

**REFERENCE POINTS ANNEXURE****CREATED IN ACCORDANCE WITH THE NATIONAL TUNA FISHERY MANAGEMENT AND DEVELOPMENT PLAN - PART 1 TUNA FISHERY MANAGEMENT****MANAGEMENT POLICY FOR THE IMPLEMENTATION OF REFERENCE POINTS FOR THE TUNA FISHERY IN PAPUA NEW GUINEA****1. SCOPE**

1. This policy sets out the mechanisms and procedures that the Papua New Guinea National Fisheries Authority will use to monitor reference points to assist in the management of tuna stocks.
2. This policy applies to the fishery waters of Papua New Guinea (PNG) as described in the National tuna Fishery Management and Development Plan, Part 1, Tuna Fishery Management (the Plan).
3. This policy aims to maintain fish stocks, on average, and over time, at a level that aims to preserve a stock biomass point that optimizes economic yield.

**2. LEGAL STATUS**

1. This Policy is for the implementation of reference points for the Tuna Fishery in PNG and represents a policy decision of the National Fisheries Authority Board. It is an annexure of the National Tuna Fishery Management and Development Plan (the Plan) made in accordance with the provisions of the *PNG Fisheries Management Act 1998* (the Act).

**3. TYPES OF REFERENCE POINTS**

1. Reference points are set in accordance with section 20 of the Plan to provide benchmarks against which to assess the performance of conservation and management in achieving operational objectives.
2. Under the Plan PNG shall observe any reference points established under any regional or sub regional arrangement or agreement, for fishing operations within its EEZ, and shall have regard to such reference points when establishing any reference points for other parts of the fishery management area.
3. For the purposes of this policy, Papua New Guinea uses the following definitions for Reference Points:
  - i. "Fishery Reference Point" is a benchmark against which to assess the performance of management in achieving an operational objective;
  - ii. "Target reference points" means an indicator of the stock status or condition that is a desirable target for management to achieve agreed targets for stock status or condition;
  - iii. "Limit reference points" means a minimum stock status or condition that is undesirable for management to achieve or sustain and at which point a pre-determined management response is triggered.

**4. GENERAL PROVISIONS**

1. The aim of this annexure is to support the tuna fishery being optimally managed within safe biological limits.
2. The plan (section 20(3) (e)) aims to ensure that fish stocks are managed to stay above the limit biomass at least 90% of the time.
3. The acceptable level of risk of exceeding the limit reference point shall be 10% with due consideration for the timing, frequency, accuracy, and currency of scientific data, and any other relevant consideration.
4. Target reference points shall be separated from limit reference points with an appropriate buffer reflecting no less than double the confidence limits used at 90% probability.

**4.1 THE APPROACH**

1. The approach to reference points is consistent with:
  - a. the adoption by WCPFC of:
    - i. the hierarchical approach to the identification of reference points; and,
    - ii. a biomass-based limit reference point for skipjack tuna of 20% of estimated recent average spawning biomass in the absence of fishing.



**Management Policy for the Implementation of Reference Points for the Tuna Fishery in Papua New Guinea—continued**

**5. Biological Reference Points, Triggers and Performance Criteria—continued**

5. In considering all management responses to reference points the Board shall have regard to any regional reference points established for the purpose of monitoring tuna stocks, and any broader regional response either proposed or implemented. Any measures taken by PNG shall be complementary to any regional measures.
6. Where scientific advice is such that any management response by PNG is unlikely to achieve the stated objectives without the cooperation of other States, and that those other States are not fully cooperating in a combined management response, the Board shall make every endeavour to ensure that at a diplomatic level those other States are fully aware, engaged, and encouraged to participate in and implement complementary responses to ensure the sustainability of tuna stocks.
7. In the event of a management response triggered under this Part, the Board shall ensure the Minister is fully briefed on the situation, and of any proposed management response, and in particular is advised of the consequences of not taking prompt action on the long term sustainability of the tuna resource and on the potential economic impacts.
8. In the event of a management response triggered under paragraph 3 the Board shall ensure the Minister, Prime Minister, and the Executive Council are fully briefed on the situation, and any proposed management response, and in particular are advised of the consequences of not taking prompt action on the long term sustainability of the tuna resource and on the potential economic impacts.
9. Any decision of the Board in respect of any matter relating to any review of data related to reference points and any consequential management plan review shall be published on the NFA website within 90 days of that decision.
10. Reference points for other tuna species are being addressed through ongoing regional discussions, and scientific advice is being sought as a part of that process.

**6. OPERATIONAL REFERENCE POINTS, TRIGGERS, AND PERFORMANCE CRITERIA**

1. A party allowable effort (PAE) is set by the Parties to the Nauru Agreement for the Vessel Day Scheme (VDS) as PNG's portion of the VDS total allowable effort (TAE).
2. The target reference point for fishing effort in each allocation year shall be PNG's PAE.
3. A PAE under the VDS allows for the trading of days between Parties to the Palau Arrangement within the boundaries of the TAE.
4. A fishing company fleet shall be notified when it has reached 80% of its VDS allocation. The notification shall be conveyed by the PNA Office as the administrator.
5. On receipt of the notification, companies shall notify the administrator, within 72 hours, of their intent:
  - I. To cease fishing when the remaining 20% of their VDS allocation is utilized. In doing so they must advise which vessels in their fleet shall use the remaining allocation and shall direct all other vessels:
    - a. For Foreign Flagged Vessel: To exit the waters of Papua New Guinea, or
    - b. For domestic, and locally based foreign vessels: To return to their designated port.
  - II. To purchase additional vessel days from Papua New Guinea's PAE allocation, subject to availability.
  - III. To request the Authority to seek additional days to be purchased from the other Parties, subject to availability and agreement on price.
6. A notification shall be sent to fishing companies when their VDS allocations have been fully utilized. Those fishing companies are required to cease fishing operations and to exit the waters of Papua New Guinea (for foreign flagged vessels), or to either return to their designated port or seek regional access (for domestic and locally based foreign flagged vessels).
7. To assist with planning, a notification shall be sent to all fishing companies when PNG's PAE has reached 80% fished.

**Management Policy for the Implementation of Reference Points for the Tuna Fishery in Papua New Guinea—*continued***

---

**6. Operational Reference Points, Triggers, and Performance Criteria—*continued***

8. The PNG Archipelagic Waters Days Scheme (AWDS) shall operate in accordance with the above rules, but with the NFA as the administrator.

**7. TOTAL CATCH LEVELS, TRIGGERS, AND PERFORMANCE CRITERIA**

1. This annexure establishes a mechanism to set a trigger total catch level for skipjack tuna, yellowfin tuna, and bigeye tuna in the fisheries waters of Papua New Guinea.
2. The trigger total catch level shall be set at the average of the last 5 years available catch data for each species, plus 10%.
3. The trigger total catch level shall be revised each year based on the latest available data.
4. The Board shall review the fishery management strategies in the event that:
  - a. either the total catch in any fishery period (calendar year) exceeds the trigger catch level, or
  - b. the trigger catch level either rises or falls for three consecutive fishery periods by greater than 10% in total.
5. In reviewing the fishery management strategies the Board shall have regard to regional initiatives, changes in traded days into or out of PNG waters, as well as the levels of effective effort over time, the most recent stock assessment, fisheries economics, industry developments, and any other information relevant or necessary to ensure the sustainability of tuna stocks.

**8. FISHING EFFICIENCY, TRIGGERS, AND PERFORMANCE CRITERIA**

1. The Board shall arrange to be established an indices of fishing efficiency for the purse seine fishery that takes into account changes to vessel characteristics (e.g. size and storage capacity), changes to fishing practices (e.g. gear and FADs), emerging technology (e.g. electronic systems).
2. The aim of the indices is to monitor operational effort creep from fishing and fishing related activity.
3. Sample data shall be collected on a continual basis, and the indices shall be updated each year.
4. The Board shall review the fishery management strategies and in particular levels of fishing effort when the indices shows an increase in three consecutive years.
5. In reviewing the fishery management strategies and levels of fishing effort the Board shall have regard to any regional initiatives, current stock assessments, and any other information relevant or necessary to ensure the sustainability of tuna stocks.
6. PNG will provide such data and information regionally and urge the region to adopt adjustments to fishing effort arrangements as required to maintain effort at a sustainable level.

**9. MANAGEMENT INITIATED REVIEW OF FISHERY MANAGEMENT STRATEGIES**

1. The Managing Director of the National Fisheries Authority may request the Board to review the fishery management strategies for all or any species of tuna where the Managing Director is satisfied that data is available that indicates action is required to prevent damage to the sustainability or economic performance of the fishery.
2. The aim of this provision is to ensure that a precautionary approach is taken to the management of tuna stocks using the best available data in real time, irrespective of the triggers contained elsewhere in this annexure.
3. In the event that the Managing Director seeks a review by the Board, the Board must undertake the review, and in the event that no action is proposed to be taken, must document its reasons in detail and provide those reasons to the Managing Director and the Minister.

**Management Policy for the Implementation of Reference Points for the Tuna Fishery in Papua New Guinea—continued**

## 7. REVIEW

This Policy shall be reviewed as necessary and may be amended from time to time through publication in the National Gazette. Any review shall take into account the best available data, including scientific and economic, as well as developmental and social considerations.

## 10. CONFLICT WITH REGIONAL ARRANGEMENTS

1. In the event of any conflict or inconsistency between this annexure and any relevant regional agreement to which PNG is both a party, and has given legal effect, the regional agreement shall prevail for the EEZ.
2. Unless stated to the contrary within either that agreement or otherwise in a legal instrument of PNG, the regional arrangement shall not apply in the archipelagic waters.

## 11. COMPLIANCE WITH THIS ANNEXURE

Any vessel, person or company who fails to comply with any provision of this annexure when so required to do shall be taken to have committed a breach of a provision of the Tuna Management Plan, which constitutes a breach of licence condition under that plan.

Approved on the 5th day of August, 2015.

Hon. M. ZEMING,  
Minister for Fisheries and Marine Resources.

---

*Fisheries Management (Amendment) Act 2015*

Notice by Minister Pursuant to Section 40B (3) of *Fisheries Management (Amendment) Act 2015*. Schedule of CMMs and Resolutions passed by the Western and Central Pacific Fisheries Commission that are applicable to Papua New Guinea, including those applicable to fisheries operating in Papua New Guinea's Exclusive Economic Zone.

SCHEDULE

Resolution/CMM	Title
CMM 2004-03	Specifications for the Marking and Identification of Fishing Vessels.
Resolution 2004-04	Resolution on Conservation and Management Measures.
Resolution 2005-03	Resolution on Non-Target Fish Species.
CMM 2006-07	Conservation and Management Measure for the Regional Observer Programme.
CMM 2006-08	Western and Central Pacific Fisheries Commission Boarding and Inspection Procedures.
CMM 2007-01	Conservation and Management Measure for the Regional Observer Programme.
Resolution 2008-01	Resolution on Aspirations of SIDS and Territories.
CMM 2008-03	Conservation And Management of Sea Turtles.
CMM 2009-02	Conservation and Management Measure on the Application of High Seas FAD Closures and Catch Retention.
CMM 2009-05	Conservation and Management Measure Prohibiting Fishing on Data Buoys AND information Package on Data Buoys as at 18 May 2010.
CMM 2009-06	Conservation and Management Measure on the Regulation of Transshipment.
CMM 2009-09	Conservation and Management Measure for Vessels without nationality.
CMM 2009-10	Conservation and Management Measure to Monitor Landings of Purse Seine Vessels at Ports so as to ensure reliable catch data by species.
CMM 2010-01	Conservation and Management Measure for North Pacific Striped Marlin.
CMM 2010-02	Conservation and Management Measure for the Eastern High Seas Pocket Special Management Area.

Schedule—*continued*

Resolution/CMM	Title
CMM 2010-06	Conservation and Management Measure to Establish a List of Vessels Presumed to have carried out Illegal, Unreported and Unregulated Fishing activities in the WCPO.
CMM 2010-07	Conservation and Management Measure for Sharks
CMM 2011-03	Conservation and Management Measure to address impact of purse seine fishing activity on cetaceans.
CMM 2011-04	Conservation and Management Measure for Oceanic Whitetip Sharks.
Resolution 2012-01	Resolution on the best available science.
CMM 2012-05	Conservation and Management Measure for Charter Notification Scheme.
CMM 2013-04	Conservation and Management Measure for WCPFC Implementation of a Unique Vessel Identifier (UVI).
CMM 2013-05	Conservation and Management Measure on daily catch and effort reporting.
CMM 2013-06	Conservation and Management Measure on the criteria for the consideration of conservation and management proposals.
CMM 2013-07	Conservation and Management Measure on the special requirements of Small Island Developing States and Territories.
CMM 2013-08	Conservation and Management Measure for Silky Sharks.
CMM 2013-10	WCPFC Record of Fishing Vessels and Authorization to Fish.
CMM 2014-01	Conservation and Management Measure for bigeye, yellowfin and skipjack tuna in the Western and Central Pacific Ocean.
CMM 2014-02	Conservation and Management Measure Commission VMS.
CMM 2014-03	Standards, specifications and procedures for the Western and Central Pacific Fisheries Commission Record of Fishing Vessels.
CMM 2014-05	Conservation and Management Measures for Sharks.
CMM 2014-06	Conservation and Management Measures to develop and implement a harvest strategy approach for key fisheries and stocks in the WCPO.
CMM 2014-07	Conservation and Management Measure for the Compliance Monitoring Scheme.

The full text of applicable resolutions and CMMs is available on the website of the Western and Central Pacific Fisheries Commission at the following *link*: [www.wcpfc.int/conservation-and-management-measures](http://www.wcpfc.int/conservation-and-management-measures).

Approved on the 5th day of August, 2015

Hon. MAO ZEMING,  
Minister for Fisheries and Marine Resources.