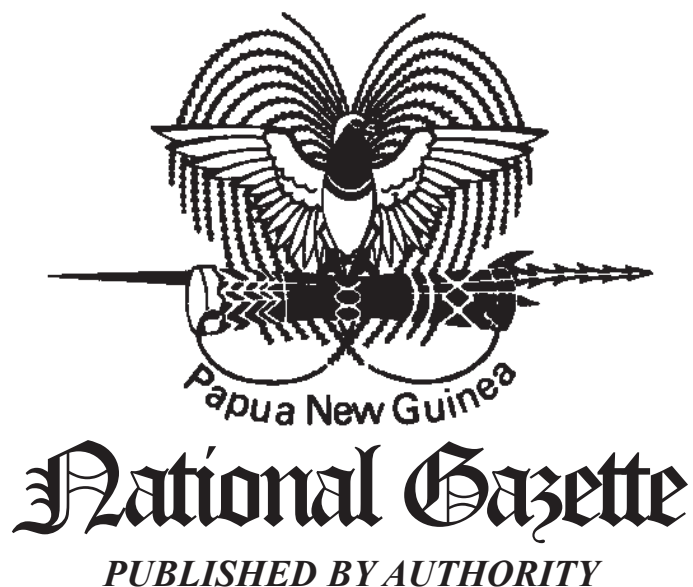




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PORT MORESBY, THURSDAY, 14th AUGUST

[2025



INDEPENDENT STATE OF PAPUA NEW GUINEA

Fisheries Management Act 1998, as amended

NATIONAL TUNA FISHERY MANAGEMENT PLAN

National Tuna Fishery Management Plan—*continued**Fisheries Management Act 1998*

Recitals.

I, the Honourable Jelta Wong, Minister for Fisheries and Marine Resources, by virtue of the powers conferred by Section 28 of the *Fisheries Management Act 1998*, and all other powers enabling me, hereby give notice of my approval of the National Tuna Fishery Management Plan 2025.

- A. The National Tuna Fishery Management Plan 2025 (the Plan) is to be read in conjunction with the following instruments all as amended from time to time:
 - (i) the *Fisheries Management Act 1998* as amended (the Act),
 - (ii) the *Fisheries Management Regulation 2000* as amended (the Regulation),
 - (iii) any other relevant associated subordinate legislation,
 - (iv) any published annexures,
 - (v) any relevant licensing guidelines and conditions, and
 - (vi) any relevant policies or procedures approved and published by the National Fisheries Authority.
- B. The Plan is a management plan prepared in accordance with section 28 of the Act.
- C. The Plan comprises this document and includes any provision of any associated annexures.
- D. The Plan supersedes and repeals the National Tuna Management and Development Plan.
- E. All provisions of the Plan take effect immediately upon Gazettal unless otherwise specified.
- F. The Plan shall continue in force and application, including under any applicable superseding new legislation, and until specifically repealed by force of law.
- G. In the event of any inconsistency between the Plan and any provision of the Act, Regulation, or other superior legislative instrument, the provisions of the Act, Regulation or other superior legislative instrument shall apply. The remainder of the Plan however shall not be invalidated by any such inconsistency. In the event of any uncertainty resulting from such inconsistency, that uncertainty may be resolved by the Minister, upon receiving a recommendation from the Board, by notice published in the *National Gazette*.
- H. Any annexure to the National Tuna Fishery Management and Development Plan certified on 25th September 2014 shall remain in force under the Plan until either revoked or replaced.

Dated this 28th of July, 2025.

Hon. Jelta Wong,
Minister for Fisheries and Marine Resources.

National Tuna Fishery Management Plan—*continued***CONTENTS**

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National Tuna Fishery Management Plan—*continued***INTRODUCTION****1. Citation**

- (1) The Plan shall be cited as the National Tuna Fishery Management Plan 2025.

2. Statement of Intent

- (1) Papua New Guinea's tuna fisheries represent a valuable, renewable, natural resource. They are an important source of current and future employment, food security, and government revenue.
- (2) The Plan is made in accordance with the provisions of the Act, and is supported by the Regulation. The Plan gives effect to Papua New Guinea's tuna fishery management, and supports development aspirations whilst meeting obligations and commitments under national laws, international laws, and regional agreements. The plan guides the behaviour of licensed fishing vessels eligible to fish under the plan.
- (3) The goal of the Plan is to ensure the sustainable use of PNG's tuna resources for the benefit of all PNG's citizens, by guiding progressive fishery management, and supporting the future economic development of PNG's tuna fishing and post-harvest sectors.
- (4) The Plan's objectives (clause 11) provide guidance to the Plan's administrators. They have been modernised to include concepts that were less developed when the Plan was first gazetted in 2014, including climate change, and the ecosystem approach to fisheries management, as well as to support domestication and national participation.
- (5) The Plan supports Papua New Guinea's stated intent to:
 - (a) Manage its tuna fishery in a sustainable and precautionary manner, taking into account the best available scientific advice.
 - (b) Maximise the economic and social benefits from the sustainable use of its tuna resources.
 - (c) Achieve the highest levels of compliance.

3. How the Plan works

- (1) The National Tuna Fishery Management Plan is established in accordance with the Act, government policy, and Papua New Guinea's international and regional commitments.
- (2) The Plan can be updated, replaced or deleted in accordance with the provisions of the Act.
- (3) Annexures to the Plan may give effect to and contain details of regulatory provisions, policies, procedures, guidelines, priorities, data, fees, or any other decision made under the Plan, as well as other relevant information that may be required or form part of the Plan.
- (4) Annexures giving effect to the fisheries management objectives of the Plan may be established or updated by a decision of the NFA Board in accordance with the Plan.
- (5) Annexures may be established or updated by the Managing Director concerning administrative or supporting fisheries management matters relating to:
 - (a) Publication of supporting strategies, action statements, or monitoring and evaluation.
 - (b) Publication of annual catch and effort statistics.

National Tuna Fishery Management Plan—*continued***3. How the Plan works—*continued***

- (c) Publication of details of vessels licensed under the Plan.
 - (d) Publication of charts, maps or other illustration, including coordinates of fishery closures.
 - (e) Any other matter specified in the Plan as being under the delegation of the Managing Director.
- (6) Any matter to be considered by the Board under the Plan shall be the subject of a Board paper and shall contain a recommendation from the Managing Director.
 - (7) Where the Board makes a decision other than in accordance with a recommendation of the Managing Director the minutes of the Board meeting shall provide an explanation from the Board.
 - (8) All annexures to the Plan shall be published in the National Gazette as soon as practical after approval by the Board, and made available through the NFA website, and either public notice through a newspaper with national distribution, or through direct communication to directly affected stakeholders.
 - (9) The provisions of any Board approved annexure come into effect either on the date of approval of that annexure, or from the date of publication, or such other later date, as specified in the annexure.
 - (10) An annexure remains in effect until it expires in accordance with the terms of the annexure, or is superseded, or is rescinded by a decision of the Board, or is otherwise revoked or replaced under the terms of the Plan.
 - (11) The addition or amendment of an annexure to the Plan does not constitute an amendment to the Plan under section 28(5) of the Act.
 - (12) In implementing any provision of the Plan or any annexure, the Board may approve short term transitional arrangements.
 - (13) Where any international or regional conservation and management measure is revoked, that measure ceases to apply regardless of whether the Plan or any annexure has been amended.
 - (14) Where any international or regional conservation and management measure is revised and supersedes an existing conservation management measure, the new management measure, once approved, published in the *National Gazette*, and notified to affected stakeholders, is taken to have effect regardless of whether the Plan or any annexure has been amended.
 - (15) The Board may seek expert advice and take such reasonable emergency measures in response to that advice as it sees fit to respond to any act of God, global externality, or environmental shock, that either impacts or is likely to impact on the sustainable or economic management of the fishery. Any such measures are to expire after 60 days, unless renewed by the Board, and are to be notified to affected stakeholders.
 - (16) Any notification of any action under the Plan to affected stakeholders means a notification communicated to the official stakeholder contact details provided to NFA by the stakeholder, or publication in one or more newspapers with national distribution, and publication on the NFA website.

National Tuna Fishery Management Plan—continued**4. Review of the Plan**

- (1) In accordance with the Act, the Plan shall be kept under review and shall be revised as necessary.
- (2) In particular the Plan shall be reviewed as necessary to conform with the Government's Medium Term Development Plan, the Fisheries Sector Plan, and the National Fisheries Authority Corporate Plan, or other such overriding instruments that replace these plans, as well as in response to changes to regional and international obligations and agreements, and revised as necessary.
- (3) Where any amendment to any regional or international instrument is approved by the Minister or Government no further approval shall be required before the Plan or annexure is amended and published in the *National Gazette*.
- (4) The Board may require the Managing Director to prepare a report on implementation of the Plan's provisions prior to any review of the plan.

5. Scope of the Plan

- (1) The Plan applies to the whole tuna fishery including all tuna fishing, tuna catch, associated bycatch, transshipment and other handling of catch, processing of catch, marketing of catch, and export of catch, in or from the fishery management area, unless specifically excluded, and includes applicable regulatory provisions.
- (2) The Plan and all tuna fishing in the fishery management area is subject to the provisions of the Act and any relevant subordinate legislation. This includes definitions contained therein, and relevant licensing provisions.
- (3) The Plan and all tuna fishing in the PNG fisheries management area must take into consideration:
 - (a) PNG's obligations under international legal instruments to which PNG is a signatory.
 - (b) Regional and sub-regional agreements and arrangements to which PNG is a party.
 - (c) Conservation and Management Measures (CMMs) of the Western and Central Pacific Fisheries Commissions as approved and/or amended by the PNG Government.
 - (d) Relevant provisions of any National Plan of Action (NPOA) approved by the Minister.
- (4) The Plan is primarily a regulatory instrument to control tuna fishing. It is not a development plan, but has objectives to guide and empower the administrators of the plan when making decisions that support development, for example through supporting:
 - achievement of the Government's Medium Term Development Plan objectives,
 - increased domestication of tuna fisheries,
 - national participation,
 - building domestic fisheries businesses,
 - increasing social benefits,
 - increasing market access, trade, and investment opportunities,
 - market standards,
 - environmental sustainability certification schemes,
 - other initiatives to obtain price premiums.

National Tuna Fishery Management Plan—continued**6. Approval of the Plan**

- (1) The Plan is endorsed by the Board, and approved by the Minister. Once approved, the plan must be published in the *National Gazette* with a commencement date, notified to affected stakeholders, and published on the NFA website before taking effect.
- (2) Administrative amendments, removal of inconsistent provisions, and other such minor changes that do not have the effect of revising the goal, objectives or policy intent of the Plan do not constitute a revision of the Plan under section 28(5) of the Act. Such amendments must however be approved by the Board, published in the *National Gazette* with a commencement date, notified to affected stakeholders, and published on the NFA website.

7. Provisions of the Plan taken to be a licence condition

- (1) The provisions of the Plan are taken to be a licence condition approved by the Board under section 43 of the Act. The provisions of the Plan are applicable to any licence issued for tuna fishing, and any associated shore based activities, under the provisions of the Act and Regulation.

8. Breaches of the Plan

- (1) Any breach of a provision of the Plan shall be taken to be a breach of a licence condition.

INTERPRETATION**9. Definitions**

- (1) In the Plan, unless a contrary intention appears in the Plan, each word or group of words has the same meaning and definition, if any, as it has in the Act:
 - (a) “Access Agreement” means any agreement between any State, regional economic integration organisation, any fishing association or similar body, a publicly incorporated company, or an individual.
 - (b) “Access Fee” means any sum of money paid for access to the tuna fishery by any State, regional economic integration organisation, any fishing association or similar body under any access agreement or in accordance with any licence.
 - (c) “Bunkering” means the transfer of fuel, and lubricants by a tanker vessel.
 - (d) “By-Catch” means all non-target fish whether retained and sold or discarded.
 - (e) “Conservation and Management Measure (CMM)” in the Plan means any CMM of the Western and Central Pacific Fisheries Commission.
 - (f) “Distant Water Fishing Nation (DWFN)” means any State whose flagged vessels fish in the PNG fishery management area under the terms of an access agreement.
 - (g) “Ecosystem Approach to Fisheries Management” means striving to balance diverse societal objectives, by taking into account the knowledge and uncertainties about biotic, abiotic and human components of ecosystems and their interactions and applying an integrated approach to fisheries within ecologically meaningful boundaries.
 - (h) “Electronic equipment” means any electrical and electronic equipment dependent on electric currents or electromagnetic fields to function and includes devices for capturing, recording, transmitting and receiving data, for vessel navigation, reporting, identification and detection, and for fish finding and fish aggregating.

National Tuna Fishery Management Plan—continued**Interpretation—continued****9. Definitions—continued**

- (i) “Environmental shock” means relatively large, non-linear changes in an environmental variable, over a relatively short interval of time, which can have a significant impact on people. These can include phenomena such as major weather events, earthquakes, and tsunamis.
- (j) “E-monitoring” means any form of electronic monitoring of vessel or fishing activity, vessel or fishing related activity, and observer activity, and includes the use of cameras to capture images and sensors to record data associated with fishing operations and related activities.
- (k) “E-monitoring video” means the use of cameras to capture images and sensors to record data, associated with fishing operations and related activities.
- (l) “E-reporting” means the use of electronic equipment to capture and store data related to catch, fishing activity, fishing related activity, and observer activity.
- (m) “Fish Aggregating Device” (FAD) means any device or object that aggregates fish whether drifting or anchored to the seabed in any part of the fishery waters whether or not equipped with electronic equipment such as for fish finding, satellite tracking, or monitoring.
- (n) “Fishery Reference Point” is “a benchmark against which to assess the performance of management in achieving an operational objective” as stated in FAO 1997.
- (o) “Fishery Management Area” means the geographical area to which the Plan relates and includes PNG’s exclusive economic zone, archipelagic waters, territorial waters, the six mile limit, and internal waters:
 - (i) “Archipelagic Waters” means the area of water as defined in the *Maritime Zones Act* 2015.
 - (ii) “Exclusive Economic Zone” means offshore seas up to 200 nautical miles from coastal baselines as defined in the *Maritime Zones Act* 2015.
 - (iii) “Six-Mile Limit” means that sea area within six nautical miles of any land, island or declared reef measured from coastal baselines.
 - (iv) “Territorial Waters” means the territorial sea water within twelve nautical miles from the Territorial Sea baseline, as defined in the *Maritime Zones Act* 2015.
 - (v) “Internal Waters” means those waters on the landward side of the baselines from which the breadth of the territorial sea is measured.
- (p) “Fresh Chilled Operation” means a fishing operation that stores tuna in ice or chilled water at not lower than minus 4 °C and where the tuna are fresh chilled and not frozen.
- (q) “Freezer Operation” means a fishing operation that stores tuna below minus 4°C and where the tuna are frozen.
- (r) “Good Standing” means that a vessel is included on any relevant good standing register recognised by the Managing Director, or in the case of a domestic vessel does not have an adverse compliance record as determined by the Managing Director. Any vessel included on any IUU list of any RFMO, or as otherwise determined by the Managing Director, shall be regarded as not in good standing.
- (s) “Harvest Control Rules” means a set of defined pre-agreed rules or actions used for determining a management action in response to changes in indicators of stock status with respect to reference points.

National Tuna Fishery Management Plan—continued**Interpretation—continued****9. Definitions—continued**

- (t) “Locally Based Foreign Fishing Vessel (LBFV)” means a foreign fishing vessel which operates from Papua New Guinea during its licensing period.
- (u) “PNG Fishing Vessel (PNGFV)” means a PNG owned and flagged domestic fishing vessel.
- (v) “Longline Fishing Day” means any day or part thereof taken from the date of departure from any port until the date of arrival in any port and which shall constitute a single trip; or the date of entry into the PNG fishery management area until the date of departure from the PNG fishery management area which shall constitute a single trip and where any departure and re-entry for a period less than 48 hours shall be regarded as the same trip.
- (w) “Longline Vessel Day Scheme (LLVDS)” means any regionally implemented longline vessel day scheme to which PNG is a party, and approved by the Minister.
- (x) “Management measures” means any measure introduced to give effect to the goal and objectives of the Plan, and may include national, regional and sub, -regional arrangements and agreements.
- (y) “Managing Director” means the Managing Director of the PNG National Fisheries Authority.
- (z) “Mothership” means any marine vessel, that has the capability to receive, carry and store fish, to supply catcher vessels with the requisites for fishing, and to transport catches to a designated port in Papua New Guinea.
- (aa) “Non-fishing day” has the same definition as agreed for the PNA VDS and shall apply to both the EEZ and archipelagic waters.
- (bb) “Papua New Guinea Albacore Longline Day Scheme (PALDS)” means any day scheme for albacore fishing effort control implemented under the Plan.
- (cc) “Papua New Guinea Longline Days Scheme (PLDS)” means any day scheme for longline fishing effort control implemented under the Plan.
- (dd) “Papua New Guinea-based Fishing Companies” means any company that is registered with the Papua New Guinea Investment Promotion Authority under the *PNG Company’s Act 1997*.
- (ee) Parties to the Nauru Agreement (PNA)” means any signatory to the Nauru Agreement.
- (ff) “Precautionary Approach” means the application of prudent foresight. Taking account of the uncertainties in fisheries systems, and the need to take action with incomplete knowledge, it requires, inter alia:
 - (i) consideration of the needs of future generations and avoidance of changes that are not potentially reversible;
 - (ii) prior identification of undesirable outcomes and measures that will promptly avoid or correct them;
 - (iii) that any necessary corrective measures are initiated without delay, and that they should achieve their purpose promptly, on a timescale not exceeding two or three decades;
 - (iv) that where the likely impact of resource use is uncertain, priority should be given to conserving the productive capacity of the resource;
 - (v) that harvesting and processing capacity should be commensurate with estimated sustainable levels of resource and that increases in capacity should be further constrained when resource productivity is highly uncertain;

National Tuna Fishery Management Plan—continued**Interpretation—continued****9. Definitions—continued**

- (vi) all fishing activities must have prior management authorization and be subject to periodic review;
- (vii) an established legal and institutional framework for fishery management, within which management plans that implement the above points are instituted for each fishery, and
- (viii) appropriate placement of the burden of proof by adhering to the requirements above.
- (gg) “Provisioning” means supplying of vessel parts, food rations, water, any other items that are not fuel or lubricants and includes changing of crew.
- (hh) “Purse Seine Fishing Day” has the same definition as agreed for the PNA VDS and shall apply to both the EEZ and archipelagic waters other than where varied by the Plan.
- (ii) “Purse Seine Non-Fishing Day” has the same definition as agreed for the PNA VDS and shall apply to both the EEZ and archipelagic waters other than where varied by the Plan.
- (jj) “Support Craft” means any scout boat or light boat or helicopter or any other craft or vessel or device used to support fishing operations which may be regulated under the Plan or by any access agreement or annexure.
- (kk) “The Act” means the *Fisheries Management Act* 1998, as amended.
- (ll) “The Plan” means the National Tuna Fishery Management Plan 2025.
- (mm) “The Regulation” means the Fishery Management Regulation 2000, as amended.
- (nn) “Tuna Domestication Policy” means any policy that impacts on the operations of this plan aimed at developing the domestic tuna industry through the provision of incentives to PNG-based fishing companies with the intention to generate greater in country value retention from PNG’s tuna resources.
- (oo) “Tuna Fishery” means all tuna fishing and related activities covered by the Plan.
- (pp) “Tuna Stock” means a discrete breeding population of a particular tuna species.
- (qq) “Vessel Day Scheme” means the PNA Vessel Day Scheme implemented under the Palau Arrangement.

TUNA FISHERY MANAGEMENT PLAN - FRAMEWORK**Division 1 - Objectives of the Plan****10. Objectives of the Plan**

- (1) To achieve the goal of the Plan and to support achievement of the Government’s Medium Term Development Plan the following objectives have been identified, to:
 - a) support sustainable tuna fisheries through an ecosystem approach to fishery management,
 - b) implement approved regional conservation and management measures,
 - c) support and enhance regional cooperative arrangements,
 - d) improve and implement harvest strategies,
 - e) actively combat IUU activities,
 - f) support the implementation of a comprehensive fisheries monitoring catch documentation scheme including the application of technology and tools for comprehensive near real time fisheries monitoring and management.

National Tuna Fishery Management Plan—continued**Tuna Fishery Management Plan—continued****Division 1- Objectives of the Plan—continued****10. Objective of the Plan—continued**

- g)* Manage the risks posed by climate change, including improving the understanding of the threats and impacts to PNG tuna resources and fisheries and respond to emerging climate change issues with proactive policies,
 - h)* support relevant research initiatives,
 - i)* support increased domestication of tuna fisheries that optimise the value retention from the tuna resources,
 - j)* support improved terms and conditions of fisheries access agreements,
 - k)* increase market and trade opportunities,
 - l)* support market standards, sustainability certification, and other initiatives to obtain price premiums,
 - m)* identify the potential for the use of rights-based approaches that increase revenue to PNG,
 - n)* minimise pollution and marine debris from fishing activities,
- (2) These objectives serve as a guiding framework for the Plan's implementation and decision-making processes. They shall be given effect through the implementation of the provisions of the Plan and may be supplemented by additional supporting strategies, action statements, and progress monitoring milestones, as deemed necessary by the Board to achieve the intended fisheries management goals and objectives.

Division 2 - Description of the key tuna resources**11. PNG's key tuna resources**

- (1) The tuna fishery is Papua New Guinea's largest fishery, and one of the largest national fisheries in the world. The species upon which the fishery relies are part of a broader regional fishery which targets the highly migratory tuna species of the Western and Central Pacific Ocean (WCPO).
- (2) The tuna species of principal interest in the fishery are the offshore tunas, which include skipjack tuna (*Katsuwonus pelamis*) yellowfin tuna (*Thunnus albacares*) bigeye tuna (*Thunnus obesus*) and albacore tuna (*Thunnus alalunga*).
- (3) Full details of current tuna catches are provided each year to SPC. Relevant details are made available through annual reports of catch estimates to the Scientific Committee of the WCPFC, and the WCPFC Tuna Fishery Yearbook. These reports are freely available from the Commission's website. The yearbook presents annual catch estimates in the WCPFC Statistical Area from 1950.
- (4) Catch statistics cover the main commercial tuna and billfish species caught in the region including:
 - (a)* Albacore (*Thunnus alalunga*).
 - (b)* Bigeye (*Thunnus obesus*).
 - (c)* Skipjack (*Katsuwonus pelamis*).
 - (d)* Yellowfin (*Thunnus albacares*).
 - (e)* Black marlin (*Makaira indica*).
 - (f)* Blue marlin (*Makaira nigricans*).
 - (g)* Striped marlin (*Tetrapturus audax*).
 - (h)* Swordfish (*Xiphias gladius*).

National Tuna Fishery Management Plan—continued**Division 2 - Description of the Key tuna resources—continued****11. PNG's key tuna resources—continued**

- (5) Further catch and effort statistics, including non-tuna species, may be provided by NFA.
- (6) The latest tuna production statistics and stock assessments may be provided as an annexure to the Plan but are also available from the SPC website.
- (7) The PNG component of the tuna fishery is of major significance. The PNG fisheries management area is highly productive when compared to other tropical waters in the region, and offers a year round fishery influenced by localized upwelling associated with the large number of islands, reefs, continental shelf and seamounts, as well as periodic extensions of the equatorial upwelling, seasonal monsoon upwelling and current reversals along the Papua New Guinea north coast, and nutrient run-off from the high-rainfall landmass.

12. Key tuna species**(1) Skipjack tuna**

- (a) Skipjack are a surface-schooling tuna which are easily distinguished from other species of tuna due to their small size, small dark pectoral fins and three to six distinct dark longitudinal lines (stripes). It is found year-round concentrated in warmer tropical waters of the WCPO, with that distribution expanding seasonally into subtropical waters to the north and south. Skipjack are historically caught mainly on the surface by purse seine and pole-and-line fishing methods.
- (b) The typical capture size for skipjack is between 40 and 70cm, corresponding to fish between one and three years of age, with very few captured fish exceeding 80cm. However, rare records of skipjack over 100cm and weighing more than 30kg have been reported historically.
- (c) Skipjack tuna is a fast-growing species (reaching 42-45cm within its first year). It is relatively short-lived (few live longer than 3-4 years) and become sexually mature early (~ 1 years of age). These biological characteristics promote rapid turnover in skipjack populations.
- (d) Skipjack are also highly fecund and can spawn year-round over a wide area of the tropical and subtropical Pacific. Environmental conditions are believed to significantly influence recruitment and can produce widely varying recruitment levels between years.
- (e) In the Western and Central Pacific Ocean (WCPO), the biomass of skipjack tuna is very large and estimated to exceed that of the other three main tuna species combined. It is assumed that skipjack in the WCPO is a separate population (for stock assessment and management purposes) to those in the eastern Pacific.
- (f) The stock is not overfished, and overfishing is not occurring.

(2) Yellowfin tuna

- (a) Yellowfin tuna are a relatively large tuna, easily distinguished as adults by their large second dorsal and anal fins which, along with finlets, are typically bright yellow. However, they can be less easy to distinguish from other tuna (like bigeye) as juveniles (<70cm). Yellowfin tuna are distributed throughout the tropical and sub-equatorial waters of the WCPO, and typically spend most of their time in the warmer mixed surface waters (above the thermocline). Small yellowfin are caught on the surface by a range of gears including handline, ringnet, purse seine and pole/line gear. The majority of larger/older fish are caught by both purse seine and longline fisheries, with the longline catch often shipped fresh to overseas markets.

National Tuna Fishery Management Plan—continued**Division 2 - Description of the Key tuna resources—continued****12. Key tuna species—continued**

- (b) The typical capture size for yellowfin shows two distinct modes in the WCPO, being 20 to 70cm (ringnet, handline, purse seine, pole and line) which corresponds to fish between approximately 3 months and 1.5 years of age, and between 90 and 160cm (purse seine, longline), corresponding to fish mostly between 1.5 and 6-7 years of age. Very few captured fish exceed 180cm or 30kg.
- (c) Yellowfin tuna is a fast growing species (reaching > 45cm within its first year). They have a life span of up to ~7 years of age and mature around 2-3 years of age. These biological characteristics promote moderate turnover in yellowfin populations.
- (d) Yellowfin are highly fecund and can spawn year round over a wide area of the tropical and subtropical Pacific, providing environmental conditions (such as water temperature) are suitable. As with many tropical tuna species, environmental conditions are believed to significantly influence recruitment levels over time.
- (e) For stock assessment purposes, yellowfin tuna are believed to constitute a single stock in the WCPO.
- (f) The stock is not overfished, and overfishing is not occurring.

(3) Bigeye tuna

- (a) Bigeye tuna are among the largest of tuna species and are distinguished as adults by their body depth, colouring (iridescent blue longitudinal band) and smaller anal and dorsal fins (relative to yellowfin). However, they are more difficult to distinguish from yellowfin tuna as juveniles (~50cm).
- (b) In the WCPO, bigeye tuna have a relatively broad distribution, both geographically between 40°N and 40°S, and vertically between the surface and 500 m deep (occasionally to 1000 m) due to their tolerance of low oxygen levels and low temperatures. In the tropical and subtropical waters of the WCPO, adult bigeye migrate from cooler deeper waters (beneath the thermocline) where they live during the day to shallower warmer waters (above the thermocline) at night. Juvenile bigeye tend to inhabit shallower waters and can form mixed schools with skipjack and yellowfin, which results in catches by the surface fishery, particularly in association with floating objects.
- (c) In the WCPO, smaller bigeye are caught on the surface by a range of gears including handline, ringnet and purse seine, while the majority of larger/older fish have been historically taken by longline fisheries.
- (d) The typical capture size for bigeye shows two distinct modes in the WCPO, being 20 to 75cm (ringnet, handline, purse seine) which corresponds to fish between 3 months and 1.7 years of age, and between 100 and 180cm (mostly caught by longline), corresponding to fish between 2 and 10 years of age. Very few captured fish exceed 200cm or 120 kg.
- (e) Bigeye tuna grow more slowly than either yellowfin or skipjack, reaching around 40cm after one year, have a longer lifespan (at least 12 years) and mature later (around 3-4 years of age). Natural mortality is estimated to be relatively low compared with other tropical species. These biological characteristics promote only moderate turnover in bigeye populations, and, in combination with their susceptibility to multiple gear types

National Tuna Fishery Management Plan—continued**Division 2 - Description of the Key tuna resources—continued****12. Key tuna species—continued**

throughout their lifespan, make bigeye tuna less resilient to exploitation than more productive species like skipjack. The bigeye biomass is estimated to be significantly smaller than those of yellowfin and skipjack in the WCPO.

- (f) Like yellowfin, bigeye tuna are highly fecund and can spawn year round over a wide area of the tropical and subtropical Pacific, providing environmental conditions (such as water temperature) are suitable. As with many tropical tuna species, environmental conditions are believed to significantly influence recruitment levels over time.
- (g) For stock assessment purposes, bigeye tuna are believed to constitute a single stock in the WCPO.
- (h) The stock is not overfished, and overfishing is not occurring.

(4) Albacore

- (a) Albacore are a relatively large tuna growing up to 1.2 metres in length. Albacore are identified by their very long pectoral fins, the longest of all tunas, and characterised by a dark yellow first dorsal fin and pale yellow second dorsal fin.
- (b) In the Pacific Ocean, albacore are thought to comprise discrete stocks north and south of the equator. In the South Pacific, the stock structure is not fully resolved. Data suggest that albacore in the southern hemisphere are most abundant in sub-equatorial waters during December-January and May-July, indicating that albacore migrate south during early summer, and north during winter.
- (c) The fishery is primarily a longline fishery with a small trolling fishery. Vessels that target albacore tuna at warmer latitudes typically set longlines at depths between 100 and 400m whilst those at cooler latitudes typically set at shallower depths of around 100 m.
- (d) Migratory behaviours in the South Pacific have not yet been well defined however, adults are frequently caught above 30°S where albacore have a higher mean length.
- (e) Albacore spawn in tropical and sub-tropical waters between 5-25°S during the summer with peak spawning occurring from October through December.
- (f) Maturity at 50% and 100% is estimated to be 4.5 and 7 years respectively. The minimum reported size of mature females is 74cm with the length at 50% maturity of approximately 85cm, and the length at 100% maturity is 94cm. Initial growth is rapid with albacore reaching 45–50cm. Subsequent growth is slower, at approximately 12cm per year from 2 to 4 years age, and declines thereafter. Maximum recorded length is about 120cm. Maximum age is around 15 years for both males and females.
- (g) The stock is not overfished, and overfishing is not occurring.

National Tuna Fishery Management Plan—continued**Division 2 - Description of the Key tuna resources—continued****13. Potential adverse environmental effects from Fishing Operations, and associated Conservation and Management Measures**

- (1) The key tuna fisheries in the fishery management area involve purse seine nets, longlines, and pole and line. These fishing methods are not known to have a significant or adverse environmental impact on benthic ecosystems. The key potential for adverse environmental impact from fishing is upon target and non-target pelagic species, including sharks, turtles, sea birds, and marine mammals.
- (2) The potential to overexploit target fish stocks is ever present. Whilst the trend across the fishery has been for the catch of all target species to progressively increase, no target species is considered to be overfished.
- (3) CMMs have been adopted by the WCPFC across the region to mitigate adverse impacts for target and non-target species. PNG is a WCPFC member and fully endorses and implements these measures.

Division 3 - Management of the tuna fishery**14. Tuna management tools, agreements, and strategies**

- (1) The implementation of the Plan shall, as appropriate, take into account and utilize a range of tools for the purpose of tuna fisheries conservation, management, and development, including ensuring compliance and combating illegal, unregulated, and unreported fishing (IUU), promoting food safety standards, and food security at the national level. These tools may include but are not limited to the following, as applicable:
 - (a) regional and international agreements, treaties and obligations,
 - (b) fisheries access agreements,
 - (c) bilateral and multilateral memoranda of understanding,
 - (d) domestication policies and strategies including investment agreements,
 - (e) vessel licensing and registration,
 - (f) catch and effort controls,
 - (g) area and time specific restrictions, including closed, restricted or prohibited fishing areas,
 - (h) reference points and harvest control rules,
 - (i) bycatch utilization,
 - (j) FAD management,
 - (k) fisheries research, including stock assessments and bio-economic modelling,
 - (l) a precautionary approach,
 - (m) an ecosystem-based approach,
 - (n) vessel based marine pollution and debris planning,
 - (o) national and regional tuna research and monitoring,
 - (p) related environmental scientific research,
 - (q) monitoring, control and surveillance, including port state inspections,
 - (r) electronic reporting and monitoring, catch traceability, documentation and information management systems,
 - (s) sanitary and phytosanitary standards,
 - (t) cost recovery for costs of operations, management, and implementation.

National Tuna Fishery Management Plan—continued**Division 3 - Management of the tuna fishery—continued****15. Licensing**

- (1) All vessels involved in the tuna fishery and associated operations (which may include gamefishing and artisanal fisheries) shall be licensed in accordance with this Plan consistent with the Act.
- (2) Licensing policy and procedures approved by the NFA may be published by the Managing Director as an annexure to the Plan.
- (3) Any licensing policy and procedure may provide preferential treatment to vessels to be licensed in accordance with any development policy or development agreement that aims to increase domestic participation in the tuna fishery.
- (4) No vessel may be licensed to fish under the Plan unless it is in good standing.
- (5) When considering an application to licence a vessel, the NFA may have regard to any history of non-compliance in any fishery.
- (6) No vessel may be licensed to fish under the Plan unless it meets the requirements of the Act, Regulations, licensing policies, and any eligibility criteria established by or under the Plan.
- (7) NFA will prepare a summary of the details of all vessels licensed to fish under the Plan, which shall be published as an annexure to the Plan, and which shall be updated on at least two occasions each year.
- (8) NFA may require any vessel licensed under the Act for the purposes of the Plan to prepare and implement a vessel marine pollution and debris management plan.

16. Records

- (1) It is a requirement of the Plan that all licence holders shall furnish catch, effort, and other such records, returns and other operational information in the form and at the time required by NFA.
- (2) The Managing Director may publish mandatory guidelines for the provision of records as an annexure to the Plan.

17. International law

- (1) International laws and conventions provide the foundation for several regional and multilateral arrangements with respect to tuna fisheries management in the Western and Central Pacific Ocean.
- (2) The United Nations Convention on the Law of the Sea (UNCLOS) provides coastal states with the power to exercise control over their fisheries within a 200 mile Exclusive Economic Zone (EEZ), with recognition of sovereignty in regards to internal waters, archipelagic waters, and territorial seas.

18. Regional tuna fisheries management arrangements

- (1) Regional arrangements are based on international law, take account of the migratory nature of tuna species, and aim to provide the basis for collective management, optimised benefits, and sustainable use of fisheries resources.
- (2) Papua New Guinea is a signatory to the following instruments :
 - (a) Forum Fisheries Agency Convention (FFA).

National Tuna Fishery Management Plan—continued**Division 3 - Management of the tuna fishery—continued****18. Regional tuna fisheries management arrangements—continued**

- (b) Convention for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPFC).
- (c) The Nauru Agreement Concerning Cooperation in the Management of Fisheries of Common Interest (Nauru Agreement).
- (d) Palau Arrangement for the Management of the Western Pacific Purse Seine Fishery.
- (e) The FAO Port State Measures Agreement (PSMA).

19. Multi-lateral and other agreements impacting tuna fishery management

- (1) United States Multi-Lateral Treaty (USMLT)
 - (a) All FFA members are signatories to the USMLT, a multi-lateral treaty with the US Government. The USMLT primarily provides for multilateral access to the purse seine fishery for the US purse seine fleet.
- (2) Federated States of Micronesia Arrangement (FSMA)
 - (a) The FSMA is an agreement for domestic based vessels of the PNA to access the fishing resources of other parties.
 - (b) The FSMA aims to provide access to Parties' waters on terms that:
 - (i) are no less favourable than those granted to distant water fishing nations,
 - (ii) secure maximum sustainable economic benefits from tuna resources through participation,
 - (iii) promote greater participation by nationals of Parties in fisheries and assist in the domestication and development of national fisheries industries.
- (3) WTO Agreement on Fisheries Subsidies
 - (a) Create policy space to ensure a level playing field in global trade that enhances economic benefits.
 - (b) Promote domestic growth, employment and value adding within the tuna industry.
 - (c) Uphold and protect sovereign rights over PNG's marine resources.
 - (d) Support sustainability and conservation of PNG's marine resources for current and future generations.
 - (e) Promote optimal, inclusive, and equitable distribution of fisheries benefits.
 - (f) Facilitate compliance with conservation and management measures, and promote sustainable fishing practices.
- (4) Review of regional multi-lateral agreements.
 - (a) PNG will keep regional multi-lateral agreements under review to ensure they provide an appropriate level of benefit.

20. Environmental Shock

- (1) A review of the Plan shall be triggered by any significant environmental shock demonstrated to significantly affect the tuna fishery.

¹Under consideration: Niue Treaty on Cooperation in Fisheries Surveillance and Law Enforcement in the South Pacific Region (NTSA).

National Tuna Fishery Management Plan—continued**Division 3 - Management of the tuna fishery—continued****20. Environmental Shock—continued**

- (2) Significant environmental shock may include climatic phenomenon including sudden climatic changes, major environmental or pollution incidents that may impact on the distribution of tuna, or the tuna fishery, and which pose a serious economic threat to PNG and the region.
- (3) NFA will support the development of national and regional initiatives to address climate change resilience.

21. Fishery reference points and harvest control rules

- (1) Fishery reference points under the Plan aim to:
 - (a) Provide benchmarks against which to assess the performance of management in achieving operational objectives.
- (2) Harvest control rules under the Plan aim to:
 - (a) Define the rules or actions to be used to determine the appropriate management action in response to changes in indicators of stock status with respect to established reference points.
- (3) The Plan:
 - (a) uses a range of rules and controls as management measures to control both total catch and effort,
 - (b) controls tuna catch by enforcing fishing effort to any agreed TAE for each part of the fishery,
 - (c) aims to maintain fish stocks at a biomass point, on average, at a level required to optimize economic yield,
 - (d) aims to ensure fish stocks remain above a biomass point where the risk to the stock is regarded as too high to achieve the objectives of the Plan,
 - (e) aims to ensure that fish stocks are managed to stay above the established limit biomass at least 90% of the time.
- (4) Under the Plan, PNG shall observe any applicable reference points established under any regional or subregional arrangement or agreement and approved by the Minister 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.
- (5) The Board may establish reference points for PNG's archipelagic and internal waters fisheries having regard to biological, social, economic, and other factors, whilst upholding principles of sustainability and the desirability for compatibility of measures.
- (6) In the event any agreed reference point is exceeded in two or more consecutive fishing years the Board shall review the provisions of the Plan with the specific goal of identifying the level of effort required to meet the agreed reference point.
- (7) Any reference points established for the fishery may be included in an annexure to the Plan.

National Tuna Fishery Management Plan—continued**Division 4 - Control of Fishing Effort****22. Control of purse seine fishing effort**

- (1) The purse seine fishery comprises:
 - (a) PNGFV accessing archipelagic waters and the EEZ.
 - (b) PNGFV accessing the Eastern High Seas Special Management Area under WCPFC rules.
 - (c) LBFV accessing EEZ waters.
 - (d) LBFV accessing archipelagic waters under any government approved tuna fishery domestication or development strategy.
 - (e) DWFN (bilateral or multilateral agreement) vessels accessing EEZ waters.
 - (f) Vessels accessing PNG's EEZ under multilateral agreements.
- (2) Purse seine effort control in the EEZ.
 - (a) Under the Plan, the PNA Vessel Day Scheme (VDS) is the approved scheme for purse seine effort control in PNG's EEZ. The VDS is a regional scheme and is administered by the PNA Office based in Majuro, Marshall Islands.
 - (b) Each year the PNA officials establish a regional Total Allowable Effort (TAE) based on a range of criteria, and having regard to WCPFC obligations.
 - (c) The TAE is allocated amongst the Parties as their individual Party Allowable Effort (PAE) after deducting an allowance for an allocation of days to be fished by vessels operating under the US Treaty, and the FSMA.
 - (d) The PAE for PNG shall be allocated to licence holders in a manner determined by the Board which may be published as an annexure to the Plan.
 - (e) In the absence of any regionally agreed PAE for PNG under the VDS, the Board will establish a TAE for the PNG EEZ taking into account applicable WCPFC CMMs, historic purse seine fishing catch and effort in the EEZ, the best available scientific information, and other relevant social and economic data and information.
- (3) Purse seine effort control in archipelagic waters.
 - (a) Under the Plan, purse seine fishing in archipelagic waters will be subject to the Archipelagic Waters Day Scheme (AWDS).
 - (b) Vessels accessing AW shall not be more than 80m.
 - (c) Under the AWDS a TAE is to be set by the Board each year having regard to the best available scientific information, relevant economic and social data and information, and in accordance with the objectives of the Plan.
 - (d) The AWDS will operate in accordance with the Plan.
 - (e) The AWDS may include vessels authorised under any government approved tuna domestication policy or strategy, with domestic operational rules consistent with that strategy established by the board, and published as an annexure to the Plan.

National Tuna Fishery Management Plan—continued**Division 4 - Control of Fishing Effort—continued****22. Control of purse seine fishing effort—continued**

- (4) Purse seine effort control in the Eastern High Seas Pocket.
 - (a) Under the Plan, purse seine fishing by PNG flagged vessels in the Eastern High Seas Special Management Area may be subject to a High Seas Pocket Day Scheme (HSPDS). Any such scheme shall be subject to:
 - (i) Any applicable WCPFC CMMs.
 - (ii) Domestic licensing arrangements and requirements approved and required as part of PNG's tuna fishery domestication policies and strategies.
 - (b) Under any HSPDS, a TAE may be set by the Board each year having regard to the best available scientific information, consistent with any applicable WCPFC CMM, relevant economic and social data and information, and in accordance with the objectives of the Plan.
 - (c) Any HSPDS will operate in accordance with the Plan and any applicable annexure which may be published to guide the operation of this sector of the fishery.

23. Allocation of fishing days

- (1) When allocating EEZ fishing days, and in support of PNG's fishery development goals, the Board will make allocations in priority order to:
 - (a) Domestic
 - (i) Domestic processors (with recognition of associated infrastructure).
 - (ii) Domestic landings.
 - (iii) Domestic/FSMA catch transhipped in the port of a PNA Party.
 - (b) DWFN access and catch
- (2) AWDS fishing days will be allocated amongst licence holders in a manner determined by the Board.
- (3) In determining allocations, the Board may have regard to a range of factors, including but not limited to the catch and other operational history of a vessel or a group of vessels (including pioneer fishing operations and compliance history), and the objectives of the Plan (including PNG's fishery development goals).
- (4) The Board may determine an allocation be made to processors where this is determined as being supportive of and consistent with PNG's fishery development goals.
- (5) Any allocation is to be made on an annual basis, and shall be a 1 year right terminating at midnight on 31st December of each fishery year.
- (6) No annual allocation is to be taken or construed as any guarantee of any future allocation.
- (7) No unused annual allocation may be carried forward to any future year.
- (8) The allocation of any fishing days under the Plan creates a fishing right for a maximum of one year, with no rights beyond one year, or any right that could support any future claim for allocations (the purpose of the annual right includes avoiding a competitive race to fish and to allow vessels to fish their allocation throughout the year at the times most suited to their logistical and marketing needs, without the risk of days being used by others in a pool, and to make commercial decisions for their benefit, and to support a year-round supply chain for processors).

National Tuna Fishery Management Plan—continued**Division 4 - Control of Fishing Effort—continued****24. Longline effort control**

- (1) The longline fishery comprises the following sectors:
 - (a) DWFN bilateral access to PNG's EEZ, north of 10°S, targeting yellowfin and bigeye, with associated bycatch.
 - (b) PNGFV and LBFV longline operations in the fishery management area, including, seasonal charter of LBFV by processors to target albacore.
- (2) Under the Plan, longline fishing may be subject to effort control through a Longline Vessel Day Scheme (LLVDS).
 - (a) The LLVDS may apply to all longline fishing in the fishery management area.
 - (b) Under the LLVDS a TAE will be established and approved by the Board for each sector having regard to the best available scientific information, and relevant economic and social data and information, in accordance with the objectives of the Plan, and taking into account PNG's obligations under any applicable WCPFC CMMs.
 - (c) The Board shall adopt any PAE established under any regional LLVDS to which PNG is a party for applicable parts of the fishery management area.
 - (d) The TAE or PAE shall be allocated to operators in a manner determined by the Board.
 - (e) In determining allocations, the Board may have regard to a range of factors, including but not limited to the catch and other operational history of a vessel or a group of vessels (including compliance history), and the objectives of the Plan (including PNG's fishery development goals).
 - (f) The Board may determine an allocation to processors where this is determined as being supportive of and consistent with PNG's fishery development goals.
- (3) Any allocation is to be made on an annual basis, and shall be a 1 year right terminating at midnight on 31st December of each fishery year.
- (4) No annual allocation is to be taken or construed as any guarantee of any future allocation.
- (5) No unused annual allocation may be carried forward to any future year.
- (6) Longline management measures
 - (a) No management measure under the Plan shall apply if it is less stringent than any applicable CMM.
 - (b) Longline operations may retain bycatch including non endangered sharks, subject to any license conditions including that all fins remain attached to trunks. The possession of shark fins removed from any trunk and trunks without fins shall be a breach of the Plan.
 - (c) Further management measures may be introduced under the Plan to minimize incidental catches of sharks, for example the use of circle hooks may be made mandatory, and the use of wire leaders may be prohibited in mitigation against shark mortality, and to assist the live release of non target species including shark, billfish, turtles, and juvenile tunas. Such measures shall be approved by the Board and published as an annexure to the Plan.
 - (d) All vessels will be required to facilitate E-reporting, and E-monitoring video, as required, and shall accommodate and support on board human observers as required.

25. Albacore longline effort control

- (3) An albacore longline fishery may be established under the Plan in accordance with any direction approved by the Board and published as an annexure to the Plan.

² From 1st July, 2014 shark longline licences were withdrawn consistent with the WCPFC CMM relating to silky shark.

National Tuna Fishery Management Plan—continued**Division 4 - Control of Fishing Effort—continued****25. Albacore longline effort control—continued**

- (a) The fishery management area is south of 10° south, and in the EEZ only (i.e. not in other archipelagic waters).
- (b) Yellowfin and bigeye tuna are permitted bycatch.
- (c) All catch must be processed onshore and mothership operations are only permitted for transferring catches to PNG processors, unless otherwise approved.
- (d) A PNG Albacore Longline Day Scheme (PALDS) may be established by the Board to manage the albacore fishery effort in PNG and published as an annexure to the Plan.
- (e) A limited number of bilateral access longline vessels shall be provided for under the Plan. These are not required to land fish in PNG other than where required by a decision of the Board. Bilateral access shall be phased out as domestic demand for PLDS days grows.
- (f) Domestic based fresh and frozen boats are to be either PNG flagged, or chartered LBFV to companies with >51% PNG equity, and where landing and minimum employment are compulsory.
- (g) To be eligible for LBFV charter a company must also operate domestically flagged PNG vessels and shall be eligible to LBFV charters at a ratio of 1:1 for each domestic PNG flagged vessel operated by the company in the fishery.

26. Further related operational issues

- (1) Effort control for other fishing methods
 - (a) Under the Plan handline boats (including pump-boats) may be licensed and subject to reporting requirements. The handline fishery is not currently subject to effort control but may have fishing restrictions implemented by a decision of the Board.
- (2) Customary and artisanal fishers' rights.
 - (a) Special consideration shall be given to avoiding any adverse impacts on customary resource owners in accordance with Section 26 of the Act, directing that the rights of customary owners of fisheries resources and fishing rights, shall be fully recognized and respected in all transactions affecting the resource or the area in which the right is exercised.
- (3) Gamefish fishery.
 - (a) The gamefish fishery including recreational gamefishing and sportfishing has been identified as a fishery with significant scope for expansion. Under the Plan NFA may consult with the game fishing sector on the introduction of guidelines and regulatory measures, including collaboration on tagging and other scientific programs.
 - (b) Any such measures shall be published as an annexure to the plan.
- (4) Effort creep.
 - (a) The issue of effort creep (the progressive increase in the effectiveness of fishing effort, primarily due to advancements in technology and improvements in fishing gear) shall be continuously monitored to ensure the goal and objectives of the Plan are achieved, particularly in relation to modern large

National Tuna Fishery Management Plan—continued**Division 4 - Control of Fishing Effort—continued****26. Further related operational issues—continued**

- (5) Crewing levels.
 - (a) The Board may determine a requirement for minimum crewing levels and crew positions for PNG citizens on domestic vessels and LBFVs and any such determination shall be published as an annexure to the Plan.
- (6) Further measures.
 - (a) The Board may determine any further operational and effort control measures that in the opinion of the Board are necessary to achieve the goal and objectives of the Plan. Any such measures shall be published as an annexure to the Plan.
- (7) Compensation not payable.
 - (a) It is a condition of operating under the Plan that no compensation is payable for any change to any management rule under the Plan, including changes beyond the control of NFA, and including any reduction in any TAE or any change in allocation of any TAE or any change in allocation methodology, other than where provided for under the Plan.
 - (b) Allocated days that remain unfished at the end of a fishing year expire and fees shall not be reimbursed.
 - (c) Days that have been paid for but can no longer be fished due to a change in management rules are not compensable but shall be reimbursed at the price paid.
- (8) Publication of any Board decision relating to TAE or other measure as an annexure to the Plan.
 - (a) Any decision of the Board relating to the setting of any TAE, or the allocation of any TAE, or any change in management rules shall be given effect by publication in the *National Gazette*, and as an annexure, as required under the Plan.

27. FAD management

- (1) FAD use shall be subject to any applicable CMM, and any FAD management annexure under the Plan.
- (2) The NFA may require any dFAD used within the Fisheries Management Area to be fitted with an approved tracking device, with all location and operational data reported to the NFA. This data will support biomass monitoring, catch assessment, regulation of FAD deployments, and tracking of drifting patterns within and beyond the fisheries management area to ensure effective monitoring and compliance.
- (3) NFA may require any FAD used in the fishery management area to comprise non-entangling and biodegradable components in full or in part. Any such provision shall be included in the FAD annexure to the Plan.
- (4) NFA may use such data to ensure compliance with FAD use restrictions, enforce area closures, detect gear tampering, facilitate the recovery of lost FADs, promote the recycling of satellite buoys, and minimize damage to fragile reef ecosystems.

³ The ongoing work of FFA towards a south pacific albacore allocation framework is noted. Any framework to which PNG is a party will be reflected through an amendment to this Plan.

National Tuna Fishery Management Plan—continued**Division 4 - Control of Fishing Effort—continued****28. FAD registration requirements**

- (1) All FADs deployed in the fishery management area, or in other waters by any vessel licensed to fish in fishery management area and which are likely (in the opinion of NFA) to drift into the fishery management area, are to be registered with NFA.
- (2) FAD registration will be the subject of FAD management arrangements which shall be approved by the Board and published in the FAD annexure.
- (3) Such management arrangements may include requirements for retrieval of FADs by the deployer, including from outside the fishery management area.

29. iFAD programme

- (1) The NFA iFAD programme promotes deployment of non-commercial anchored inshore FADs typically inside territorial waters to enhance fishing opportunities for artisanal and small-scale fishermen. Besides the positive aspects of food security, safety at sea and enhancement of small-scale enterprises the scheme serves to take pressure of the fragile coastal reef ecosystems. iFADs and commercially deployed anchored FADs, are encouraged to be used without restriction by artisanal, small-scale handline, and game fishermen.

30. Closed areas and other measures

- (1) The Board may, from time to time delineate specific areas to be closed to certain categories of fishing and for other related activities including conservation, preventing interaction between different categories of licensed fishing vessels, interaction between commercial fishing vessels and non-commercial fishing operations.
- (2) Such closures may be made by regulation approved by the Minister, or fishery notice approved by the Board, shall be notified to affected stakeholders, and may be included in any closure annexure to the Plan.

Division 5 - Monitoring, control, and surveillance, and fisheries research**31. Measures and strategies to enhance compliance, and combat and eliminate IUU fishing**

- (1) Tuna fishing under the Plan is subject to PNG's fisheries laws including applicable penalties and sanctions.
- (2) The NFA shall maintain close liaison and consultation with regional organizations on all matters relating to the vessel register, regional cooperation on surveillance, and harmonised minimum terms and conditions for licensing fishing vessels, including its participation in satellite monitoring, and other electronic reporting and monitoring systems.
- (3) A National Plan of Action for Illegal Unreported and Unregulated Fishing shall be maintained and reviewed as required by the Board.
- (4) E-Reporting and E-Monitoring may be introduced under the Plan in accordance with regional agreements, and shall take into account scientific design principles and any regionally agreed data standards and formats with specifications and requirements included in an annexure.

National Tuna Fishery Management Plan—continued**Division 5 - Monitoring, control and surveillance and fisheries research—continued****31. Measures and strategies to enhance compliance, and combat and eliminate IUU fishing—continued**

- (5) NFA's national observer program shall be maintained in line with regional standards, such other requirements as may be approved by NFA, and will comply with obligations to regional and subregional body requirements.
- (6) Compliance with any E-reporting and E-monitoring video program is a condition of licence under the Plan.
- (7) NFA shall facilitate any standard for ecolabelling of wild caught fish given effect to by any applicable law or agreement.
- (8) Transshipment and bunkering by PNG flag vessels in the high seas is prohibited as a condition of licence.
- (9) The Board and Managing Director may establish further rules for landing, processing, transshipment, and export of any fish the subject of the Plan. Any such rules shall be published as an annexure to the Plan.
- (10) Where transfer pricing, misreporting, or other false declaration is undertaken by any business, operator, or vessel, the Managing Director shall require the business, operator or vessel to refund any access fee concession or benefit provided for the fishing year in question, and may further suspend or cancel any associated licence or require such bond to be paid as will create a deterrent against any further infraction.
- (11) NFA shall require any licence holder to provide upon demand such data or other information as it requires to fulfil audit requirements for catch landing, processing, transfer, transshipment, or disposal. Such information must be provided within 30 days of such a request being made.
- (12) The Managing Director may instigate an investigation or audit into any failure of any requirement to provide data to NFA, or into compliance with the terms of any agreement concerning licensing, fishery development, or investment.
- (13) The Managing Director may suspend or cancel any agreement concerning licensing, fisheries development, or investment where an investigation report demonstrates significant non-compliance with its terms, or in the case of any incident of corruption.
- (14) The Board and or MD may establish such operational rules for monitoring, control, and surveillance as it he thinks necessary to assist with compliance and to prevent IUU fishing and to generally give effect to the goal and objectives of the Plan and may publish such rules as an annexure to the Plan, in full or in part.
- (15) NFA shall maintain an updated PSM Standard Operating Procedure to support the implement of the FAO PSMA and any regional PSMA to which PNG is a signatory, including rules concerning the arrival in port of any licensed vessel, and for the inspection of any vessel before or after arrival in port. Such rules shall have regard to the terms of the 2009 FAO Port State Measures Agreement and shall be published as an annexure to the Plan.
- (16) The NFA shall develop the necessary capacity and competence, and may establish a compliance audit unit, to undertake programmed and ad-hoc audits of the provisions of the Plan, including developing and delivering advisory material and training, and any agreement concerning licensing, fishery development, or investment.
- (17) All vessels operating under the Plan shall be required to install and operate a type approved MTU or eMTU by PNA, FFA and WCPFC, and installed by approved installers and in accordance with PNG VMS requirements.
- (18) Any vessel operating under the Plan may be required to ensure its AIS is operational, as and when required by NFA.
- (19) The PNG ACCD is to be fully implemented under the Plan. Both ACU and CDCU will be operational in each port where fish product may be lawfully caught, transhipped, landed, imported, processed, or exported according to PNG Standards for Fish and Fishery Product 2019.

National Tuna Fishery Management Plan—continued**Division 5 - Monitoring, control and surveillance and fisheries research—continued****32. Research, monitoring and collaboration under the Plan**

- (1) In support of the goal and objectives of the Plan, NFA shall undertake and collaborate in any scientific, environmental, and economic research, including bioeconomic modelling, and monitoring relevant to tuna fisheries including with other national, international, and regional management, advisory, academic, and scientific bodies.
- (2) In particular, NFA shall collaborate with the Pacific Community (SPC) Oceanic Fisheries Programme to undertake stock assessments and other relevant research.
- (3) NFA shall maintain databases of information with the capability to report on the magnitude of tuna catches in the fishery management area including inter-annual and seasonal variability, catch per unit effort (CPUE), the species breakdown of catches, and size structure by species in the catches.
- (4) NFA shall publish catch and effort data each year, and shall provide such data to regional and sub-regional bodies as required.
- (5) NFA shall undertake consultation with the flag States of vessels it licences, and shall develop memorandums of understanding (MOUs) in support of the Plan. MOUs shall include sections on compliance, research, and monitoring, and in particular shall give effect to any NPOA related to IUU fishing.
- (6) NFA shall undertake consultation with other PNG government departments with an involvement in regulating the fishing and associated industries and shall develop MOUs, in particular aimed at minimising red tape, and providing whole of government services.

Division 6 - Application of the Plan**Sub-Division 1 - PNG's tuna fisheries****33. PNG's tuna fisheries**

- (1) The Plan applies to all tuna fishing activities in PNG's fisheries management area. Fishing activities are defined by the Act, and the Regulation.
- (2) The species covered by the Plan shall include:
 - (a) All species of tuna including those in the genera *Katsuwonus*, *Thunnus*, *Auxis*, *Cybiosarda*, *Euthynnus*, and *Gymnosarda*; and
 - (b) All other non-target and target bycatch, and associated or dependent species taken in the course of fishing for tuna.
- (3) The Plan may make rules and other provisions and measures either within the Plan, or by a decision of the Board as an annexure to the Plan relating to all methods of fishing for tuna, including but not limited to:
 - (a) Purse seining (including mini-seiners).
 - (b) Longline.
 - (c) Pole-and-line.
 - (d) Trolling, hand lining, game fishing and other small scale fishing.

National Tuna Fishery Management Plan—*continued***Division 6 - Application of the Plan—*continued*****Sub-Division 1-PNG's tuna fisheries—*continued*****33. PNG's tuna fisheries—*continued***

- (4) The Plan makes rules and other provisions and measures either within the Plan, or by a decision of the Board as an annexure to the Plan for related activities including but not limited to:
- (a) Catching including by-catch.
 - (b) Registration, deployment, retrieval, tracking and use of fish aggregation devices.
 - (c) Gear conflicts.
 - (d) Transshipping.
 - (e) Unloading.
 - (f) High seas and regional operations.
 - (g) Regional access.
 - (h) Crewing.
 - (i) Port calls.
 - (j) Port inspections.
 - (k) Bunkering.
 - (l) Provisioning.
 - (m) Bait fishing.
 - (n) Mothership operations.
 - (o) Aircraft support operations.
 - (p) Processing.
 - (q) Importing, buying, selling and export of fisheries products.
 - (r) Storage.
 - (s) Catch traceability.
 - (t) Sanitary and Phytosanitary measures.
 - (u) Monitoring, control, and surveillance, and IUU fishing.
 - (v) Fishery certification and eco-labelling.

Sub-Division 2 - Access Fees**34. Access fees**

- (1) The Board shall set all access fees including any benchmark access fees related to purse seine and longline access for all fleets in both EEZ and archipelagic waters subject to any further provision of this division.
- (a) Access fees and any benchmark fees may be published as an annexure to the Plan.
 - (b) Access fees shall be charged on the basis of each fishing day allocated.
 - (c) Under the Plan, competitive, market-based schemes may be created for access fees for DWFN vessels.
 - (d) The Board may determine any competitive allocation process for DWFN vessels and may publish any such determination as an annexure to the Plan.

National Tuna Fishery Management Plan—continued**Division 6 - Application of the Plan—continued****Sub-Division 2 - Access Fees—continued****34. Access Fees—continued**

- (e) In setting any access fee the Board shall have regard to any credible economic data or credible reports concerning access fee levels, any economic development goals and relevant data, or credible reports concerning the impact of fees on economic development, and any State or other access agreement.

35. Purse seine VDS (EEZ) fishing days

- (1) For transparency when NFA engages in bilateral access fee negotiations with DWFNs, NFA shall not allocate access at a rate below any PNG benchmark access fee established under this sub-division.

36. General provisions relating to transfer of VDS (EEZ) fishing days between PNA Parties.

- (1) For the purpose of clarification all fishing days belong to the respective Parties to the Nauru Agreement, and all transfers are Party to Party.
- (2) Where there is agreement to transfer days between Parties this shall be notified to the PNA office on the Palau Arrangement prescribed form which specifies the number of days to be transferred, and which is signed by an authorised officer of both Parties.
- (3) Any agreement to transfer days may include reference to the beneficiary vessel or company who is sponsoring the transfer and who will use the days.

37. Transfer of purse seine days between VDS and AWDS

- (1) Purse seine days are not transferable between the VDS (EEZ) and the AWDS (archipelagic waters). These are separate schemes. VDS is a regional scheme; AWDS is a national scheme.

38. Transfer of purse seine VDS, and AWDS days

- (1) The intent of this provision is to facilitate the efficient transfer of fishing days.
- (2) All transfer of PNG days must occur through NFA.
- (3) Each transfer may be subject to an administration fee set by NFA.
- (4) Any transfer shall be completed by NFA within 7 working days of receipt of any administration fee, and a completed application form in the approved format, signed, and containing all required information.
- (5) A transfer of days can only occur where approved by NFA, and on agreed terms.
- (6) Days subject to a non-fishing day claim cannot be transferred.
- (7) Fishing days, and non-fishing days, may not be carried forward into, or borrowed from, future years.
- (8) NFA can determine such further operational policies and procedures as are necessary to give effect to the efficient and effective transfer of fishing days.
- (9) Any provisions relating to the transfer of days under any regional fishing day scheme approved by PNG shall be implemented by NFA.

National Tuna Fishery Management Plan—continued**Division 6 - Application of the Plan—continued****Sub-Division 2 - Access Fees—continued****39. Transfer of PAE between PNA Parties under the VDS (EEZ)**

- (1) The transfer of another Parties PAE to PNG, or any PNG PAE to another Party, shall occur in accordance with the VDS rules applicable at the time the transfer occurs.
- (2) All transfers must be notified through the PNA Office.
- (3) A transfer of days can only occur where approved by NFA, and on agreed terms.
- (4) Any receipt of days by PNG will be regarded as an increase to the PAE.
- (5) Any transfer of days from PNG will be regarded as a reduction in the PNG PAE.
- (6) NFA will trade or transfer any such days received as additional PNG PAE, and in accordance with any agreed terms and conditions.
- (7) Subject to above, a company may arrange a transfer of days from another Party, to PNG, for the purpose of reallocation to a PNG sponsored FSMA vessel.

40. Transfer of PNG PAE to a PNG FSMA sponsored vessel

- (1) NFA may facilitate the transfer of VDS days allocated to a domestic company to a PNG FSMA eligible vessel.
- (2) NFA can determine such further operational policies and procedures as are necessary to give effect to the efficient and effective transfer of fishing days.

41. FSMA eligibility criteria

- (1) NFA will undertake its administrative responsibilities under the FSMA as determined by the Parties from time to time, including assessing eligibility for access to FSMA waters

42. Purse seine vessel length weighting arrangement

- (1) A vessel length weighting arrangement applies to all purse seine fishing under the Plan to reflect a progression of CPUE against length. The intent of this arrangement includes creating an incentive for small scale purse seining, and as a measure against effort creep associated with large scale purse seine operations.
- (2) Vessel length weighting arrangements under Table A may be reviewed by the Board and amended by to the Plan as necessary to provide for future group seining operations involving small vessels operating in archipelagic waters providing that these arrangements do not undermine either the integrity of the Plan or the VDS fee structure.
- (3) The vessel length weighting arrangements in Table A apply unless otherwise varied by the Board, and included as an annexure to the Plan, or unless otherwise varied in accordance with the PNA VDS:

National Tuna Fishery Management Plan—continued**Division 6 - Application of the Plan—continued****Sub-Division 2 - Access Fees—continued****42. Purse seine vessel length weighting arrangement—continued****TABLE A**

	Vessel Size	Weighting	Description
(a)	<25 metres	4:1 (archipelagic waters only)	For vessels <25m, four (4) actual fishing days = 1 AWDS day.
(b)	25 metres to <50 metres	2:1	For vessels 25m to <50m, two (2) actual fishing days = 1 VDS day.
(c)	50 metres to < 80 metres	1:1	For vessels 50m to <80m, 1 actual fishing day = 1 VDS day.
(d)	80 metres to < 100 metre	1:1.5 (access to PNG EEZ only)	For vessels 80m to <100m, 1 actual fishing day = 1.5 VDS days.
(e)	>100 metres	1:3 (access to PNG EEZ only)	For vessel >100 m, one (1) actual fishing day = 3 VDS days.

43. Transfers and administration subject to annexure

- (1) The rules concerning any transfer of fishing days or any administration of the VDS under the Plan may be the subject of an annexure made under the Plan which may supersede or complement any provision of the Plan, with the approval of the Board.

44. Longline Day Scheme fees

- (1) The Board may determine the price for any longline day. In setting the price, consideration shall be given to maximising fees for DWFN access.
- (2) The Board may determine any longline day scheme fee for domestically based vessels based on credible economic data or reports reflecting the value of such concessions to employment and the national economy, and any State or other agreement.
- (3) Any determination of the Board under this clause shall be published as an annexure to the Plan.

45. Longline fishing non-fishing days, carry forward, and borrowing from future years

- (1) There are no non-fishing days in the longline fishery. This applies to domestic longline vessels, foreign access longline vessels, and seasonal albacore vessels.
- (2) Longline fishing days may not be carried forward to, or borrowed from future years.
- (3) The Board may vary any provision of this clause and publish its decision as an annexure to the Plan.

Sub-Division 3 - Cost Recovery**46. Cost recovery**

- (1) Services provided to industry by NFA (or other relevant government departments) may be cost recovered under the Plan.
 - (a) Such services shall be related to the regulatory management program for the fishery and include but not be limited to policy, consultation, licensing, compliance, science, catch documentation, product testing and certification, vessel registration, and vessel inspection.

National Tuna Fishery Management Plan—continued**Division 6 - Application of the Plan—continued****Sub-Division 3 - Cost Recovery—continued****46. Cost Recovery—continued**

- (2) Any cost recovery program will have regard to whether a cost is attributable or not attributable to industry, and the efficiency of the service to be provided by NFA or other provider.
- (3) Under the Plan the costs attributable to industry will be progressively quantified and recovered. There will be a consultation process involving industry, and any decision will be made by the Board. Fees to be cost recovered will be included in an annexure to the Plan.

Sub-Division 4 - Other Fishing and Related Operations**47. Pole and line**

- (1) There is currently no pole and line fishery operating in the fishery management area.
- (2) Prior to approving the issue of any licence for pole and line fishing (other than a trial licence for a period no longer than three months) or any proposal for the establishment of a pole and line fishery the Board must cause a public notice to be published on the NFA website and in a newspaper with national circulation and inviting further proposals within a specified timeframe, and calling for public comment.
- (3) Prior to approving any proposal, the Board may determine how many fishing days are to be reallocated from the AWDS and VDS to pole and line fishing and an appropriate weighting for such days taking into account relative CPUE for both fisheries and ensuring there is no net increase in fishing effort and catch.
- (4) Any pole and line fishery is to be established as a vessel day scheme and the price for pole and line fishing days will be set to reflect economic factors, such as the potential for employment benefits from fishing and processing.
- (5) Any determination made by the Board in respect of any future pole and line fishery, including any fishery operational measures, shall be given effect by publication as an annexure to the Plan.

48. Mothership operations

- (1) Motherships are only permitted to service licensed purse seiners with limited tuna hold and freezer capacity. In accordance with the Act, only vessels with a carrying capacity of 600 metric tonnes or less may operate with motherships within the fishery management area.
- (2) Each mothership shall be subject to compulsory observer coverage, and compulsory port clearance, and must comply with the same reporting requirements as purse seine vessels, including any CDS, VMS and AIS requirements.
- (3) All licensed domestic and locally based foreign purse-seine fishing vessels, except where allowed for under the terms of the licence, are prohibited from taking on the role of a mothership.

49. Bunkering

- (1) Only licensed tanker or bunker vessels shall be permitted to conduct bunkering activities within the fisheries waters of PNG and only upon written approval of the Managing Director.
- (2) Bunkering and reports shall be in accordance with the licensing policies and guidelines in the Annexure.

National Tuna Fishery Management Plan—continued**ABBREVIATIONS RELEVANT TO THE PLAN, AND ASSOCIATED DOCUMENTS**

ACU	-	Audit and Certification Unit
ALC	-	Automatic Location Communicator
AW	-	Archipelagic Waters
CDCU	-	Catch Documentation and Certification Unit
CDS	-	Catch Documentation Scheme
CPUE	-	Catch Per Unit of Effort
CMM	-	Conservation and Management Measure
DWFN	-	Distant Water Fishing Nation
EEZ	-	Exclusive Economic Zone
FAD	-	Fish Aggregating Device
dFAD	-	Drifting Fish Aggregating Device
aFAD	-	Anchored Fish Aggregating Device
iFAD	-	Inshore Fish Aggregating Device
FFA	-	Forum Fisheries Agency
FIMS	-	Fisheries Information Management System
FSMA	-	Federated States of Micronesia Arrangement
FTE	-	Full Time Equivalent
HCR	-	Harvest Control Rule
IUU	-	Illegal Unreported and Unregulated (Fishing)
LOA	-	Length Overall
LLVDS	-	Longline Vessel Day Scheme
LRP	-	Limit Reference Point
MARPOL	-	International Convention for the Prevention of Pollution from Ships
MT	-	Metric Tonne
MTU	-	Mobile Transmitting Unit
eMTU	-	enhanced Mobile Transmitting Unit
NFA	-	PNG National Fisheries Authority
NFD	-	Non Fishing Day
NPOA	-	National Plan of Action
PALDS	-	Papua New Guinea Albacore Longline Day Scheme
PLDS	-	Papua New Guinea Longline Day Scheme
PNA	-	Parties to the Nauru Agreement
PAE	-	Party Allowable Effort
PNG	-	Papua New Guinea
PNG ACCD	-	Papua New Guinea Audit Certification and Catch Documentation
PNGFMA	-	Papua New Guinea Fisheries Management Area
PNGFV	-	Papua New Guinea Fishing Vessel
PSMA	-	Port State Measures Agreement
PSVDS	-	Purse Seine Vessel Day Scheme
SPC	-	Secretariat of the Pacific Community
TRP	-	Target Reference Point
TAE	-	Total Allowable Effort
UNCLOS	-	United Nations Convention on the Law of the Sea
UNFSA	-	United Nations Fish Stocks Agreement
USMLT	-	United States (of America) Multilateral Treaty
VDS	-	Vessel Day Scheme (Purse Seine or Longline)
VMS	-	Vessel Monitoring System
WCPFC	-	Western and Central Pacific Fisheries Commission

Dated this 28th day of July, 2025.

Hon. J. WONG,
Minister for Fisheries and Marine Resources.