



PARTIES TO THE PALAU ARRANGEMENT

21st ANNUAL MEETING

31 March – 1 April 2016

Tarawa, Kiribati

PA21/WP.2: Purse Seine VDS TAE for 2017-18

TAE Setting

1. Article 12.2 of the VDS Scheme text sets out the issues to be taken into account in setting the TAE as follows:
 - i) The best available scientific, economic, management and other relevant advice and information;
 - ii) The provisions of the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean;
 - iii) The objectives of the Management Scheme; and
 - iv) Any submission on this issue from any party, individual or organisation.

Current Status

2. At PA20, 44,890 days was adopted as the PNA TAE for 2016 and the provisional PNA TAE for 2017, and 45,881 days was adopted as the provisional VDS TAE (including PNA and Tokelau) for 2017 as follows:

Table 1: TAEs for 2014 – 2016; provisional TAE for 2017

	Determining the TAE (days)		
	TAE 2014 & 2015	TAE 2016	Provisional TAE for 2017
Estimated 2010 Logsheet effort	44,033	44,033	44,033
Length Adjustment factor	1.34%	1.95%	1.95%
PNA TAE	44,625	44,890	44,890
Tokelau TAE	985	991	991
Total VDS TAE (PNA + Tokelau)	45,610	45,881	45,881

Scientific Information and Advice

3. As shown below, WCPO purse seine catches of bigeye, skipjack and yellowfin tuna are provisionally estimated¹ to have increased in 2014 to a record level of 2 million tonnes. SPC have advised the WCPFC that this increased catch level “could be due to a strong year-class in conjunction with environmental conditions resulting in a prolonged period where skipjack tuna were more available to the gear.”² Annual purse seine catches in PNA waters have fluctuated since 2010 at around 1.5 million tonnes while annual purse seine catches in other areas of the WCPO outside PNA waters have grown rapidly in recent years. The increase outside PNA waters has come largely from Indonesian waters and the high seas. 2015 catch data is not yet available but VMS data indicates a decline of about 15-20% in purse seine effort in PNA EEZs in 2015 with continuing high catch rates.

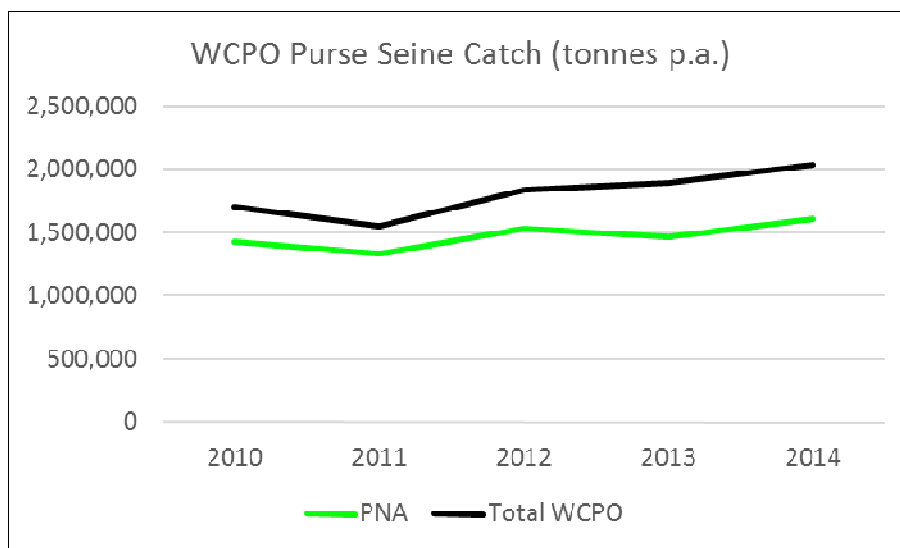


Figure 1: WCPO Purse Seine Catch (tonnes p.a)

4. The WCPFC Scientific Committee has provided the following advice:
- a) on the status of the skipjack stock:
- “Additional purse-seine effort will yield only modest gains in long-term skipjack catches and may result in a corresponding increase in fishing mortality for bigeye and yellowfin tunas. The management of total effort in the WCPO should recognize this.*
- The spawning biomass is now around the mid-point of the range of candidate TRPs of 40%, 50%, and 60% of unfished spawning stock biomass that WCPFC10 has asked the SC10 to consider for skipjack. SC10 recommends the commission take action to avoid further increases in fishing mortality and keep the skipjack stock around the current levels, with tighter purse-seine control rules and advocates for the adoption of TRP and harvest control rules.”*

¹ Data provided by SPC in October 2015

² SPC, Overview of Tuna Fisheries in the Western and Central Pacific Ocean, Including Economic Conditions – 2014.

This advice is based on assessment of the skipjack stock undertaken in 2014. There will be a new skipjack assessment this year.

b) on the status of the yellowfin stock:

“The SC recommend that the catch of WCPO yellowfin should not be increased from 2012 levels which exceeded MSY and measures should be implemented to maintain current spawning biomass levels until the Commission can agree an appropriate TRP.”

5. In a major move forward, the WCPFC adopted a target reference point (TRP) for skipjack at its December 2015 session at 50% of the level of adult biomass without fishing, following the adoption of this TRP by PNA. This is roughly equivalent to maintaining fishing effort on skipjack at around the 2012 level, aims to maintain the adult skipjack biomass at nearly double that required to produce MSY, and is a higher standard than adopted by any other tuna RFMO for a major tuna stock. There is no room to increase fishing mortality if the adult biomass is to be maintained at this level.

Economic Information and Advice

Market for Tuna for Canning

6. During 2015, skipjack prices were depressed, having fallen to around US\$1,000 per tonne³ in late 2015, down from a peak of \$2,350 per tonne in April 2013, and compared to a long term average trend level of around \$1,400 - \$1,500 per tonne. More recently, prices have risen sharply to a reported \$1,400 per tonne⁴ for March 2016 with further increases projected.
7. The sustained reduction in prices indicates an over-supply of fish for canning, variously attributed to:
 - Sluggish demand;
 - Increased catches and supply from the WCPO and other oceans;
 - Exploitation of the over-supply situation by large processors and brandowners;
 - The broader effects of downturns in the global economy, especially prices of other food products.
8. In this situation, a reduction in the TAE might seem worth considering in order to tighten tuna supply and promote an increase in prices which can be extracted as vessel day prices.
9. Last year, documentation for the Regional Roadmap for Pacific Fisheries pointed to what was seen as continuous increases in catches under the VDS as the reason for the large reduction in global skipjack prices noted above. That analysis was mistaken and misleading, in that:
 - a) As can be seen in Figure 1 above, PNA purse seine catches have **not continually increased** but have varied from year-to-year driven largely by annual changes in fishing conditions;
 - b) As shown in Table 2 below, there was a relatively **small contribution of growth in PNA waters** compared to catches in other areas from 2012 to 2014 (24%), showing that any contribution from PNA catch increases to global catch increases was relatively small over this period while prices were declining. Most of the increase in the global catch was from other areas of the WCPO outside PNA waters.

³ Average Thai monthly import value

⁴ Bangkok, 1.8+kgs

Table 2: Global Tuna Catches 2012-2014 (all gears)

Global Tuna Catches 2012-14 (all gears)					
	2012	2014	Growth 2012-14		PNA Share (%)
PNA	1,607,141	1,681,604	74,463	4.6%	
Other WCPO	1,058,257	1,197,469	139,212	13.2%	
Total WCPO	2,665,398	2,879,073	213,675	8.0%	34.8%
Other Oceans	2,011,774	2,103,999	92,225	4.6%	
Global	4,677,172	4,983,072	305,900	6.5%	24.3%

- c) In addition, as shown in Figure 2 below which shows indices of global skipjack prices and the FAO global food price index, it seems that the global skipjack price is substantially influenced by global food prices or similar indicators, and the current low skipjack prices also reflect similar global price trends.

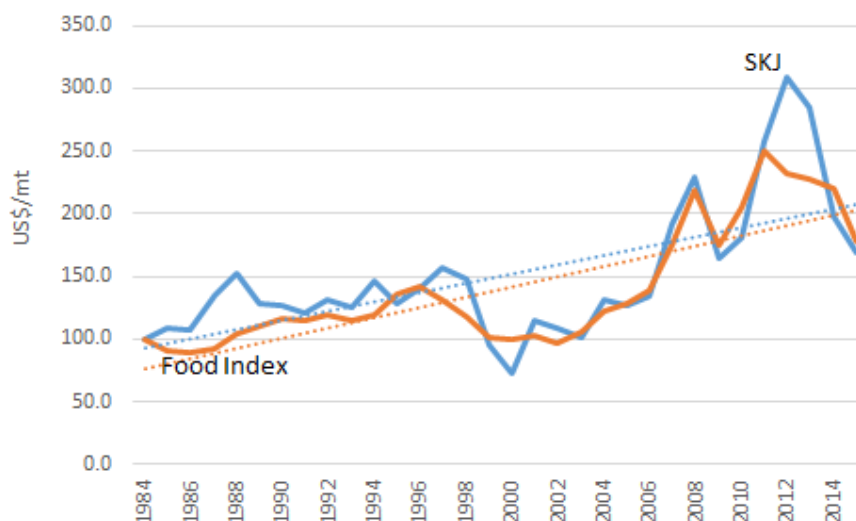


Figure 2: Global SKJ price index and the FAO global food price index

10. On the basis of this analysis it seems clear that:
- a) Catches in PNA waters were not a significant cause of the declines in skipjack prices over the period 2012-2014;
 - b) There is likely to be no sustained gain to PNA from reducing PNA purse seine effort and catches to push the skipjack price up, although reducing catches and supply would be expected to produce some short term price increase; and
 - c) Cutting PNA purse seine effort and catch to reduce supplies for canning would effectively mean PNA taking an economic loss in order to compensate for increases in WCPO purse seine catches outside PNA waters.

Market for Days

11. In 2015, there was a strong demand for vessel days which drove up the price of days. However, the days used in 2015 at 35,900 days was significantly below the VDS TAE of 45,610 days, noting that in recent years the days used has averaged 42,700 days, about 6-7% below the TAE. Part of this difference in 2015 was due to one fleet buying 2,800 days more than it used. It also seems clear that other fleets also did not use days that they had bought or been allocated, including some domestic fleets that operated in the Eastern high seas, and fleets such as the EU fleet which left the region without using some of the days they had bought, while some other vessels were tied up.

12. Despite this reduction in days used in 2015, low tuna prices and economic difficulties of some fleets including the US fleet, the demand for 2016 days has remained strong. From informal consultations in Nadi recently among Parties, it seems that virtually all days offered for 2016 so far have been sold at, and in most cases above, the prices paid for days in 2015.
13. Factors contributing to strengthening of the demand for days in 2016 include:
 - a) tightening of arrangements for non-fishing days;
 - b) tighter controls on fishing in archipelagic waters;
 - c) reduction in number of days available for foreign vessels due to increases in days allocated to domestic vessels and FSMA;
 - d) industry expectations of improvements in economic conditions;
 - e) a shift of fishing to the west which makes the eastern High Seas and EPO areas less attractive as an alternative to buying VDS days;
 - f) increasing use of tenders and other more competitive processes for selling days.
14. Looking ahead, it is clear that the price of vessel days cannot continue to increase at recent rates and must level off and begin to fluctuate with a range of market conditions. For now, however, the price of vessel days for foreign vessels looks likely to continue to increase, although more slowly, because:
 - a) as domestic fleets grow, there are less days available each year for foreign vessels with the likelihood, therefore, of an increasingly competitive market for days for foreign vessels;
 - b) Parties are making increased use of more competitive selling arrangements such as tendering.
15. While the overall vessel day price can be expected to continue to rise, if more slowly, there may be some rebalancing of demand for days between zones as fishing appears to be more balanced across the region as El Nino conditions fade.
16. From this analysis, there is no reason to consider changing the TAE at this point to take into account the market for days. If vessel day prices do begin to ease, Parties have the option available of limiting or ending access to the eastern high seas by vessels while licensed by PNA, which should increase demand for days by around 3-4,000 days, based on the increase in effort in the eastern high seas since the PNA ban on fishing in that area was dropped.

WCPFC Considerations

17. In CMM 2015-01, PNA Members have agreed to limit purse seine effort in PNA EEZs to 2010 levels through the PNA Vessel Days Scheme. In response, the PNA TAE adopted for 2016 and the provisional PNA TAE for 2017 are based on the 2010 effort level in PNA EEZs. Two additional considerations related to the WCPFC are:
 - a) The Commission has now adopted a Target Reference Point (TRP) for skipjack. The next step in the Commission workplan on skipjack is to develop a Harvest control Rule for skipjack which will in time provide the framework for adjustment of measures such as the VDS TAE in coordination with limits applying in other waters to maintain the skipjack stock around its TRP;
 - b) In the interim, as discussed below, PA21 will begin to consider how to adjust the VDS for effort creep, including adjusting the TAE, if that becomes necessary.

MSC Considerations

18. With respect to decision-making on the PNA skipjack fishery and the VDS in particular, PNA commitments for MSC certification include:
 - i) Establishment of a short term objective: at PA17, the Parties adopted the short term objective of limiting purse seine effort in PNA EEZs at the 2010 level.

- ii) The link between the VDS TAEs and WCPFC requirements and the scientific advice needs to be clearly established by the PNA. Decisions taken on adjustment to the VDS scheme have to be based on the best available information. This will be derived largely from SPC scientific advice, SPC logsheet data, information compiled by the PNA Office and FFA as well as any additional work commissioned through PNA or other management organisation. Explanations on recommendations made and decisions taken, or lack of action, will be clearly documented by the PNA Office, through minutes of meetings. These minutes will be publically available on the PNA Office website.

Starting in 2012, this paper was modified from previous years to reflect these requirements. This includes clearly recording the link between the TAE and the relevant WCPFC measure and the scientific advice.

Effort creep

- 19. The VDS Scheme text at Article 2.4 ii) requires the Administrator to provide information on any observed or potential increase in average effective fishing effort for each fishing day since the introduction of the Management Scheme. Successive Administrator's reports have reported on trends in vessel size classes and catch rates per day.
- 20. The increase in total catch and catch rate in 2014 has increased attention to effort creep under the VDS, especially in the light of a recommendation in the 2014 VDS Review that a study should be made of converting the VDS to a catch-based system, largely in response to concerns related to effort creep. A follow-up study is now being undertaken, and the report will be available for Parties to take into account in discussion on the 2017 and 2018 TAEs at PA21. In addition, SPC and the PNAO will present a paper to PA21 considering ways to adjust the VDS and WCPFC zone-based purse seine limits more widely to take effort creep into account, if that becomes necessary, including adjusting the TAE as one option.

Management Information and advice

- 21. The starting point for the determination of the TAE is the estimated logsheet effort in PNA EEZs for 2010 to reflect the PNA obligation under the tropical tuna CMM referred to in para 12 above. The estimated effort level for 2010 continues to be revised by SPC, largely reflecting the failure of fishing states to provide accurate and timely operational data. The revisions are small, but create complexities that potentially undermine the effectiveness of the VDS. Previously, the TAE has been adjusted annually to reflect these small changes in the estimated 2010 effort level. In order to maintain the effectiveness of the VDS, Parties agreed at PA20 to adopt the 2010 level of effort in PNA EEZs advised to WCPFC10 in 2013 by SPC⁵ of 44,033 days as the appropriate limit to be used in future. This limit will be advised to WCPFC consistent with para 24 of CMM 2014-01 which says:
 - 24. *PNA shall report to the Commission against its collective annual limit by 1 July for the previous 12-month calendar period.*
- 22. The VDS TAE also needs to take into account the projected difference in effort levels resulting from the length adjustments applied in the VDS. The adjustment applied to determine the TAE for 2014 was reduced from 3.34% to 1.34%, largely as a result of the application of the VDS to the US fleet. For the 2016 and provisional 2017 TAE, the adjustment was increased to 1.95% to reflect further projected changes to the application of the VDS to the US fleet. This

⁵ from WCPFC10: Table 1 of Paper "WCPFC10-2013-12- Data Summaries in Support of Discussions on the CMM on Tropical Tunas"

adjustment, however, has been decreased to 1.3% to account for the reduced days by larger vessels, and how that will impact the VDS days.

23. At PA20, Parties decided to confirm, at their Annual Meetings, the TAE for the next year (in this case 2017) and adopt a provisional TAE for the following year (in this case 2018).
24. Taking into account the considerations set out above, and subject to consideration of the report on converting the VDS to a catch-based system, it is proposed that the provisional 2017 PNA TAE set last year be changed to 44,605 days and that this be adopted as the provisional PNA TAE for 2018 as set out in the Table below.

Table 3: Provisional TAE for 2018

Determining the TAE (days)				
	TAE 2014 & 2015	TAE 2016	TAE 2017	Provisional TAE for 2018
Estimated 2010 Logsheet effort	44,033	44,033	44,033	44,033
Length Adjustment factor	1.34%	1.95%	1.3%	1.3%
PNA TAE	44,625	44,890	44,605	44,605
Tokelau TAE	985	991	985	985
Total VDS TAE (PNA + Tokelau)	45,610	45,881	45,590	45,590

Tokelau as part of the VDS

25. Tokelau is now part of the VDS although it is not part of the PNA TAE. It has its own TAE, which it brings to the VDS and which is transferable with PNA members. This was initially established at 1,000 days when the PNA VDS TAE was 45,284 days, and is adjusted proportionately with changes in the PNA TAE. With the proposed PNA TAE for 2017 of 44,605 days, the Tokelau TAE will be adjusted to 985 days, and the total VDS TAE for 2017 will be 45,590 days as shown in Table 3 above.

Conclusions and Recommendations

26. On the basis of the considerations above, there is no reason for the Parties to change their decision at PA17 to apply a PNA TAE based on the revised 2010 effort level.
27. It is recommended that
 - i) The 2017 PNA TAE be set at 44,605 days;
 - ii) The TAE of 44,605 days be adopted as the provisional PNA TAE for 2018.