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Fisheries Management Act 1998.

The National Tuna Fishery Management Plan

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NATIONAL TUNA FISHERY MANAGEMENT PLAN

I, RON G. GANARAFO, 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 me enabling, hereby give notice on the revised version of the <u>National Tuna Fishery Management Plan</u>. This plan supersedes the previous plan gazetted G35, 8th March 1999 and to take effect immediately.

ABBREVIATIONS

CPUE	-	catch per unit of effort
DWFN	-	Distant Water Fishing Nations
EEZ	-	Exclusive Economic Zone
FFA	-	Forum Fisheries Agency
FSM	-	Federated States of Micronesia
IPA	-	Investment Promotion Authority
MT	-	metric ton
NFA	-	National Fisheries Authority
OFP	-	Oceanic Fisheries Programme
PNA	-	Parties to the Nauru Agreement
PNG	-	Papua New Guinea
PNGFZ	. –	Papua New Guinea Fisheries Zone
SPC	-	Secretariat of the Pacific Community (formerly South Pacific Commission)
TAC	-	Total Allowable Catch
US	-	United States (of America)

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PART 1 - PRELIMINARY INFORMATION

1. INTRODUCTION

- (1) The *National Goals and Directive Principles* urges the nation's fisheries resources to be managed in a manner, which maximises Papua New Guinean participation through the wise use and development of the fisheries resources as a renewable asset.
- (2) The *Fisheries Management Act* and this Plan, to the extent that it is applicable, must be capable of supporting this level of resource management.
- (3) The **National Tuna Fishery Management Plan** has been established in accordance with Government policy and Papua New Guinea's international commitment.
- (4) This Plan is divided into three sections:- Preliminary Information, Management Framework, and Application Framework.
- (5) **Part I** provides the **Preliminary Information** outlining the parts of the Plan;
- (6) **Part II** provides the **Management Framework** for sustainable development of the tuna fishery, acknowledging Papua New Guinea's sovereign rights to manage highly migratory fish stocks, develop its domestic tuna fishing industry, and ensuring that the State and its people gain optimal benefit from the tuna resource. In consideration of the highly migratory nature of tuna, this framework adopts precautionary approach to management, taking into account the scientific information available for developing the resource, the need for regional and international cooperation in conserving and managing the resource, taking into account the need to continue to carry out research, and consideration of the customary, artisanal, and other users of the tuna resource.
- (7) **Part III** provides the **Application Framework** according to the management requirements provided for by the *Fisheries Management Act*. This framework covers the three principal fisheries namely:- (1) Longline Fishery; (2) Purse Seine Fishery; and (3) Pole-and-Line Fishery.

2. CITATION

This plan shall be cited as the NATIONAL TUNA FISHERY MANAGEMENT PLAN.

3. APPLICATION OF PLAN

- (1) The Plan applies to all activities by way of "fishing" as defined by *Fisheries Management Act* 1998.
- (2) The species covered by this Plan shall include;
 - (a) all tuna species; and
 - (b) all other non-target, associated or dependent species taken in the course of fishing for tuna.
- (3) The area of coverage by this Plan is all Papua New Guinea fisheries waters including the:-
 - (a) internal waters;
 - (b) territorial sea;
 - (c) archipelagic waters; and
 - (d) offshore waters.
- (4) This Plan covers
 - (a) all methods of fishing for tuna, including but not necessarily limited to;
 - (i) Surface Tuna Fisheries
 - (a) Purse seining
 - (b) Pole-and-line
 - (c) Trolling; and
 - (ii) Mid Water Tuna Fisheries
 - (a) Longlining
 - (b) Droplining

- (c) Handlining or single line fishing; and
- (b) all related activities, specified by **Part III**, including but not necessarily limited to:
 - (i) use of fish aggregation devices;
 - (ii) transhipping;
 - (iii) port calls;
 - (iv) bunkering;
 - (v) bait fishing;
 - (vi) mothership operations;
 - (vii) aircraft support operations; and
 - (viii) provisioning.

4. **REVIEW OF THE PLAN**

The National Tuna Fishery Management Plan shall be kept under review and revised when necessary.

PART II – MANAGEMENT FRAMEWORK

Division 1 - Description of the Tuna Resource

5. DESCRIPTION OF THE TUNA RESOURCE

- (1). The PNG tuna resource and the fishery can best be described in the following manner:
 - (a) The PNG Fisheries Zone (PNGFZ), located in the Western and Central Pacific compared to other tropical waters in the region, is highly productive as a result of its geographical and climatic location. It is influenced by localised upwellings associated with large number of islands, reefs and sea mounts, periodic extensions of the equatorial upwellings, seasonal monsoon upwellings and current reversals along the New Guinea north coast, and nutrient run-off from the highrainfall landmass;
 - (b) Productivity in the PNGFZ is also strongly influenced by *El Nino* events, being lower during such period noticeable for reduced equatorial upwelling, deeper mixed layer, higher temperature and lower salinity;
 - (c) The tuna species of principal interest in the PNGFZ are the offshore tunas, which include skipjack *Katsuwonus pelamis*, yellowfin *Thunnus albacares*, bigeye tuna *Thunnus obesus*, and albacore *Thunnus alalunga*;
 - (d) World production of tuna on an annual basis of around 3.2 million mt, of which skipjack comprises some 1.48 million mt (47.3%), yellowfin 1.19 million mt (37.9%), bigeye 283,000 mt (9.0%), and albacore 193,000 mt (6.1%);
 - (e) Approximately 1.2 million mt of this world catch is taken in the Central and Western Pacific ocean, with up to 30% of the regional tuna production coming from PNG in exceptional years and 20% in most years;
 - (f) The Oceanic Fisheries Programme (OFP) of the Secretariat of the South Pacific Community (SPC) maintains a Regional Tuna Database from which catches from all member countries are analysed;
 - (g) Over the past decade the estimated purse-seine catch from PNG waters exceeded 200,000 mt in three years, the highest being over 350,000 mt;
 - (h) The highest estimated catch in the longline fishery has been 19,500 mt in 1978. Since the domestication of the longline fishery in 1995, this young industry exported between 800 mt and 1000 mt annually over the past two years;
 - (i) Catch by the Japanese and PNG pole-and-line vessels in the early 1970s had peaked at 90,000 mt and almost 50,000 mt were landed by domestic vessels;

- (j) The OFP has estimated the monthly throughput of tuna into the PNGFZ to be 118,000 mt of skipjack and 30,000 mt of yellowfin, and the standing stock at 411,000 mt and 141,000 mt respectively;
- (k) Tuna in the PNG zone are taken largely by foreign operators to be processed offshore. The purseseine fishery has begun to develop locally with the establishment of a tuna cannery the RD Tuna Canners, Pty. Ltd. and supported by its fishing fleet, the RD Fishing – PNG, Pty. Ltd. as well as other private investor operations;
- (1) Domestication of the tuna longline fishery is being pursued strongly. The small scale operations of this domestic fishery, in terms of investment, work force, work skills and infrastructure requirements have combined well to generate high value products, making this to be a successful industry in the long run.

Division 2 – Objectives of the Plan

6. OBJECTIVES OF THE NATIONAL TUNA FISHERY MANAGEMENT PLAN

The broad objectives of the National Tuna Fishery Management Plan aspire to give effect to the fisheries management principles contained in the *Fisheries Management Act*, and specifically to:

- (a) Maximise benefits to Papua New Guinea from sustainable use of its tuna resource;
- (b) Satisfy Papua New Guinea's regional and international obligations to the management and conservation of tuna resources, while ensuring the national interest comes first and foremost;
- (c) Minimise any adverse impacts of tuna fishing and related activities on the marine environment;
- (d) Minimise any adverse impacts on the artisanal and traditional fishing sectors;
- (e) Improve decision-making in relation to management of the tuna fishery through effective information and communications network; and
- (f) Ensure that the provisions of this Plan are developed, implemented, administered and monitored in an efficient and cost-effective manner.

Division 3 – Management and Development of the Tuna Fishery

7. STRATEGIES

The following management strategies are adopted for the tuna fishery:

- (a) Establish a national Total Allowable Catch (TAC) for each relevant fishery, or by licence category;
- (b) Implement the limits set on fishing effort for tuna species, consistent with national TAC levels;
- (c) Encourage and facilitate sustainable development of Papua New Guinea's domestic tuna industry;
- (d) Develop and apply criteria for licensing which give preference to PNG operators;
- (e) Regulate the deployment and utilisation of artificial fish attractants, including anchored fish aggregation devices (FADs or payaos), that may cause gear conflict and fishery interaction, or have adverse biological impact on the tuna stocks;
- (f) Support fiscal and developmental incentives to invest in the domestic tuna industry;
- (g) Implement zoning where necessary to prevent localized tuna stock depletion, or gear conflict, to enhance the long term viability of locally-based industries;

- (h) Collect and validate scientific data on the status of tuna stocks towards national and regional stock assessments through use of regional log books, port sampling, scientific observers, and other reporting methods;
- (i) Promote industry involvement in research, including active use of industry vessels and knowledge towards improving stock assessment processes and providing data on their operations for the purpose of reviewing this Plan;
- (j) Develop and implement a policy to recover costs of management being incurred by NFA;
- (k) Monitor tuna fishing impact on associated or dependent species and, as necessary, adopt measures to ensure sustainable management;
- (1) Monitor licensed tuna fishery interactions with other users of the resource, and where necessary, implement measures to address adverse impacts;
- (m) Monitor the economic performance of the tuna fishery, including information on catches, sales, processing and other relevant information;
- (n) Implement a strategy to ensure responsible fishing, as required under international and regional conventions to which PNG is a party;
- (o) Facilitate active involvement in consultations on fishery management arrangements.

Specific management and development measures applying to each sector of the fishery are outlined under **Part III** of this Plan.

8. PRECAUTIONARY APPROACH TO FISHERIES MANAGEMENT

Papua New Guinea will apply a precautionary approach to the sustainable management of the tuna resource and non-target, associated or dependent species, taking into account the best scientific evidence available on the status of the stocks and the uncertainties inherent in that advice.

9. TOTAL ALLOWABLE CATCH

- (1) A Total Allowable Catch (TAC) shall be set for each fishery and licence category.
- (2) The NFA may review the TAC, taking into account results of scientific research, economic performance of the fishery, and any other factors that it may consider as relevant to the development of an efficient and sustainable operation of the tuna fisheries, and advise the Minister through the National Fisheries Board. The Minister may announce a new TAC from time to time.
- (3) The TACs for each fishery are described in Part III of this Plan for each fishery, as follows: *Division 2.* Longline Fishery *Division 3.* Purse-Seine Fishery *Division 4.* Pole-and-Line Fishery

10. CONTROL OF BY-CATCH

The by-catch from the tuna fisheries shall be managed through enforcing fishing licence conditions and/or subject to the reciprocating management requisites for other species or fisheries.

11. CONTROL OF FISHING EFFORT

- (1) The NFA may, from time to time, review catch levels of each tuna species or its licensing arrangements, and recommend changes to correspond to the level of fishing effort, type or methods of fishing, or the category of licence which is applicable in the tuna industry.
- (2) Such review may be prompted by, but not be restricted to;
 - (a) the TAC being approached generally, or by a respective fishery or by any licence category;

- (b) an opportunity to expand, or the need to reduce the level of fishing effort in line with new scientific evidence on the status of the stocks;
- (c) a need to adjust fishing effort in one sector because of adverse interaction with another, or localised stock depletion;
- (d) management initiatives taken at the regional or multilateral level, in particular sustainable levels of fishing on a stock-wide basis; and
- (e) following any new government policy initiatives.

12. CLOSED AREAS

- (1) The Board may, from time to time, by notice in the National Gazette, following a recommendation from the Managing Director, delineate specific areas to be closed to certain categories of fishing and other related activities including conservation, preventing interaction between different categories of licensed fishing vessels, interaction between commercial fishing vessels and noncommercial fishing operations.
- (2) The closed areas applied to each fishery are specified under Divisions 2, 3, and 4 respectively of **Part III** of this Plan.

13. ALLOCATION OF LICENCES

Allocation of licences shall be guided by the *Domestication Policy* which is set out in this Plan and in accordance with the **Application Framework** set out for each fishery under the respective Divisions 2, 3, and 4, of **Part III** of this Plan.

14. SCIENTIFIC RESEARCH

- (1) Scientific research programmes shall be drawn up to coordinate research priorities that ensure the sustainability of the tuna resource. This may include the biology and ecology of the tuna stocks, stock assessment and economic operation of the tuna fishery.
- (2) In accordance with the *Fisheries Management Act*, licensed operators are obliged to submit data on catch and effort and marketing for the purpose of this Plan. Data will be collected through approved forms, which may be amended from time to time.
- (3) The NFA may place observers on fishing and related vessels for the purpose of research and compliance. Fishing operators are obliged to cooperate with observers in accordance with the provisions of the *Fisheries Management Act*

Division 4 – Policy on Tuna Fishery Development

15. DOMESTICATION POLICY

- (1) The Minister may, from time to time;
 - (a) announce major initiatives designed to boost the development of the domestic tuna industry, and to maximise benefits to Papua New Guinea from the management and development of PNG's tuna stocks;
 - (b) announce policies setting out conditions of operation for domestic charter vessels, including fees and charges to be paid, provided that an increase in this category reduces foreign access.
- (2) Notwithstanding the overall objective of the **National Tuna Fishery Management Plan**, which is aimed at sustainable exploitation of the tuna resource, the principle objective of this policy is to promote an increased rate of participation by Papua New Guineans in the tuna industry.
- (3) Guidelines and conditions, which support the policy, are therefore required for licensing and

operation of all vessels in the tuna fishery, so that potential investors are aware of the Government's requirements. Guidelines and conditions for allocating licences are set out in **Part III** of this Plan.

16. CUSTOMARY AND ARTISANAL FISHERS

Special consideration shall be given to avoid any adverse impacts on customary resource owners in accordance with *Section 26* of the *Fisheries Management 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.

17. GAMEFISH FISHERY

- (1) The gamefish fishery is in its infancy in Papua New Guinea, but the scope for expansion in this fishery is great. Tuna longline, tuna purse seine and tuna pole-and-line fisheries also catch species that are targeted by gamefish fishermen and the degree of interaction, scientific quality data and comprehensive information on catch and effort from licensed operators are required to be able to understand the fishery better.
- (2) Invocation of *Section 29* of the *Fisheries Management Act* will be necessary, which requires licensed operators in the tuna fisheries, including the gamefish fisheries, to supply records, returns and other information deemed necessary for the management, development and conservation of the fishery resources in PNG waters.

Division 5 - Monitoring of the Plan

18. NATIONAL AND REGIONAL TUNA RESEARCH AND MONITORING

- (1) The NFA shall carry out a programme of research on PNG's tuna stocks including monitoring of the fisheries with a view to developing an information base and capability to quantify the magnitude of tuna catches in PNG waters including inter-annual variability and catch per unit effort (cpue), the species breakdown of catches, and size structure by species in the catches.
- (2) PNG shall continue to work with regional management bodies involved in research and monitoring of the tuna fishery, which is to be published in annual reports.

19. MONITORING, COMPLIANCE AND SURVEILLANCE

- (1) The NFA shall, through its surveillance programme, strive to protect the tuna stocks from illegal exploitation. The programme shall apply the strategic use of observers and fishery officers on licensed fishing vessels.
- (2) The NFA shall maintain close liaison and consultation with regional organizations on all matters relating to vessel register and regional cooperation on surveillance and harmonised minimum terms and conditions for licensing fishing vessels, including its participation in satellite monitoring systems for foreign and domestic licensed vessels.

PART III – APPLICATION FRAMEWORK

Division 1 – *Interpretation*

20. INTERPRETATION

In this Plan, unless the contrary appears, each word or group of words has the same meaning, if any, as it has in the *Fisheries Management Act*, except where this differs as provided below: -

"Act" means the Fisheries Management Act as amended from time to time;

"Archipelagic Waters" means the area of water defined in the National Seas Act 1977;

"Bunkering" means taking on fuel;

"By-Catch" means all other species of fish caught in the course of fishing where tuna is the target species;

"Fishery Management Area" means the specified area to which the fishery plan relates;

"Fresh Chilled Operation" means a fishing operation which stores tuna in ice or chilled water at not lower than minus 4 °C and where the tuna are fresh chilled and not frozen;

"Freezer Operation" means a fishing operation that stores tuna below minus 4°C and where the tuna are frozen;

"Locally-Based Foreign Fishing Vessel" means a chartered foreign fishing vessel which operates from Papua New Guinea during its licensing period and lands or tranships an approved portion of its catch in Papua New Guinea as an export of Papua New Guinea;

"Mothership" means a marine vessel, which has the capability to carry and store tuna, to supply catcher vessels with the requisites for fishing, and to transport catches from fishing vessels at the fishing ground to a port of operation in Papua New Guinea;

"Six - Mile Limit" means that sea area within six (6) miles of any land, island or declared reef;

"Territorial Sea" means that sea area within twelve (12) miles from the Territorial Sea baseline, as defined in the *National Seas Act 1977;*

"Tuna Stock" means a discrete breeding population of a particular tuna species;

"Twelve - Mile Limit" means that sea area within twelve (12) miles of any land, island or declared reef.

Division 2 – Longline Fishery

21. PREAMBLE

In line with the objectives of the Plan, the following management and development measures shall be imposed for the longline fishery.

22. LIMITS ON FISHING LICENCES

Only longline fishing vessels licensed to fish under the *Fisheries Management Act 1998* shall operate in Papua New Guinea fisheries waters. The total number of longline tuna fishing vessels to be licensed shall be 100. This is based on a calculation of the catching capacity of a longline vessel setting of 1,200 hooks per day.

23. TYPE OF OPERATIONS

- (1) Fresh chilled vessels, along with a limited number of freezer vessels, shall be the principal type of operation licensed to operate in the tuna longline fishery. Fresh chilled vessel operators shall be allowed to retain a percentage of frozen products as part of their operation. This percentage shall be imposed by conditions on their licence.
- (2) National companies may charter foreign registered vessels to be based in PNG to operate only as fresh chilled vessels. National companies may only operate foreign registered longline vessels if they already own longline vessels registered in PNG. Upon advice by the National Fisheries Board, the Minister may, from time to time, announce the number of foreign vessels that a national company may charter.

24. ALLOCATION OF LICENCES

(1) Fishing licences in respect to tuna longline fishing shall be issued only to Papua New Guinea registered and flagged vessels and locally-based foreign fishing vessels operated by Papua New Guinean companies.

(2) On allocating licences, preference shall be given to national fishing companies being PNG registered and flagged vessels. The number of licences to be allocated to each category and type of operation shall be in accordance with **Schedule 1**.

25. TOTAL ALLOWABLE CATCH FOR THE TUNA LONGLINE FISHERY

The total allowable catch (TAC) for tuna longline fishery in the fisheries waters of Papua New Guinea shall be 10,000 mt per annum.

26. GUIDELINES FOR THE OPERATION OF COMPANIES AND OPERATORS OF CHILLED AND FROZEN TUNA LONGLINE VESSELS

To assist the progressive growth of a domestic tuna longline fishery and to promote PNG citizen and national companies participating in the industry, a set of guidelines is approved hereto by the Minister. These guidelines as follows, are:-

- (a) In the interest of meaningful Papua New Guinean participation in this developing industry, tuna longline ventures will be restricted to citizens and national companies. Ventures with more than 49 percent foreign shareholding shall not be permitted.
- *(b) No domestic licensed boat shall be permitted to land catch or product directly to an overseas port.*
- (c) Wet charters shall not be permitted. However, dry charter of foreign vessels shall be permitted in the short term. All charters shall be on a quota arrangement where each company must have in operation one (1) PNG-owned boat to one (1) chartered boat. Charters shall be permitted only where domestic capacity is insufficient.
- (d) Chartered boats shall be subject to the national safety and survey standards under the Merchant Shipping Act, administered by the Department of Transport, and shall require Customs clearance, before being licensed.
- (e) To avoid a monopoly situation in this limited fishery, no single fleet shall be allowed to exceed either twenty (20) boats total (owned and chartered) or have a combined capacity to fish (set) greater than 24,000 hooks per day.
- (f) Lease-purchase agreements are encouraged but shall be regarded in the same way as dry charter boats under these guidelines.
- (g) In applying for tuna longline licence, the gear must be specific to tuna longline gear specification and inspected and certified by NFA or an independent expert, before issuance of licence.
- (h) PNG fisheries observers shall be placed on board, from time to time, to monitor the operations and ensuring that the operations target only tuna.
- *(i) Fishing using longline gear is prohibited within 6 miles from any land or island or declared reef.*
- *(j) The use of satellite monitoring shall be made compulsory as soon as the capability is in place.*
- (k) Freezer vessels (below $-4^{\circ}C$) shall be allowed under the following conditions;
 - (i) Boats to be registered and owned, or chartered by PNG citizen companies; and
 - (ii) Boats must land and export their product through a PNG port.

27. AREAS OF OPERATION

The licence shall specify the areas of operation and shall be issued in accordance with the following:

PNG Registered and Flagged Vessels and Locally- Based Foreign Vessels

- (a) Territorial Sea*
- (b) Offshore Waters
- (c) Archipelagic Waters
- *Except within six (6) miles from any land, island or declared reef.

Areas where access is strictly prohibited, unless stated otherwise in the terms of the licence, include:

Six (6) miles from any land, island or declared reef.

29. TRANSFER AT SEA

Transfer of longline tuna catch at sea shall be permitted between licensed longline vessels subject to landing of the product at a PNG port.

30. RELATED ACTIVITIES

- (1) Management of the longline fishery may take into account all related activities, including but not necessarily limited to:
 - (a) use of fish aggregation devices;
 - (b) transhipping;
 - (c) port calls;
 - (d) bunkering;
 - (e) bait fishing;
 - (f) mothership operations;
 - (g) interactions with purse seine operations and pole-and-line operations; and
 - (h) provisioning.
- (2) Preference shall be granted to fishing operators utilizing PNG based suppliers and groups or companies providing related services.

Division 3 - Purse Seine Fishery

31. PREAMBLE

In line with the objectives of the Plan, the following management and development measures shall be imposed for the purse seine tuna fishery.

32. LIMITS ON FISHING LICENCES

- (1) Only purse seine vessels licensed to fish, prescribed by the *Fisheries Management Act*, may operate in the fisheries waters of PNG.
- (2) On allocating licences, the National Fisheries Board shall give first priority to purse seine vessels registered and flagged in PNG and secondly to locally-based foreign vessels operated by Papua New Guinea fishing companies. The total number of licences to be allocated to licensed purse seine fishing vessels, shall be 100.

33. TOTAL ALLOWABLE CATCH

The total allowable catch (TAC) for the tuna purse seine fishery in the fisheries waters of Papua New Guinea shall be 338,000 mt per annum. This TAC is inclusive of skipjack, yellowfin and bigeye tunas.

34. ALLOCATION OF LICENCES

- (1) On allocating purse seine fishing licences, consideration shall be given to current and future regional or international arrangements to which PNG is a party. These include the:
 - (a) Palau Arrangement for the Management of the Western Pacific Tuna Purse-Seine Fishery.
 - (b) Federated States of Micronesia Multilateral Arrangements for Regional Fisheries Access (FSM Arrangement).
 - (c) Treaty on Fisheries between the Governments of Certain Pacific Island States and the Government of the United States of America (US Treaty).
 - (d) Bilateral Agreements between fishing companies, fishing associations or Governments of

distant water fishing nations (DWFN).

(2) The TAC shall be allocated to licensed purse seiners in accordance with catch levels per licence category as set out in Schedule 2.

35. MOTHERSHIP OPERATIONS AND TRANSHIPMENT

- (1) Only vessels with carrying capacity of 600 mt or less may operate with motherships within the PNGFZ. Each mothership shall be subject to compulsory observership, compulsory port clearance and must comply with the same reporting requirements as for purse seine vessels.
- (2) All licensed domestic and locally-based foreign purse-seine fishing vessels and licensed motherships, except where allowed for under the terms of the licence, are prohibited from transhipment in the PNGFZ and on the high seas.

36. GUIDELINES FOR THE OPERATION OF LOCALLY-BASED FOREIGN VESSELS IN THE TUNA PURSE SEINE FISHERY

- (1) To assist in the development of the PNG domestic purse seine fishery is a set of guidelines to operate locally-based foreign purse seine vessels, approved hereto by the Minister. These guidelines are:-
 - (a) Approval to operate locally-based foreign fishing vessels given only to companies that are defined by the *IPA Act* as, citizen companies and national companies;
 - (b) Approval to continue operating will only be given if IPA requirements are observed;
 - (c) Locally-based foreign vessels must operate from a PNG port;
 - (d) All fish taken by locally-based foreign vessels within the EEZ and on the high seas must be landed in PNG for processing or transhipped as PNG export from a designated port;
 - (e) Locally-based foreign vessels shall be allowed to operate solely in the EEZ.
 - (f) Locally-based foreign vessels shall be granted licence for one (1) year, subject to annual renewal, the licence conditions may be reviewed at anytime;
 - (g) The review shall consider the extent of the company's domestic involvement in catching, processing and marketing of tuna taken under such licences, following which NFA shall determine conditions appropriate for further issuance of licence;
 - (h) Locally-based foreign vessels shall be required to comply fully with all reporting requirements of the *Act*, including its *Regulations*, the *Tuna Fishery Management Plan* and licence conditions;
 - (i) Observers shall be placed on vessels with conditions similar to the vessel crew at the expense of the operation, as prescribed by the *Fisheries Regulations*.
 - (j) In addition to the licence fee prescribed by the *Regulations*, there shall be a charge for locally-based foreign vessels for access to the tuna resource. The National Fisheries Board shall consider the appropriate level of access fee to be assessed in a like manner to vessels licensed under the FSM Arrangement charging a nominal fee of 2.5% as follows:

Access Fee = Average regional catch per vessel x Average price of tuna x 2.5%.

- (k) Licensing procedures shall be applied in accordance with the *Fisheries Management Act* 1998.
- (2) These guidelines shall allow the expansion of a locally-based fleet in the purse seine fishery, up to the limit stated in the Plan. If there is demand for licensing such vessels in excess of this number, this may be accommodated by further reducing the number of vessels licensed under *Bilateral Access Agreements*.

37. AREAS OF OPERATION

The licence conditions of purse seine vessels described below, shall set out the areas of operation as:

- *(i) PNG registered and flagged purse seine fishing vessels.*
 - (a) Territorial Sea *
 - (b) Archipelagic Waters
 - (c) Offshore Waters

* Except within Twelve (12) miles from any land, island or declared reef.

(ii) Locally-based foreign purse seine fishing vessels on charter.(a) Offshore Waters

(iii) Bilateral access agreement, multilateral arrangement or treaties licensed purse seine fishing vessels.

(a) Offshore Waters

38. PROHIBITED AREAS

Areas where access is strictly prohibited, unless stated otherwise in the terms of the licence, include:

Twelve (12) miles from any land, island or declared reef.

39. RELATED ACTIVITIES

- (1) Management of the purse seine fishery shall take into account all related activities, including but not necessarily limited to:
 - (a) use of fish aggregation devices;
 - (b) transhipping;
 - (c) port calls;
 - (d) bunkering;
 - (e) mothership operations;
 - (f) aircraft support operations;
 - (g) interactions with longline operations and pole-and-line operations; and
 - (h) provisioning.
- (2) Preference shall be granted to fishing operators utilizing PNG-based suppliers and groups or companies providing related services.

Division 4 - Pole-and- Line Tuna Fishery

40. PREAMBLE

In line with the objectives of the Plan, the following management and development measures shall be imposed for the pole-and-line tuna fishery.

41. LIMITS ON FISHING LICENCES

- (1) Access to this fishery may be granted only to PNG registered and flagged vessels and locally-based foreign vessels operated by PNG companies.
- (2) Currently there are no licensed pole-and-line vessels operating in the fishery, as vessels come into the fishery, appropriate number of licences shall be allocated and level of effort adjusted through reduction of number of licences in *Category C* of **Schedule 2**.

42. TOTAL ALLOWABLE CATCH FOR POLE-AND-LINE TUNA FISHERY

- (1) The total allowable catch (TAC) for the pole-and-line tuna fishery in the PNGFZ shall be 20,000 mt per annum, but may be increased as demand arises, or if not taken, shall be transferred to the purse seine fishery.
- (2) This TAC is declared the most suitable sustainable harvest target allowing for an acceptable level of risk, given the present state of knowledge on the tuna resource and catch levels, and where there is

currently no pole-and-line fishing operation in PNGFZ.

43. AREAS OF OPERATION

The licence conditions of the category of vessels described below shall set out areas of operation as follows:

- (a) PNG Registered and Flagged Vessels
 - (i) Territorial Sea *
 - (ii) Offshore Waters
 - (iii) Archipelagic Waters

* Except within twelve (12) miles of any land, island or declared reef.

- (b) Locally-Based Foreign Vessels
 - (i) Territorial Sea* ψ
 - (ii) Archipelagic Waters* ψ
 - (iii) Offshore Waters

* *Except within twelve (12) miles of any land, island or declared reef.*

 ψ Provided that they land their catch to PNG shore-based facilities. Locally-based foreign fishing vessels may operate in the archipelagic waters, and the territorial sea for a period of five (5) years from first issue of licence which must then be licensed as a PNG registered and flagged fishing vessel to qualify for such access.

44. **PROHIBITED AREAS**

Areas where access is strictly prohibited, unless stated otherwise in the terms of the licence, include:

Twelve (12) miles from any land, island or declared reef.

45. RELATED ACTIVITIES

- (1) Management of the pole-and-line fishery shall take into account all related activities, including but not necessarily limited to:
 - (a) use of fish aggregation devices;
 - (b) transhipping;
 - (c) port calls;
 - (d) bunkering;
 - (e) bait fishing;
 - (f) mothership operations;
 - (g) interactions with longline operations and purse-seine operations; and
 - (h) provisioning.
- (2) Preference shall be granted to fishing operators utilizing PNG based suppliers and groups or companies providing related services.

SCHEDULE 1

The category or type of operation of Tuna Longline Fishing Vessels to be allocated licence.

Licence Category	Number of Licences
PNG registered and flagged fresh chilled vessels	70 licences
Locally-based foreign vessels (provided that this category will be the first category reduced as PNG registered and flagged vessel capacity increases)	10 licences
Freezer Vessels (applies only to 100% nationally owned companies)	20 licences

SCHEDULE 2

The category or type of operation of the Surface Tuna Fishery to which certain catch levels are to be allocated
and licensed.

Licence Category		Allocated Catch Level
A.	PNG Registered and Flagged Vessels; and Locally-Based Foreign Fishing Vessels	The overall TAC shall be a rolling average taken over a three-year period to take into account the possibility of the TAC being exceeded in any one year as a result of additional operation of PNG fishing vessels brought into this fishery in excess of the estimated number. Such an increase shall also result in a corresponding reduction to the number of licences allocated for bilateral licence vessels. No limit on the number of vessels is allotted nor the level of catch; provided that the tonnage to be taken shall be (estimated) at:
		60,000 metric tons
В.	FSM Arrangement Vessels; and US Treaty Vessels	Access to PNG waters by US vessels and regional vessels is governed by a Treaty and an Arrangement. Access is paid to PNG, based on the amount of catch made in the PNG fisheries waters. The allocated catch for this category shall be a rolling average of three years and shall be: 20,000 metric tons
C.	Bilateral Agreement Vessels	258,000 metric tons
fro	tal Allowable Catch taken m PNG Fisheries Waters nually	338,000 metric tons

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