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**PROPOSAL: CONSERVATION AND MANAGEMENT MEASURE ON
ESTABLISHING A HARVEST STRATEGY FOR KEY TUNA SPECIES IN THE
WESTERN AND CENTRAL PACIFIC OCEAN**

WCPFC-TCC10-2014-DP03
29 August 2014

PROPOSAL FROM AUSTRALIA

[Please also refer to WCPFC-TCC10-2014-DP02 for explanatory cover note]

CONSERVATION AND MANAGEMENT MEASURE ON ESTABLISHING A HARVEST STRATEGY FOR KEY TUNA SPECIES IN THE WESTERN AND CENTRAL PACIFIC OCEAN

Conservation and Management Measure 2014-xx

The Western and Central Pacific Fisheries Commission (WCPFC):

Noting that the objective of the *Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean* (the Convention) is to ensure through effective management, the long-term conservation and sustainable use of the highly migratory fish stocks of the Western and Central Pacific Ocean in accordance with the *United Nations Convention on the Law of the Sea* (the 1982 Convention) and the *Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks* (the UN Fish Stocks Agreement);

Recalling Article 6 (3) of the UN Fish Stocks Agreement and Article 6 of the Convention, which call for the establishment of precautionary stock-specific reference points to implement the precautionary approach, as well as action to be taken if such points are exceeded;

Further recalling that [Article 6\(1\)\(a\) of the Convention provides that the guidelines set out in Annex II of the UN Fish Stocks Agreement form an integral part of the Convention and shall be applied by the Commission. These guidelines provides guidelines-guidance for-on](#) the application of precautionary reference points in the conservation and management of straddling fish stocks and highly migratory fish stocks, including the adoption of provisional reference points when information for establishing reference points is absent or poor;

Noting that Article 7.5.3 of the *FAO Code of Conduct for Responsible Fisheries* also recommends the implementation of stock specific target and limit reference points, inter alia, on the basis of the precautionary approach;

Concerned that catches for a number of tuna species in the Western and Central Pacific Ocean are in excess of the range of maximum sustainable yield levels and are not being managed sustainably;

Recalling the recommendations from the Performance Review of the WCPFC on the Precautionary Approach and Limit Reference Points, which the Commission considers to be a high priority;

Adopts, in accordance with Article 10 of the Convention, the following conservation and management measure with respect to establishing harvest strategies for key tuna fisheries in the Western and Central Pacific Ocean:

Objective of this measure

1. To agree that the Commission shall develop and implement a harvest strategy approach for each of the [key tuna](#) fisheries under the purview of the Commission[±], according to the process and indicative schedule set out in this conservation and management measure (CMM).

General provisions

2. A harvest strategy is a framework that specifies the pre-determined management actions in a fishery for defined species (at the stock or management unit level) necessary to achieve agreed biological, economic and/or social management objectives.

[±][That is, highly migratory fish stocks within the western and central Pacific Ocean, excluding sauries.](#)

3. The Commission agrees that harvest strategies established pursuant to this CMM may be developed for multi-species fisheries, where a particular fishery targets or catches a number of species (including as incidental catch).

Harvest Strategy Principles

4. The Commission agrees that harvest strategies are considered to represent a best-practice approach to fisheries management decision making. Harvest strategies are proactive and provide a consistent framework for taking the available information about a stock or fishery and applying an evidence and risk-based approach to setting harvest levels. They provide a more certain operating environment where management decisions around the fishery or species are more consistent, predictable and transparent.
5. Harvest strategies for specific fisheries developed in accordance with this CMM shall set out the management actions necessary to achieve defined biological, economic and/or social objectives in the fishery. Each harvest strategy shall contain a tailored process for monitoring and conducting assessments of the biological, economic and social conditions of the fishery and pre-defined rules that control the intensity of fishing activity according to the assessed conditions of the fishery.
6. [In developing individual harvest strategies for fisheries within the Western and Central Pacific Ocean, the Commission shall have regard to the following principles:
 - a. Fisheries shall be managed to meet the Convention's objective
 - b. Fisheries are more efficient, profitable, stable and sustainable, ~~when stocks are larger than the stock size that produces the maximum sustainable yield (referred to as 'B_{MSY}'), where maximum sustainable yield is a theoretical maximum that can be taken from a stock in perpetuity at larger stock sizes,~~ and
 - c. Future productivity is at greater risk when stocks are reduced to a level where the recruitment of young fish relative to the portion of the stock subject to fishing declines precipitously (referred to as 'recruitment failure').]

Elements of a harvest strategy

7. Harvest strategies developed in accordance with this CMM shall, wherever possible, contain the following elements:
 - a. Defined operational objectives for the fishery ('operational management objectives')
 - b. Indicators of fishery performance related to the objectives ('performance indicators')
 - c. Reference points for performance indicators ('reference points')
 - d. A statement defining acceptable levels of risk to meeting objectives ('acceptable levels of risk')
 - e. A monitoring strategy to collect relevant data to assess fishery performance ('monitoring strategy')
 - f. Decision rules that control the intensity of fishing activity and/or catch ('harvest control rules'), and

- g. An evaluation of the performance of the proposed harvest strategy against management objectives, including risk assessment ('management strategy evaluation'), ~~and~~.

8. Further detail on each of these elements is set out in Annex 1 of this CMM.

9. Notwithstanding paragraphs 7 and 8 of this CMM, in developing individual harvest strategies, the Commission may tailor elements on a case by case basis to suit the specific requirements of a particular fishery. This may include agreeing to interim or provisional elements of a harvest strategy. The absence of adequate scientific information shall not be used as a reason for postponing or failing to adopt harvest strategies.

8.10. In developing individual harvest strategies, the Commission shall, in accordance with Article 8 of the Convention, ensure compatibility with harvest strategies and elements thereof that have already been implemented in the region.

Disproportionate burdenSpecial requirements of Developing States

9. ~~This CMM places obligations on the Commission itself and not on individual Members, Cooperating Non-Members and Participating Territories (CCMs). Accordingly, there is no transfer, direct or indirect, of a disproportionate burden of conservation action onto developing States Parties or on Territories or Possessions, except as set out and accounted for in paragraph 10.~~

10.11. In recognition of the special requirements of Ddeveloping States Parties to this Convention, in particular Small Island Developing States and of Territories and Possessions, in relation to conservation and management of highly migratory fish stocks in the Western and Central Pacific Ocean, the Commission will facilitate the effective participation of these States and Territories in Commission meetings and those of its subsidiary bodies undertaking work on harvest strategies.

11.12. The requirement to avoid ~~Disproportionate~~disproportionate burden of conservation action onto Developing States Parties or on Territories or Possessions shall be considered in the development of individual harvest strategies.

Timelines for the adoption of harvest strategies for specific fisheries

12.13. Harvest strategies for specific fisheries in the Western and Central Pacific Ocean shall be developed and adopted by the Commission in accordance with the indicative timeframes set out in Annex 2 of this CMM.

13.14. The Commission shall agree timeframes to adopt harvest strategies for ~~other tuna species (including for skipjack, bigeye, and yellowfin by no later than the twelfth meeting of the Commission in 2015).~~ The Commission may agree timeframes to adopt harvest strategies for other species. These agreed timeframes shall be incorporated into Annex 2 of this CMM.

Resources

15. In formulating their budget and work programme, the Commission, Scientific Committee and any relevant WCPFC sub-committees shall ensure that the tasks listed in this measure are sufficiently resourced in terms of time and budget to achieve the agreed timeframes.

14.16. The Commission may draw on funds earmarked for this purpose from the Voluntary Contributions Fund to achieve the tasks listed in this measure.

15.17. In the interests of efficiency and ensuring full participation by all CCMs, the Commission may decide to use existing WCPFC meetings to undertake the work set out in this CMM or convene additional workshops or meetings to consider the tasks set out in this measure.

Additional detail on the elements of a harvest strategy

Management objectives

1. The Commission shall determine agreed conceptual management objectives ~~based on biological, economic, social and/or ecosystem indicators~~ for key fisheries in the Western and Central Pacific Ocean. In determining these objectives, the trade-offs between these indicators each shall be considered and agreed so that any contradictions between competing objectives can be resolved.
2. The Scientific Committee shall translate these conceptual management objectives into objectives that have a direct and practical interpretation in the context of the fishery and against which performance can be evaluated ('operational management objectives').

Performance indicators

3. The Scientific Committee shall ~~establish~~ ~~determine~~ ~~recommend~~ a set of specific performance indicators to measure progress against the agreed operational management objectives for each fishery, taking into account recommendations of relevant bodies including the Northern Committee. ~~The performance indicators shall be selected to measure where an indicator sits in relation to a reference point.~~ The indicator may be ~~a direct observation~~ empirical (based on information produced by the fishery such as catch per unit effort) or model-based (including may be estimated using a stock assessment outputs model (such as biomass or bioeconomic outputs such as economic rent).
4. In selecting appropriate indicators, the Scientific Committee may have regard to relevant international standards and guidelines, including the Food and Agriculture Organization of the United Nations *Technical Guidelines for Responsible Fisheries: Indicators for Sustainable Fisheries Development of Marine Capture Fisheries* (FAO, 1999).

Reference points

5. For each fishery, to achieve the agreed operational management objectives, the Commission shall, taking into account relevant advice from the Scientific Committee and other relevant subsidiary bodies, as appropriate, establish reference points that identify:
 - i. targets to be achieved on average ('target reference points'),
 - ii. [if considered necessary, triggers to initiate specific management responses ('trigger reference points'),] and
 - iii. limits to be avoided ('limit reference points').
6. Where the Commission has already adopted target, trigger or limit reference points for particular tuna species, those agreed reference points shall be incorporated into the harvest strategy for that species, unless the Commission decides otherwise.

Acceptable levels of risk

7. Across all harvest strategies, the Commission shall define acceptable levels of risk associated with breaching limit reference points, taking into account advice from the Scientific Committee. The Commission shall ensure that the risk of exceeding limit reference points is very low.
8. Unless the Commission decides otherwise, target reference points shall be conservative and separated from limit reference points with an appropriate buffer, with a view to ensuring that the

target reference points are not so close to the limit reference points that the chance that the limits are exceeded is greater than the agreed level of risk.

Monitoring strategy

9. The Commission shall ensure that for each fishery, sufficient data shall be collected [and provided to the Commission within a suitable timeframe](#) to assess the fishery's performance [\[, and CCMs' compliance with relevant agreed management measures\]](#).
10. The Commission may adopt a monitoring strategy for a fishery (where necessary data is not already required to be provided to the Secretariat) or rely on data required to be provided under existing Commission CMMs and the *Scientific Data to be Provided to the Commission* standards.
11. For each fishery with an established harvest strategy, the Scientific Committee [and other relevant subsidiary bodies, as appropriate](#), shall evaluate the performance of the fishery against the agreed operational management objectives (as specified through the performance indicators and reference points). The Scientific Committee shall report its findings and advice to the Commission.

Harvest control rules

12. For each fishery, the Commission shall decide on a set of clear, pre-agreed rules or actions used for determining a management action response to changes in indicators of stock status with respect to reference points ('harvest control rules').
13. In particular, individual harvest strategies shall be used to determine the overall level of exploitation for a fishery using a pre-agreed formula ~~and mechanisms for determining individual Member allocations~~.
14. Notwithstanding paragraph 157 of this Annex, the Commission may decide to implement interim harvest control rules prior to a full management strategy evaluation being completed by the Scientific Committee.

Management strategy evaluation

15. Prior to implementation of a [formal](#) harvest strategy, an evaluation of the likely performance of any proposed harvest strategy in achieving the operational objectives should be undertaken by the Scientific Committee [and other relevant subsidiary bodies, as appropriate](#). These harvest strategy evaluations may be performed through simulation modelling.
16. As part of this process, the Scientific Committee [and other relevant subsidiary bodies, as appropriate](#) shall estimate or describe key management system uncertainties including with respect to stock assessments [and available data](#).

Timelines for adoption of harvest strategy CMMs**1. South Pacific Albacore**

Actions:	Agreement on management objectives	Identification and testing of candidate reference points Prepare progress report	Consider progress report from Scientific Committee Identify possible harvest control rules	Management strategy evaluation with implications of various targets on harvest control rules Provide advice on outcomes to Commission	Adoption of harvest strategy CMM (including all harvest strategy elements)
WCPFC body responsible:	Commission	Scientific Committee	Commission	Scientific Committee	Commission
Timeframe:	By no later than WCPFC12 (2015)	By no later than SC12 (2016)	By no later than WCPFC13 (2016)	By no later than SC13 (2017)	By no later than WCPFC14 (2017)