM 2005-01. Catches and effort of vessels operating under charters and similar arrangements have been attributed to host island states or territories in accordance with paragraph 5 of CMM 2005-01 using the best information available to SPC-OFP.

<sup>1</sup> As at 20<sup>th</sup> July 2009

Note Number	Background information
1.	<p><b>ECUADOR</b></p> <p>Values presented here are from Operational data provided to SPC under the IATTC-SPC data exchange agreement.</p>
2.	<p><b>SPAIN</b></p> <p>[15 Oct 2008] Annual high seas effort by the EU fleet for period 2001-2007 provided (Sourced from VMS data). Source of EEZ coordinates used to determined high seas days unknown. Definition of "DAY" thought to be days at sea since the data are sourced from VMS.</p>
3.	<p><b>INDONESIA</b></p> <p>WCPFC (SPC-OFP) does not have any operational catch/effort data for the Indonesia domestic purse seine fleet to determine the extent of activities by area, so the following methods have been used in the absence of the data.</p> <p>1. National waters</p> <p>For 2004, the average CPUE (SKJ+YFT+BET)/days = 24 MT/day in the tropical waters of the WCPFC Convention Area. Applying this to the total purse seine catch estimates for domestic Indonesia purse seine fishery in 2004 (164,721 mt) gives 6,363 days (after subtracting an arbitrary estimate of 500 days for activities on the high seas – see below).</p> <p>For 2003-2006, the average CPUE (SKJ+YFT+BET)/days = 26.5 MT/day in the tropical waters of the WCPFC Convention Area. Applying this to the annual average purse seine catch estimate for domestic Indonesia purse seine fishery for 2003-2006 (170,243 mt) gives 5,924 days (after subtracting an arbitrary estimate of 500 days for activities on the high seas – see below).</p> <p>2. High seas</p> <p>WCPFC (SPC-OFP) doesn't have any effort data for the Indonesia domestic purse seine fleet but presumably they fish in the high seas enclave between FSM, PNG, Palau and Indonesia. If this effort is assumed to be similar to the effort of the Philippines fleet based in PNG, a value of 500 days could possibly be attributed to fishing in the high seas by the Indonesian fleet.</p>
4.	<p><b>JAPAN</b></p> <p>Complete operational logsheet data provided to the Commission on 16<sup>th</sup> April 2009 in relation to CMM 2008-01. These data represent 100% coverage and therefore a better source of data to estimate high seas effort, so the estimates have been revised compared to information presented to WCPFC5.</p>
5.	<p><b>KOREA</b></p> <p>[12 Sep 2008] Advice from Korea Indicates that average fishing days from 2001 to 2004 are 1,571 days and fishing days in 2004 are 1,531 days. Yet to be reconciled since the source of EEZ coordinates used to estimate high seas days is unknown. Also we are not sure of their definition of "DAY". SPC estimates 1,234 days for 2004 and 1,230 as the average for 2001-2004.</p>
6.	<p><b>PHILIPPINES – WORK-IN-PROGRESS</b></p> <p>High seas effort by the Philippines (distant-water) fleet based in PNG has been determined to be 452 days [for 2004] and 239 (average 2001-2004) based on logsheet data.</p> <p>At this stage, it is not possible to accurately estimate the annual effort of the Philippines domestic purse seine fleet on the high seas in the WCPF Convention Area in a manner consistent to the process undertaken for the other purse-seine fleets, due to the lack of operational (logsheet) data for this fleet.</p> <p>Since TCC4, the Philippines have contacted their fishing companies to obtain the necessary operational logsheet data and substantial operational logsheet data have been provided to the WCPFC who have conducted an evaluation of the data provided (see TABLE 1).</p>

Note Number	Background information
	Estimates of high seas effort by the domestic Philippines purse seine fleet for 2004 provided by the Philippines (but yet to be substantiated) are 4,659 days.
7.	<p><b>USA</b></p> <p>[13 Sep 2008] USA have provided a value of 1,066 days as the average for 2001-2004, but only 1,038 days have been determined using the data available to the WCPFC (SPC-OFP). The WCPFC (SPC-OFP) are currently working with US-NMFS to review the respective EEZ coordinates used in the process of determining high seas days.</p>
8.	<p><b>Other Non-WCPFC CCM</b></p> <p>This entity relates to fleets based in the Eastern Pacific Ocean or IATTC-member country fleets providing data to IATTC, but excluding fleets for which the WCPFC already hold operational data (e.g. Vanuatu, El Salvador, Ecuador, Spain and the USA) .</p> <p>Other fleets that may support purse seine effort on WCPO tuna stocks may include Malaysia and Vietnam but data are not available to include consideration of this possible effort here.</p> <p>1. Days in national waters within the WCPFC Convention Area.</p> <p>For 2001-2004, none of these fleets were licensed to fish in national waters according to information currently available, so no fishing activity by non-WCPFC CCM fleets has been attributed to national waters. (0 days)</p> <p>For 2003-2006, none of these fleets were licensed to fish in national waters according to information currently available, so no fishing activity by non-WCPFC CCM fleets has been attributed to national waters. (0 days)</p> <p>2. High Seas</p> <p>From IATTC data, after removing El Salvador, Ecuador, Spain and Vanuatu fleet effort (which are already counted), the effort in 2004 for these fleets fishing in the WCPFC Convention Area was the same as the average effort for 2001-2004. For 2001-2004, the number of days effort in the WCPFC Convention Area was 33 days, according to aggregate data provided by IATTC data. (33 days).</p> <p>For 2003-2006, the number of days effort in the WCPFC Convention Area was 21 days, according to best available operational and aggregate data provided by IATTC data.</p>



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March 27, 2009

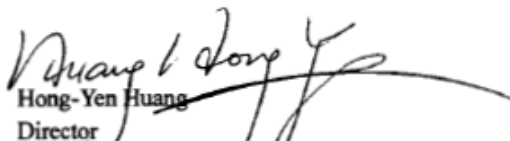
Mr. Andrew Wright  
Executive Director  
Western and Central Pacific Fisheries Commission  
P.O. Box 2356, Kolonia, Pohnpei  
Federated States of Micronesia

Dear Mr. Wright,

The Fourth Meeting of the Commission tasked the Executive Director to commence a process to support the adoption of measures similar to the Vessel Day Scheme (VDS) to limit purse seine effort on the high seas. Therefore, during the WCPFC5 meeting, the Commission further encouraged CCMs to provide comments on the recommendations contained in WCPFC5-2008/13 to the Secretariat prior to SC5. Accordingly, you have made a request to the CCMs to provide comments on this issue by March 27, 2009.

However, after several rounds of internal discussion, we find that this issue is far more complicated than we used to think and further discussion among the government officials, scholars and industry is still needed. Therefore, we can not provide any official comment at this moment and would like to reserve our right to make official comments in the future. Our comments would be provided to the Secretariat as soon as internal consensus is reached. In the meanwhile, we would be glad to learn about opinions from other CCMs.

Sincerely yours,

  
Hong-Yen Huang  
Director  
Deep Sea Fisheries Division





Charleston - we can  
discuss if you like?  
Lew.

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7 May 2009

Mr Andrew Wright  
Executive Director  
Western and Central Pacific Fisheries Commission (WCPFC)  
Kaselehlie Street  
PO Box 2356  
Kolonias; Pohnpei State, 96941  
Federated States of Micronesia

Dear Mr Wright,

The HS VDS was considered at a meeting of the PNA on 1 May 2009 and in this regard I am writing to you on behalf of the Parties to provide comments in relation to its application and implementation.

The PNA would like to reiterate that the 2 high seas pockets adjacent to the PNA will be closed as of 1 January 2010 under the Third Implementing Arrangement. As such, a high seas VDS will only apply to the area of high seas outside the 2 pockets to be closed.

In addition, we have the following general comments on the HS VDS:

- The high seas VDS must provide equitable opportunities for Small Island Developing States to develop their high seas fisheries. This can be achieved by either retaining the current exemption for Small Island Developing States domestic fleets from high seas effort limits; or adopting an arrangement that results in full control of high seas fishing effort being allocated to adjacent developing coastal States, especially Small Island Developing States;
- ? 1 ○ The total number of days available under a HS VDS should be limited annually to days fished in the high seas between 20° north and 20° south excluding days fished in the 2 high seas pockets in 2004 and this level should be defined and substantiated; and
- ✓ ○ The HS VDS should not undermine the in-zone VDS that has been implemented by the PNA. It should be clear that the HS VDS is separate from the in-zone VDS and the transfer of fishing days between the two will not be permitted, consistent with the existing CMM 2008-01.

Please note these are initial comments and once further information is produced by the WCPFC Secretariat the PNA will consider and provide advice on this information as it becomes available.

Yours sincerely,

Charleston Deiye  
Chief Executive Officer  
Nauru Fisheries and Marine Resources Authority &  
PNA Chairman 2008-2009

[2%] dev. aspirations-



**U.S. DEPARTMENT OF COMMERCE**  
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**MAR 27 2009**

Mr. Andrew Wright  
Executive Director  
Western & Central Pacific Fisheries Commission  
P.O. Box 2356  
Kolonias, Pohnpei 96941  
Federated States of Micronesia

Dear Drew:

The United States offers the following views with respect to the Commission's efforts to develop a high seas vessel day scheme (HS VDS) compatible with the Parties to the Nauru Agreement, Palau Arrangement Vessel Day Scheme to provide a common metric for managing purse seine activities on the high seas as called for in paragraph 21 in Conservation and Management Measure 2008-01. We look forward to further elaboration by the Secretariat and deliberation at the Scientific Committee and Technical and Compliance Committee and well as the annual session in 2009 on this important issue:

Any Commission implemented high seas VDS or system should be designed with sufficient spatial and temporal flexibility to deal with shifting oceanic and economic conditions, particularly with respect to effort limits that apply in EEZs. For example, the VDS should provide for members to be able to freely shift allowable fishing days between the high seas and their respective EEZs (and with the EEZs of States in which their fleets have access). It should also provide for members to be able to shift, within certain constraints, allowable fishing days from year to year - e.g., to debit future years with past overages and credit future years with past underage(s), or as in the PNA VDS, to borrow fishing days from future years. With these objectives in mind, the high seas VDS should share certain basic attributes with the PNA VDS, including using the calendar year as the basic time unit, and ideally the same definition and measure of fishing day.

A VDS for the high seas within the Convention Area and for waters under the jurisdiction of the non-PNA Members is, in effect, an allocation of fishing effort. In this regard, Article 10, paragraph 3 of the Convention clearly identifies the factors to be considered in determining total allowable catch or total allowable level of fishing effort. These include, in part: status of stocks and existing levels of fishing effort; past and present fishing patterns and the fishing practices of participants in the fishery; the historic catch in an area; the respective contributions of participants to conservation and management of the stock, including the provision of accurate data and their conduct of scientific research in the area; the record of compliance; among other factors.



Attachment C (continued)

With respect to historic fishing practices, there are fleets with over 30 years of fishing on the high seas within the Convention Area whose operations are already constrained under other elements of 2008-01. Any VDS-like mechanism to be adopted by the Commission will have to be negotiated in a transparent manner that takes into account the factors listed above including current and past fishing practices of all fleets operating in the Convention area.

The high seas VDS should allow for the transparent and efficient transferability of fishing days among CCMs. In that case, it will be critical that no CCMs have open-ended or room-for-expansion allocations.

We have concern about the use of the 3 vessel length categories used in the PNA VDS—given the lack of an independent verification mechanism. We would also like to see the analysis that supports the fishing effort allocated for the various vessel lengths supporting the equivalent effort (sea days). We are open to some scale based on a transparent and quantitative analysis comparing vessels physical parameters and effective effort.

We do not support the equivalent of an “Olympic”-style allocation on the high seas (option 1 of WCPFC5-2008/13). We can support the concept of purse seine fishing opportunities on the high seas being allocated among CCMs, as in option 2 cited in the same paper. However, unlike option 2, we believe that each CCM should be responsible for ensuring that the collective effort of its vessels do not exceed the CCM's limit in any given limit period, as in the scheme currently in effect under CMM 2008-01.

We have concerns about reserving fishing days for specific purposes and the incentives that may be created. Under the right conditions we could support a small-scale pilot scheme in which some purse seine fishing opportunities on the high seas are allocated to CCMs by bidding. Unlike option 4, however, we do not support leaving SID CCMs out of such a scheme.

Thank you for the opportunity to comment on this important facet of our developing regime for conservation and management in the western and central Pacific. Feel free to contact me or Raymond Clarke (808-944-2205) if you have any questions regarding the views articulated above.

Sincerely,



William L. Robinson  
Regional Administrator

cc: William Gibbons-Fly – DOS OMC