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FOURTEENTH REGULAR SESSION**  
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**REFERENCE DOCUMENT FOR THE DEVELOPMENT OF  
THE WCPFC HARVEST STRATEGY FRAMEWORK UNDER CMM 2014-06**

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**WCPFC14-2017-11  
15 November 2017**

**Paper prepared by the Secretariat**

**A. Introduction**

1. The purpose of this paper is to provide a quick reference guide to the recommendations of the Scientific Committee (SC) of relevance to the discussions in support of the Commission's development of a harvest strategy framework under CMM 2014-06. The Summary Reports of the annual meetings are part of the meeting documentation and readily available for access, and they provide the context and discussion in support of the recommendations. The agreed 2017 work plan for the adoption of harvest strategies under CMM 2014-06 is in **Attachment A**.

**B. Scientific Committee Recommendations**

*Target reference points for South Pacific albacore (SC13 Paragraphs 461 – 475)*

2. SC13 reviewed information related to the implications of a range of candidate target reference points for south Pacific albacore (SC13-MI-WP-01, *see Table 1 below*) and provided a number of suggestions to clarify aspects of the paper before a revised version is forwarded to WCPFC14. Noting that WCPFC13 agreed to defer the possible adoption of an interim target reference point for the South Pacific albacore stock, which had originally been agreed to take place in 2015 under the Harvest Strategy Work Plan, until December 2017 at the latest (para. 314 WCPFC13 Summary Report), SC13 encourages CCMs to describe their objectives for the fishery and recommends that WCPFC14 note the biological and economic consequences of the options modelled in this paper. In particular, SC13 draws the attention of WCPFC14 to the Limit Reference Point (LRP) already adopted by the Commission for south Pacific albacore and the need to identify a TRP which maintains the stock well above this limit, while noting that following the last assessment (SC11-SA-WP-06) the LRP is above  $SB_{MSY}$ .

**Table 1.** Expected consequences for the fishery of a range of potential TRPs (from SC13-MI-WP-01)

Option#	TRP (median SB2033/S BF=0)	Change in Catch Rate Proxy <sup>1</sup>	Change in effort by 2033 relative to 2013 to achieve TRP	Average change in total catch in 2033 relative to 2013 resulting from TRP	Risk of breaching 20% SBF=0 LRP in 2033	Result for this level of TRP once fishery reaches equilibrium
1	59%	+49%	at least -75%	-59%	0%	<b>Maximum Economic Yield achieved</b>
2	45%	+17%	-47%	-41%	0%	<b>Allows 20% revenue margin</b> per average vessel over costs at US\$1.10 cost per hook or <b>10% revenue margin</b> for a high cost vessel over costs at \$1.30 per hook
3	42%	+10%	-39%	-38%	0%	<b>Allows financial break-even</b> per vessel if cost is \$1.30 per hook
4	40%	+5%	-33%	-36%	0%	<b>Allows 10% revenue margin over costs</b> at \$1.10 per hook
5	37%	-1%	-23%	-33%	4%	<b>Allows break-even</b> if cost is \$1.10 per hook
6	34%	-8%	-12%	-30%	9%	<b>Allows 10% revenue margin over costs</b> at \$0.90 per hook
7	32%	-14%	0% (status quo)	-28%	20%	<b>Achieved if no change in effort from 2013:</b> Allows break-even only if cost per hook is less than \$0.90
8	14%	-56%	+150%	-22%	74%	<b>Maximum Sustainable Yield achieved</b>

***Performance indicators and monitoring strategies (SC13 Paragraphs 476 – 491)***

3. As requested in the Harvest Strategies Workplan (Attachment N, WCPFC13 Summary Report) and by the Small Working Group on Management Objectives at WCPFC13, SC13 reviewed candidate performance indicators and monitoring strategies for i) South Pacific albacore commensurate with candidate management objectives for the Southern Longline Fishery (SC13-MI-WP-02) and ii) bigeye and yellowfin tuna commensurate with candidate management objectives for the Tropical Longline Fishery (SC13-MI-WP-03). SC13 provided a number of suggestions to clarify, and update as appropriate, aspects of these papers and requested that revised versions of both be forwarded to WCPFC14 (*see Table 1 and Table 2 in Attachment B*). In reviewing these papers SC13 noted that while the number of key performance indicators should be kept to a tractable level as they will influence the Management Strategy Evaluation (MSE) modelling framework currently being developed, they should also be sufficient to monitor the key long-term management objectives for these fisheries. It was also noted that the list of indicators and monitoring strategies can be reviewed throughout the current MSE work. SC13 recommends that WCPFC14 note the candidate performance indicators and monitoring strategies for each of these fisheries as listed in these revised papers, and provide advice on what performance indicators and monitoring strategies should be included for the development of harvest strategies under CMM 2014-06.

4. WCPFC13 accepted the suggested initial list of performance indicators for tropical purse-seine fisheries as developed by the Small Working Group on Management Objectives at WCPFC13 for the purpose of the evaluation of harvest control rules (Attachment M, WCPFC13 Summary Report), which is in **Attachment C**.

***Harvest control rules and management strategy evaluation (SC13 Paragraphs 492 – 504)***

5. SC13 noted that WCPFC12 had adopted a work-plan for the adoption of Harvest Strategies under CMM 2014-06 and that the development of Harvest Control Rules and Management Strategy Evaluation frameworks had commenced in 2016 and is scheduled to continue through until 2018. SC13 noted the

<sup>1</sup> Vulnerable biomass in 2033 relative to 2013 (Median longline VB2033/VB2013)

importance of this ongoing work and reviewed the progress outlined in SC13-MI-WP-04. Noting that the initial focus of this work has been on WCPO skipjack, and that other stocks and fisheries will need to be considered as the work proceeds, SC13 provided feedback on the work undertaken to date and made a number of suggestions to help progress this work over the next year. SC13 also noted that additional resources (based on funding provided by New Zealand) are being provided to help expedite this work and appreciated the support for workshops and consultations to improve the capacity of fishery managers to become meaningfully engaged in the development of management strategy evaluation frameworks. SC13 recommended that WCPFC14 note the approach being taken to develop an MSE framework for WCPFC stocks and fisheries, noting that the results presented in this progress report (SC13-MI-WP-04) are preliminary and that development of the framework is ongoing with the expectation that preliminary results would possibly be provided in 2018. SC13 also noted:

- the importance of ongoing stakeholder involvement and consultation in this work (e.g. via in-country stakeholder engagement with the Scientific Service Provider and/or through a higher-level meeting or workshop for broader stakeholder engagement) and recommends that WCPFC14 explore mechanisms and options for facilitating and funding these arrangements.
- that the harvest strategy work needs to be integrated into the work of the Commission and be given a greater priority.
- the concerns of some CCMs about the discontinuation of the management objectives workshop process.

*Economic data (SC13 Paragraphs 140 – 151)*

6. SC13 considered the development of guidelines for the voluntary provision of economic data to the Commission by CCMs and recommended that intersessional work be undertaken on the principles that will inform the development of such guidelines. CCMs wishing to participate in this intersessional work should provide a contact point for inclusion in this intersessional working group which will be facilitated by Fiji and the FFA Secretariat.

7. SC13 further recommended that the outcomes of this intersessional work be considered by TCC13 (*see Attachment D*).

## Agreed 2017 work plan for the adoption of harvest strategies under CMM 2014-06

	South Pacific Albacore	Skipjack	Bigeye	Yellowfin
2017	<p><b>Agree Target Reference Point (b).</b></p> <ul style="list-style-type: none"> <li>Commission agree a <b>Target Reference Point</b> for south pacific albacore.</li> </ul> <p><b>Develop harvest control rules (e).</b> and <b>Management strategy evaluation (f).</b></p> <ul style="list-style-type: none"> <li>SC provide advice on candidate harvest control rules based on agreed reference points.</li> <li>Commission consider advice on progress towards <b>harvest control rules.</b></li> </ul>	<p><b>Develop harvest control rules (e)</b> and <b>Management strategy evaluation (f).</b></p> <ul style="list-style-type: none"> <li>SC provide advice on candidate harvest control rules based on agreed reference points.</li> <li>Commission consider advice on progress towards <b>harvest control rules.</b></li> </ul>	<p><b>Agree performance indicators and Monitoring strategy (d).</b></p> <ul style="list-style-type: none"> <li>SC provide advice on a range of performance indicators to evaluate performance of harvest control rules.</li> <li>Commission agree interim performance indicators to evaluate harvest control rules</li> </ul> <p>[SC report on BET status following updated assessment.]</p> <p>[SC and SPC provide advice to the Commission on the likely outcomes of revised tropical tuna measure.]</p>	<p><b>Agree performance indicators and Monitoring strategy (d).</b></p> <ul style="list-style-type: none"> <li>SC provide advice on a range of performance indicators to evaluate performance of harvest control rules.</li> <li>Commission agree interim performance indicators to evaluate harvest control rules</li> </ul>
	<b>Consider management objectives for stocks and fisheries (a).</b>			

**Report of the ISG-08: Performance Indicators and Monitoring Strategies  
(Attachment F, SC13 Summary Report)**

ISG-8 met twice during SC13 (on Saturday 13<sup>th</sup> August during the lunch break and Monday 15<sup>th</sup> August during the afternoon-tea break). Robert Campbell (Australia) acted as facilitator and R. Scott was rapporteur.

The Terms of Reference for ISW-8 were to discuss and review the performance indicators and monitoring strategies proposed in working papers MI-WP-02 (*Performance indicators and monitoring strategies for South Pacific Albacore compatible with candidate management objectives for the Southern Longline Fishery*) and MI-WP-03 (*Performance indicators and monitoring strategies for Bigeye and Yellowfin Tuna compatible with candidate management objectives for the Tropical Longline Fishery*) and agree on a final list of candidate performance indicators and monitoring strategies for inclusion in the revisions of these working papers to be submitted to WCPFC14.

The finalised lists of performance indicators and associated monitoring strategies supported by ISG-8 for the *Southern Longline Fishery* are displayed in Table 1 and for the *Tropical Longline Fishery* in Table 2.

In reviewing and discussing the above working papers, ISW-8 also noted the following:

1. Due to the finer-scale data requirements of some performance indicators (e.g. catch at the level of individual CCMs), and/or a dependency on information which will not be modelled within the MSE operating model (e.g. multi-species interactions for ecosystem effects), ISW-8 recognised that some performance indicators will not be included in the outputs of the Harvest Strategy Work Plan (at least in the short-term). Nevertheless, it may be possible to evaluate these objectives independently of the outputs of the MSE operating model (e.g. using data collected by individual CCMs), as part of the monitoring strategy.
2. While it may not be possible to evaluate all performance indicators in the short-term (especially via the outcomes of the MSE operating model), the Commission should nevertheless not lose sight of the monitoring strategies required to support the management framework to achieve the Commission's longer term management objectives.
3. In the short-term it was seen as best practice to support a broad range of performance indicators in support of the multiple management objectives already identified by the Commission. However, ISW-8 noted that there will be scope to iteratively refine both the management objectives and related performance indicators and monitoring strategies in light of the outcomes of the current Harvest Strategy Work Plan and the development of the management framework within the WCPFC.

**Table 1.** Revised candidate management objectives for the southern longline fishery and proposed performance indicators and monitoring strategies for the purpose of the evaluation of harvest control rules.

Objective Type	Objective Description	Performance Indicators	Monitoring Strategy	ISW-8 Comment
Biological	Maintain albacore (and SWO, YFT & BET) biomass at or above levels that provide stock sustainability throughout their range.	Probability of $SB_{\text{recent}}/SB_{F=0} > 20\%$ as determined from the MSE.	Probability of $SB_{\text{recent}}/SB_{F=0} > 20\%$ in the long-term as determined from the reference set of MSE operating models (updated and reconditioned periodically, as appropriate).	<b>Supported:</b> ISG-8 noted the new definition of ‘recent’ to now include the last 4 years in the definition. Some discussion as to exactly how this will be calculated, e.g. final year of the model time-frame or over some time period.
Economic	Maximise economic yield from the fishery.	Predicted effort relative to $E_{\text{MEY}}$ (to take account of multi-species considerations, BET and other spp; may be calculated at the individual fishery level). $B_{\text{MEY}}$ and $F_{\text{MEY}}$ may also be considered at a single species level.	Observed effort in the fishery relative to $E_{\text{MEY}}$ .	<b>Supported</b> ISG8 noted that MEY can be difficult to calculate and will be dependent on availability of economic data. As such, the PI will likely be modelled in a similar manner as the economic indicators described in working paper ST-WP-08. In turn, relative economic performance, rather than maximising economic yields, may be appropriate.
	Maximise catch	Average expected catch. (may also be calculated at the assessment region level)	Observed catch information	<b>Supported</b> ISG-8 noted that catch will be modelled by the ‘fleet’ and region structure included in the MSE operating model.
	Maintain acceptable CPUE.	Average deviation of predicted CPUE from reference period levels.	Observed CPUE data from the longline fishery	<b>Supported</b> ISG-8 noted that CPUE will be modelled by the ‘fleet’ and region structure included in the MSE operating model
	Maximise SIDS revenues from resource rents.	Average value of SIDS/non-SIDS catch	Observed proportion of SIDS-effort/catch to total effort/catch in SIDS waters from log-sheet or VMS data.	<b>Supported</b> ISG8 noted that implementation of this PI will be dependent on the ability to separate SIDS and non-SIDS fleets in the MSE operating model.
	Catch stability.	Average annual variation in catch.	Observed variation in catch as estimated from logsheet and other data	<b>Supported</b> ISG-8 again noted that catch will be modelled by the ‘fleet’ and region structure included in the MSE operating model
	Effort predictability	Effort variation relative to reference period level (may also be calculated at the assessment region level).	Observed effort levels from log-sheet or VMS data	<b>Supported</b> Based on effort from the harvest strategy model for the modelled fleets.
	Maintain ALB, BET, YFT, SWO stock sizes around the TRP (where adopted)	Probability of and deviation from $SB_{\text{recent}}/SB_{F=0} > X$ in the short-medium- long-term as	Current median adult biomass, as determined from the reference set of operating models.	<b>Supported</b> ISG-8 noted that this will be a direct outcome of the Harvest Strategy Work Plan

Objective Type	Objective Description	Performance Indicators	Monitoring Strategy	ISW-8 Comment
		determined from MSE (may also be calculated at the assessment region level).		
Social	Food security in developing states (import replacement)	As a proxy: Average proportion of CCMs-catch to total catch for fisheries operating in specific regions.	Ratio of locally marketed fish to imported fish products.	<b>Supported</b> ISG8 noted that due to the often fine-spatial scale of these PIs as opposed to the broader scale of fishery impacts being modelled in the MSE operating model that it would be difficult to implement these PIs at the required region scale for some CCMS at this stage.
	Avoid adverse impacts on small scale fishers.	As a proxy: Average catch for small-scale fisheries.	Monitoring of fisheries in CCMs	
	Maintain/develop domestic fishery	Levels of effort and catch in domestic fishery.	Monitoring of fisheries catch and effort in CCMs	
	Human resource development	Employment – though use catch of domestic catch as proxy.	Employment in the fishing sector monitored via number of domestic vessels and resulting catch in domestic fishery.	
Ecosystem	Minimise catch of non-target species.	Expected catch of other species	Ratio of target species catch to catch of non-target species based on bycatch data from observer program	<b>Supported</b> Noted use of proxy bycatch ratio information.

Note:

The Management Objective “Optimise Capacity” (and related performance indicators and monitoring strategies) which had been included in Table 2 of SC13-MI-WP-02 was considered to be encompassed by the Management Objective “Optimise Economic Yield from the Fishery” which was already included in the Economic Section of Table 1.

**Table 2.** Candidate management objectives for the tropical longline fishery and proposed performance indicators and monitoring strategies for bigeye and yellowfin tuna for the purpose of evaluation of HCRs.

Objective Type	Objective Description	Performance Indicators	Monitoring Strategy	ISW-8 Comment
Biological	Maintain YFT and BET (and SWO) biomass at or above levels that provide stock sustainability throughout their range.	Probability of $SB_{\text{recent}}/SB_{F=0} > 20\%$ as determined from the MSE.	Probability of $SB_{\text{recent}}/SB_{F=0} > 20\%$ in the long-term as determined from the reference set of MSE operating models (updated and reconditioned periodically, as appropriate).	<b>Supported:</b> ISG-8 noted the new definition of 'recent' to now include the last 4 years in the definition. Some discussion as to exactly how this will be calculated, e.g. final year of the model time-frame or over some time period.
Economic	Maximise economic yield from the fishery.	Predicted effort relative to $E_{\text{MEY}}$ (to take account of multi-species considerations including impacts on PS fisheries; may be calculated at the individual fishery level). $B_{\text{MEY}}$ and $F_{\text{MEY}}$ may also be considered at a single species level.	Observed effort in the fishery relative to $E_{\text{MEY}}$ .	<b>Supported</b> ISG8 noted that MEY can be difficult to calculate and will be dependent on availability of economic data. As such, the PI will likely be modelled in a similar manner as the economic indicators described in working paper ST-WP-08
	Maintain acceptable CPUE.	Average deviation of predicted CPUE from reference period levels.	Observed CPUE maintained at or greater than specified levels.	<b>Supported</b> ISG-8 noted that CPUE will be modelled by the 'fleet' and region structure included in the MSE operating model.
	Increase fisheries-based development within developing states economies	Amount and proportional contribution of SIDS fleet catch/catch in SIDS waters	Amount and value of product (exported or catches) from SIDS	<b>Supported</b> ISG8 noted that implementation of this PI will be dependent on the ability to separate SIDS and non-SIDS fleets in the MSE operating model.
	Optimize fishing effort	$E_{\text{MEY}}$ (as for Maximise economic yield) or some other economic measure  Effort consistent with specified level.	Annual monitoring through logbooks and VMS	<b>Supported</b> ISG-8 noted that effort will be modelled by the 'fleet' and region structure included in the MSE operating model
	Maximise SIDS revenues from resource rents.	Average value of SIDS/non-SIDS catch	Observed proportion of SIDS-effort/catch to total effort/catch in SIDS waters from log-sheet or VMS data.	<b>Supported</b> ISG8 noted that implementation of this PI will be dependent on the ability to separate SIDS and non-SIDS fleets in the MSE operating model.
	Catch stability [Stability and continuity of market supply]	Average annual variation in catch.	Observed variation in catch from log-sheet data	<b>Supported</b> ISG-8 again noted that catch will be modelled by the 'fleet' and region structure included in the MSE operating model
	Effort predictability	Effort variation relative to reference period level (may also be calculated at the assessment region level).	Observed effort levels from log-sheet or VMS data	<b>Supported</b> Based on effort from the harvest strategy model for the modelled fleets
	Maintain BET, YFT (and ALB	Probability of and deviation from $SB/SB_{F=0} >$	Current median adult biomass, as determined	<b>Supported</b> ISG-8 noted that this will be a

Objective Type	Objective Description	Performance Indicators	Monitoring Strategy	ISW-8 Comment
	&SWO) stock sizes around the TRP (where adopted)	X in the short- medium-long-term as determined from MSE (may also be calculated at the assessment region level).	from the reference set of operating models.	direct outcome of the Harvest Strategy Work Plan
Social	Food security in developing states (import replacement) [affordable protein for coastal communities]	As a proxy: Average proportion of CCMs-catch to total catch for fisheries operating in specific regions.	Ratio of locally marketed fish to imported fish products.	<b>Supported</b> ISG8 noted that due to the often fine-spatial scale of these PIs as opposed to the broader scale of fishery impacts being modelled in the MSE operating model that it would be difficult to implement these PIs at the required region scale for some CCMS at this stage.
	Employment opportunities	As a proxy: Average proportion of CCMs-catch to total catch for fisheries operating in specific regions	Numbers employed in fishing and processing sector relative to some target	
	Maintain/develop domestic fishery	Ratio of domestic catch to total catch	Monitoring of fisheries in CCMs	
	Human resource development	As a proxy: Ratio of domestic catch to total catch	Monitoring of fisheries in CCMs	
	Avoid adverse impacts on small scale fishers.		Monitoring of fisheries in CCMs	
Ecosystem	Minimise catch of non-target species.	Expected catch of other species based on observer data	Ratio of target species catch to catch of non-target species from observer program	<b>Supported</b> Noted use of proxy bycatch ratio information
	Minimise fishery impact on the ecosystem	Similar to previous PI. As a proxy use the expected catch of other species based on observer data	Ratio of target species catch to catch of non-target species	<b>Supported</b> Noted use of proxy bycatch ratio information

**Results of SWG on Management Objectives  
(Attachment M, WCPFC13 Summary Report)**

Suggested **initial list** of performance indicators (shaded) for Tropical Purse Seine Fisheries **for the purpose of the evaluation of HCRs only**. SPC is requested to continue the work on HCRs based on the suggested indicators here as much as possible. Short-, medium-, and long-term calculation results would be provided, if possible. **The list is interim and should be reviewed and may be revised when further information is available.**

**Objectives included here do not consist a consensus view of the SWG. The SWG developed a list of useful indicators, simply using the MOW/US suggestions as a guide without agreeing/disagreeing them. Each indicator is considered to have different importance to different CCMs, thus should not be considered to have equal weights.**

Objective Type	MOW4 Strawman	US proposal (DP22)	SWG suggestion of objective	Performance Indicator (WP14)	Monitoring Strategy (WP14)	SWG Suggestion to include as an indicator
Biological	Maintain SKJ (and YFT & BET) biomass at or above levels that provide fishery sustainability throughout their range.	Maintain SKJ, YFT, BET stock sizes above LRPs.		Probability of $SB/SB_{F=0} > 0.2$ in as determined from MSE.	Probability of $SB/SB_{F=0} > 0.2$ in the long-term as determined from the reference set of operating models	<b>Yes</b>
Economic	Maximise economic yield from the fishery			Predicted effort relative to $E_{MEY}$ (to take account of multi-species considerations, SKJ, BET and YFT; may be calculated at the individual fishery level). $B_{MEY}$ and $F_{MEY}$ may also be considered at a single species level.	Observed rent from the fishery relative to $MEY$ .  Observed effort in the fishery relative to $E_{MEY}$ .	<b>Yes</b>
			Maximize catch	Average expected catch. (may also be calculated at the assessment region level)	Observed catch information	<b>Yes</b>
	Increase fisheries-based development within developing states (SIDS) economies, especially on-shore processing capacity.			As a proxy: Average proportion of SIDS-catch to total catch for fisheries operating in specific regions.	Percentage contribution of fisheries to GDP. Proportion of total catch processed by SIDS Value of product exported from SIDS.	

Objective Type	MOW4 Strawman	US proposal (DP22)	SWG suggestion of objective	Performance Indicator (WP14)	Monitoring Strategy (WP14)	SWG Suggestion to include as an indicator
	Maintain acceptable CPUE.			Average deviation of predicted SKJ CPUE from reference period levels.	Observed CPUE maintained at or greater than specified levels.	Yes
	Optimise fishing effort			$E_{MEY}$ (as for Maximise economic yield ). Effort consistent with specified level	Annual monitoring through logbook/VMS	
	Maximise SIDS revenues from resource rents	Take into account the special requirements of developing states and territories		Proxy: average value of SIDSs/non-SIDSs catch <del>Average proportion of SIDS-effort or catch to total effort or catch for fisheries operating in specific regions</del>	Observed proportion of SIDS-effort/catch to total effort/catch from SIDS waters from logsheet or VMS data	Yes
	Catch stability			Average annual variation in catch <del>in the short-, medium- and long-term.</del>	Observed variation in catch from logsheet data	Yes
	Stability and continuity of market supply			Average annual variation in catch effort in the short-, medium- and long-term	Observed variation in catch From logsheet data Observed variation in market prices Market throughput of tuna products	
			Effort predictability	Effort variation relative to reference period level (may also be calculated at the assessment region level).		Yes
		Maintain SKJ, YFT, BET stock sizes around TRPs (where adopted).		Probability of and deviation from $SB/SB_{F=0} > 0.5$ (SKJ) in the short- medium-long-term as determined from MSE (may also be calculated at the assessment region level).	Current median adult biomass, as determined from the reference set of Operating Models.	Yes
Social	Affordable protein for coastal communities			As a proxy: Average proportion of CCMs-catch to total catch for fisheries operating in specific regions.	Average fish consumption per year per person relative to some target.	
	Food security in developing states (import replacement)			As a proxy: Average proportion of CCMs-catch to total catch for fisheries operating in specific regions.	Ratio of locally marketed fish to imported fish products.	Yes
	Avoid adverse impacts on small scale fishers	Minimize adverse impacts on other fisheries,		o MSY of SKJ, BET, YFT o Possible information on other competing	Monitoring of fisheries in CCMs	Yes

Objective Type	MOW4 Strawman	US proposal (DP22)	SWG suggestion of objective	Performance Indicator (WP14)	Monitoring Strategy (WP14)	SWG Suggestion to include as an indicator
		including: o Downstream fisheries like longline fisheries; o Competing fisheries like troll, pole-and-line, and non-tropical purse seine fisheries;		fisheries targeting SKJ. (may also be calculated at the assessment region level) o Any additional information on other fisheries/species as possible.		
	Employment opportunities			As a proxy: Average proportion of CCMs-catch to total catch for fisheries operating in specific regions as determined from stochastic projections.	Monitoring of fishing and processing sector in CCMs	
Ecosystem	Minimise bycatch	Minimize adverse impacts on NADSs		Number of FADs sets Expected catch of other species as possible	Ratio of target species catch to catch of non-target species from observer program	<b>Yes</b>
	Minimise ecosystem impact			Size or age structure of population Total bycatch amount	From observer based size sampling and stock assessment outputs	
Other		Adhere to the other principles and provisions of the Convention.				

**Report of the virtual inter-sessional working group on the development of guidelines for the voluntary provision of economic data to the Commission by CCMs**

At its recent meeting, the Scientific Committee (SC) considered the development of guidelines for the voluntary submission of economic data and recommended that intersessional work be undertaken on the principles that will inform the development of such guidelines. The SC13 directive is cited below for ease of reference:

*“SC13 considered the development of guidelines for the voluntary provision of economic data to the Commission by CCMs and recommended that intersessional work be undertaken on the principles that will inform the development of such guidelines. CCMs wishing to participate in this intersessional work should provide a contact point for inclusion in this intersessional working group which will be facilitated by Fiji and the FFA Secretariat. SC13 further recommended that the outcomes of this intersessional work be considered by TCC13.”*

The WCPFC Secretariat subsequently sent out a circular seeking contact points from interested parties. The Virtual Inter-Sessional Working Group subsequently convened and developed a draft list of principles (provided as **Annex 1**) which was submitted to the WCPFC Secretariat for consideration by TCC. However, the draft list of principles was not considered by TCC13 and is now submitted for the consideration of the 14<sup>th</sup> Regular Session of the Commission (WCPFC14)<sup>2</sup>.

**Annex 1**

**[DRAFT] Principles to inform the development of guidelines for the voluntary provision of economic data to the Commission by CCMs**

The following principles will inform the development of guidelines for the voluntary submission of economic data to the Commission by CCMs.

*With regard to the Provision of the Economic Data*

1. The provision of any of the economic data shall not be compulsory or binding in any manner;
2. Data will be provided to the Commission or the Commission’s approved data-contractor only;

*With regard to the Content of the Economic Data*

3. CCMs may provide data in relation to their flagged vessels including where these vessels are permitted to fish in areas beyond their jurisdiction and in relation to fishing activity that takes place within their jurisdiction.
4. The Guidelines will provide a description of the issues that the Commission requires economic data to inform its decision making processes. These issues may, include, but are not limited to:
  - a) Establishment of fishery management objectives;
  - b) Enabling of indicators to monitor economic status of fisheries;
  - c) Setting Target Reference Points for stocks that are designed to achieve a management objective;
  - d) Production of a regular report on economic conditions and trends in key WCPO fisheries.
5. The Guidelines will provide a description of the economic data required to address each issue identified in it as requiring the provision of economic data.

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<sup>2</sup> The outcomes of this intersessional work were considered by CCMs through *Circular No. 2017/87*.

6. The Guidelines will provide a list detailing the economic data required to address the identified issues and where possible templates for the provision of that data.
7. The guidelines will be a living document with the Commission able to amend over time particularly the list of identified issues, the descriptions of data requirements and the list of required economic data contained within it.
8. The description of the issues that the Commission requires economic data to inform its decision making processes and the list detailing the economic data required to address the identified issues will not preclude data being provided, or being made available, for other analyses requested by the Commission. In this case, the CCMs may request its economic data not to be used for those other analyses.

*With regard to the Classification of the Economic Data*

9. Data will be considered non-public domain and the Commission shall agree risk levels for the different categories

*With regard to the Dissemination of the Economic Data*

10. Data shall only be released for analytical purposes to CCMs according to rules of confidentiality. These rules will be stricter in scope and force than those governing the confidentiality of other scientific data.
11. These rules of confidentiality shall be binding.

*With regard to Reporting to the Commission*

12. An annual report will be provided to the Commission by the Secretariat or approved data-contractor providing information on the provision and dissemination of the economic data submitted as part any process developed for the voluntary submission of economic data to the Commission by CCMs.