

ASIAN DEVELOPMENT BANK

TAR:OTH 36669

TECHNICAL ASSISTANCE

FOR

**ALTERNATIVE NEGOTIATING ARRANGEMENTS TO INCREASE FISHERIES
REVENUES IN THE PACIFIC**

October 2003

ABBREVIATIONS

ADB	–	Asian Development Bank
CMFS	–	Conservation and Management of Highly Migratory Fish Stocks
DWFN	–	distant water fishing nation
EEZ	–	exclusive economic zone
FFA	–	Forum Fisheries Agency
FFC	–	Forum Fisheries Committee
PDMC	–	Pacific developing member country
SPC	–	Secretariat of the Pacific Community
t	–	tons
TA	–	technical assistance
US treaty	–	United States Fisheries Multilateral Fisheries Treaty with certain Pacific Island countries
WCPO	–	Western and Central Pacific Ocean
WCPTC	–	Western and Central Pacific Tuna Commission

NOTE

In this report, "\$" refers to US dollars.

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I. INTRODUCTION

1. The Forum Fisheries Agency (FFA), on behalf of its governing body the Forum Fisheries Committee, approached the Asian Development Bank (ADB) in 2002 for assistance in formulating alternative license fee arrangements in light of the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean adopted on 5 September 2000 (the CMFS Convention). The concept paper was included in Pacific Department's regional technical assistance (TA) plan for 2003.¹ The TA framework is in Appendix 1.

2. The tuna fishery in the western and central Pacific Ocean (WCPO) is the largest and one of the most productive in the world, with an average annual catch fluctuating around 1.8 million metric tons (t) during 1996–2000. The catch had an annual average monetary value of nearly \$2 billion. Annual revenue² from license fees flowing to FFA's member countries³ is approximately \$60.3 million and increasing this revenue from licensing is a high priority for FFA member countries.

3. The declaration of exclusive economic zones (EEZs) from the 1970s on, sanctioned under the 1982 United Nations Convention on the Law of the Sea, enabled FFA member countries to introduce fishing access agreements with the distant water fishing nations (DWFNs) and license fees were approximately 4% of the landed value of the catch. This return has since increased to 5–6%⁴ but comparisons with other license agreements outside the Pacific region suggest that revenues may be increased.⁵

4. The adoption of the CMFS Convention (Appendix 2) envisages the introduction of specific fish quota allocations to the Pacific island states and the DWFNs. FFA member countries need to prepare for these changes while continuing to receive the benefits from their tuna resources. The current access arrangements and agreements only address the maximum number of purse seiners,⁶ but offer no mechanisms to deal with actual catch allocations or the potential to increase license fees by creating competition for licenses and/or facilitating changes to the current licensing arrangements.

II. ISSUES

5. Tuna catches from the WCPO represent approximately a third of the world's total landed catch. The benefits generated by the tuna fishery in the WCPO offer for many Pacific developing member countries (PDMCs)⁷ one of the few avenues to prevent continued economic stagnation. The present catch levels of the Pacific tuna fishery are considered sustainable and the stocks of the main four commercial tuna species are in a healthy state, although there have

¹ The Project first appeared in *ADB Business Opportunities* (Internet edition) on 31 July 2003.

² ADB. 2001. Tuna: A Key Economic Resource in the Pacific. *Pacific Studies Series*. Manila

³ The 17 members of FFA are: Australia, Cook Islands, Fiji Islands, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu and Vanuatu.

⁴ \$60.3 million corresponds to around 3% of the value. The discrepancy between this figure and the average of 5% obtained in license fees stems from domestically-based seiners that pay less, and the catches taken outside the EEZs.

⁵ The European Union fleet off West Africa for example pays 8-9% in license fees, but subsidies could be part of this.

⁶ Purse seining targets surface skipjack using huge encircling nets, which are then closed in the bottom (purse) before the catch is taken onboard.

⁷ Includes Cook Islands, Fiji Islands, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

been some concerns over the status of the bigeye and yellowfin stocks. However, the long-term catch trends and the length-frequency data (a measure of the extent of overfishing) of the main commercial tuna species need to be documented as underpinning evidence of an existing sustainable fishery and therefore strengthened bargaining power in future access negotiations.

6. DWFN fleets dominate the commercial tuna fishery in the WCPO. In general, access to the EEZs for foreign fishing vessels has been provided through bilateral arrangements between the PDMCs and the governments, fishing associations, or individual companies from the DWFNs. Only one multilateral arrangement, a United States Fisheries Multilateral Fisheries Treaty with certain Pacific island countries in 1987 (US treaty), has been concluded, but efforts to conclude similar arrangements with Japan, the Republic of Korea, Taipei, China, and the European Union, have not been successful. However, a more recent trend in some PDMCs with large and year-round tuna resources has been to issue long-term access agreements against DWFN investment in onshore fish processing facilities. The economic benefits in the form of employment and economic growth can be substantial and the implications of this development trend should be evaluated. With the uneven distribution of the tuna resources in the Pacific ocean, the better endowed countries are unlikely to agree to share their revenue with the less endowed—as is the case with the US treaty.

7. The adoption of the CMFS Convention envisages the establishment of effective management regimes by Pacific island states and introduces new elements into the tuna fishery. Sustainability of the fishery is the goal and various measures will be applied to ensure tuna conservation. This new development appears to offer opportunities for Pacific island countries to increase their benefits from their tuna resources as total allowable catch quotas are likely to increase the value of access.

8. The Palau Arrangement⁸ dated October 1992 specifies a limit of 205 purse seiners to operate in the WCPO. Five DWFNs were originally allocated a specific number of vessels each and a certain number of vessels were earmarked for the Pacific island states. In the last few years, the Palau Arrangement has been under pressure due to an increase in the number of vessels and new entrants seeking licenses, and has only held together using short-term solutions taking advantage of the fact that the number of United States vessels is below the allocated ceiling.

9. Despite a long history of licensing foreign tuna fishing vessels, the balance of power when negotiating access with the fishing states has not typically favored the Pacific island states. The PDMCs have, for some time, recognized the disparity between the fees that they negotiate and the reported value of the fishery, but have been hampered in negotiating increased returns by a number of constraints. The constraints include general institutional weaknesses, secrecy and nontransparency in the negotiations, the economic and political power of the DWFNs, competition among Pacific island countries, and data and surveillance shortfalls. The latter is being rectified, with the agreement that all fishing vessels are to carry tracking devices.

10. A range of approaches has been used for calculating and negotiating license fees, typically targeted at recovering approximately between 5–6% of the landed value of the catch, but often associated with aid assistance of various forms, which makes the "raw" license fee somewhat difficult to calculate. The limited capacity of Pacific island states to verify reported

⁸ Parties to the Palau Arrangement comprise Kiribati, Marshall Islands, Federated States of Micronesia, Palau, and Papua New Guinea.

catches by surveillance mechanisms or by comparative analysis of landed catches against reported log sheets, also makes the current calculation of revenues and fees difficult. Pacific island states have in general maintained an ethic of regional cohesiveness on issues where there are clear collective benefits like the US treaty, and on a number of subregional fisheries management arrangements. However, details concerning bilateral negotiations and agreements tend not to be available between Pacific island states and are in general being kept secret, using “commercial confidentiality” as the excuse. This lack of shared information contributes toward reduced negotiating power as the individual governments have no mechanism for evaluating if the license fees negotiated are fair in comparison with other countries in the region. To eliminate the opportunity for DWFNs to negotiate license fees inequitably among PDMCs, transparent mechanisms for licensing must be promoted across the region. Transparency and good governance serve to reduce and deter the temptation to employ corrupt practices during negotiations.

11. The nature of foreign fishing access arrangements has changed very little during the last 10 years. Thus, the adoption of the CMFS Convention, with its introduction of total allowable catches, provides a timely and good opportunity to review the various arrangements and look at options for Pacific island states to increase the benefits that they can generate from their tuna resources. Alternatives to the traditional license arrangements—including, e.g., the use of charters and rights based management—should be options available for the PDMCs once the commission for the CMFS Convention begins its work in earnest.

III. THE TECHNICAL ASSISTANCE

A. Purpose and Output

12. The purpose of the TA is to increase the returns from fishing license agreements to FFA member countries. The output is the formulation of possible alternative license arrangements, to position the FFA member countries with options for increasing the revenues from license fees in light of the pending introduction of a total allowable catch regime. Given the differences between many PDMCs, notably the uneven and fluctuating distribution of the tuna stocks, investment policies, and infrastructure, the alternative arrangements will likely have different applicability for the different PDMC groupings. FFA member representatives, from departments of fisheries and ministries of finance, will be presented with the output at a workshop for discussion and endorsement. The endorsed version will be presented to the Forum Fisheries Committee for its approval for presentation to the Pacific Islands Forum and later submitted to the annual Forum Leaders meeting in August 2004. The findings will be published in ADB’s *Pacific Studies Series* for wide distribution in the region and beyond.

13. The output should facilitate more harmonized and transparent license negotiations to help the FFA member countries extract the maximum revenue from their resources. As the value of a fishery ultimately hinges upon the sustainability of the catches, a supporting output will be to convincingly demonstrate whether the various tuna fish stocks are being overexploited.

B. Methodology and Key Activities

14. The TA will analyze catch and length-frequency data for the last 15 years of the four main commercial tuna fish species caught in the WCPO. The data will be provided from the database at the Secretariat of the Pacific Community (SPC) in Noumea. An international consultant will translate the data into a write-up in lay person's language verifying whether the

tuna catch levels in the WCPO are sustainable. The TA will also (i) document the existing access agreements and license arrangements (government-to-government, government-to-industry, and government-to-company) and the current levels of returns to the FFA member countries, including the direct and indirect costs and benefits from these access arrangements; and (ii) formulate a discussion paper identifying alternative methods and arrangements to negotiate license fees arrangements, based on the expected higher attractiveness for access in a total allowable catch regime and taking into consideration subregional comparative advantages.

15. PDMCs will be visited for in-depth verification of data from member countries. Discussions with selected representatives from the DWFNs will be undertaken to gauge the feasibility of and interest in alternative license agreements. A draft final report will be circulated to the relevant departments in all FFA member countries for comments prior to the workshop to finalize and endorse the report's recommendations.

C. Cost and Financing

16. The total cost of the TA is estimated at \$372,000 equivalent (detailed cost estimates are in Appendix 3). ADB has been requested to finance the costs of international consultants (remuneration, per diem, and travel), data collection, reporting, publication, and participation of FFA member country officials in the regional workshop at a total cost of \$300,000. FFA will finance the remaining \$72,000. The TA will be financed on a grant basis by ADB's TA funding program.

D. Implementation Arrangements

17. FFA will be the Executing Agency for the TA. FFA's mission is "to enable members to manage, conserve, and use the tuna resources in their EEZs and beyond, through enhancing national capacity and strengthening regional solidarity."⁹ The agency is involved in regional fisheries management activities and providing its services to its members at the national level on a request basis. The director of FFA will have overall responsibility for the TA but the practical implementation will be vested with the manager of the Economic and Marketing Division, who will be the TA leader. The division will submit quarterly progress reports to ADB. The director of the Marine Resources Division at SPC will be the focal point for providing the statistical data.

18. The TA is expected to begin in November 2003 and be concluded not later than the scheduled Pacific Islands Forum meeting in August 2004.

19. FFA will receive an advance of up to \$60,000 for undertaking all arrangements in connection with the regional workshop, and will be responsible for paying for participants' travel, per diem, and accommodation, and for workshop proceedings, etc.¹⁰ All advances will be liquidated in accordance with ADB's guidelines. FFA is uniquely positioned to undertake this role as it has implemented two previous TAs.¹¹

⁹ FFA's mission statement.

¹⁰ FFA will submit a detailed cost estimate for ADB approval as the basis for any advances.

¹¹ ADB. 1993. *Technical Assistance for Tuna Industry Development Study*. Manila. (TA 5566-REG), and ADB. 1998. *Technical Assistance for Development of an International Fisheries Agreement for the Conservation and Management of the Tuna Resources in the Western and Central Pacific Region*. Manila. (TA 5815-REG).

20. The TA will provide a total of 9 person-months of consulting services in addition to the services provided by FFA. Three individual international consultants will be recruited, in (i) fisheries management and licensing (team leader), (ii) fisheries agreements, and (iii) scientific editing. The consultants will serve for a total of 7 person-months, and 2 person-months are unallocated due to the inherent uncertainty within the fisheries sector of information and statistic availability. The consultants will be engaged by ADB in accordance with ADB's *Guidelines on the Use of Consultants*. The team leader will be required to work part-time at SPC's and FFA's headquarters. (Outline terms of reference are provided in Appendix 4.)

21. The recommendations of the report will be disseminated to all concerned parties of the FFA member countries. In addition, the final report, including the sustainability aspects of the tuna resources in the WCPO, will be published in ADB's *Pacific Studies Series* for wide distribution according to the Pacific Department's mailing list.

IV. THE PRESIDENT'S DECISION

22. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$300,000 on a grant basis for Alternative Negotiating Arrangements to Increase Fisheries Revenues in the Pacific, and hereby reports this action to the Board.

TECHNICAL ASSISTANCE FRAMEWORK

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
Goal Improve national finances and welfare through good governance and transparent access negotiations.	Endorsement of findings by Forum Fisheries Committee and presented for adoption at the annual Forum Leaders meeting in August 2004.	Adoption of the recommendations in the discussion paper.	No adverse impact on the bilateral relationship between the foreign fishing fleet and the Forum Fisheries Agency (FFA) member countries following the adoption of improvements and new license fees options. Political will among FFA members remains high. Tuna stocks remain healthy.
Purpose Increase returns for fishing license agreements and/or access agreements to FFA member countries.	10-20% increase in value of access agreements for at least 50% of the Pacific developing member countries (PDMCs) within 3 years of completion of the technical assistance (TA).	Final report.	Availability of data and related information.
Output Formulate possible alternative license arrangements or access agreements generating revenues over existing arrangements, underpinned by catch sustainability documentation.	Regional workshop supports the findings and recommendations of the TA.	Discussion paper.	Alternative and better options for license fees and/or access agreements can be identified.
Activities Review the options for the access of foreign fishing vessels in the FFA member countries. Document the catch sustainability of the 4 major tuna species in the western and central Pacific Ocean (WCPO).	Improvements in the licensing arrangements. Introduction of alternative approaches on license fees. Implementation of the changes and alternative approaches in licensing	Progress report(s). Report of the review.	Easy access to the licensing arrangements' information. Availability of data and related information.

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
<p>Undertake selected visits to PDMCs and distant water fishing nation (DWFN) countries.</p> <p>Analyze the current licensing arrangements.</p> <p>Analyze the returns from the major access arrangements.</p> <p>Analyze the effectiveness of the current license fees.</p> <p>Identify and analyze alternative approaches to license fees in the tuna fishery.</p> <p>Identify the requirements necessary to implement the alternative options.</p> <p>Present the report and its recommendations at a workshop attended by all FFA members.</p>	arrangements.		
<p>Inputs</p> <p>Three individual consultants for a total of approximately 7 person-months, and 2 person-months unallocated:</p> <p>Fisheries management and license specialist</p> <p>Fisheries agreements specialist</p> <p>Science editor</p>	<p>Consultants fielded according to contract.</p> <p>TA budget: \$372,000</p>		<p>Consultants with relevant experience are available within the time frame.</p>

DWFN = distant water fishing nation, FFA = Forum Fisheries Agency, PDMCs = Pacific developing member countries, TA = technical assistance, WCPO = Western and Central Pacific Ocean

REGIONAL ORGANIZATIONS

1. The Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (the CMFS Convention) was adopted in Honolulu on 5 September 2000. It is one of the first regional fisheries agreements to be adopted since the conclusion in 1990 of the agreement for the implementation of the provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 (the Law of the Sea Convention), relating to the conservation and management of straddling fish stocks and high migratory fish stocks.
2. The objective of the CMFS Convention is to ensure, through effective management, the long-term conservation and sustainable use of highly migratory fish stocks in the western and central Pacific Ocean, in accordance with the Law of the Sea Convention and the 1995 Agreement. For this purpose, the CMFS Convention establishes the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (the Commission). The contracting parties to the CMFS Convention are, automatically, members of the Commission.
3. The CMFS Convention applies to all species of highly migratory fish stocks (defined as all fish stocks of the species listed in Annex I of the Law of the Sea Convention occurring in the CMFS Convention area and such other species of fish as the Commission may determine) within the CMFS Convention area, except sauries. Conservation and management measures under the CMFS Convention are to be applied throughout the range of the stocks, or to specific areas within the CMFS Convention area, as determined by the Commission. The CMFS Convention area is defined in article 3 of the CMFS Convention.
4. The CMFS Convention was open for signature for 12 months from 5 September 2000 by the states that participated in the Multilateral High-Level Conference on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific: Australia; Canada; The People's Republic of China; Cook Islands; Fiji Islands; France; Indonesia; Japan; Kiribati; Republic of Korea; Marshall Islands; Federated States of Micronesia; Nauru; New Zealand; Niue; Palau; Papua New Guinea; Philippines; Samoa; Solomon Islands; Tonga; Tuvalu; United Kingdom of Great Britain and Northern Ireland for Pitcairn, Henderson, Ducie, and Oeno Islands; United States; and Vanuatu. The depositary for the CMFS Convention is the Government of New Zealand. As of September 2002, the Convention had been signed by 19 States: Australia, Canada, Cook Islands, Fiji Islands, Indonesia, Marshall Islands, Federated States of Micronesia, New Zealand, Nauru, Niue, Palau, Papua New Guinea, Philippines, Samoa, Solomon Islands, Tonga, Tuvalu, United States, and Vanuatu. Four States, (Fiji Islands, Marshall Islands, Papua New Guinea, and Samoa) had ratified the CMFS Convention.
5. In accordance with article 36, the CMFS Convention will enter into force 30 days after the deposit of instruments of ratification, acceptance, approval, or accession by three states north of the 20° parallel of north latitude and seven states south of the 20° parallel of north latitude. However, if, within 3 years of its adoption (i.e., by September 2003), the CMFS Convention has not been ratified by three states north of the 20° parallel of north latitude, it will nevertheless enter into force 6 months after the deposit of the thirteenth instrument of ratification, acceptance, approval, or accession.
6. After entry into force, the contracting parties may, by consensus, invite other States and regional economic integration organizations that wish to fish for high migratory fish stocks in the CMFS Convention area to accede to the CMFS Convention.

7. The CMFS Convention also contains special arrangements for participation by fishing entities and by territories within the CMFS Convention area. On 5 September 2000, Taipei, China signed the Arrangement for the Participation of Fishing Entities.

8. Simultaneously with the adoption of the CMFS Convention, the participants in the Multilateral High-Level Conference also adopted a resolution establishing the Preparatory Conference for the Establishment of the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean. The task of the preparatory conference, which will continue until the CMFS Convention enters into force, is to lay the groundwork for the establishment of the commission and to ensure that no vacuum exists between adoption of the CMFS Convention and its entry into force. Specifically the preparatory commission and its subsidiary bodies will facilitate the future work of the Commission and the process of collecting and analyzing data on the status of the fish stocks and, if necessary, recommend conservation and management measures.

A. Secretariat of the Pacific Community

9. The Secretariat of the Pacific Community (SPC), in Noumea, is the premier regional technical and development organization of the Pacific. SPC and an international organization, works in partnership with its members, other organizations, and external funding agencies to deliver high priority work programs to member countries and territories. SPC's work programs aim to develop the technical, professional, scientific, research, planning, and management capability of Pacific island people and directly provide information and advice, to enable them to make informed decisions about their future development and well-being. SPC is the only bilingual (English and French) regional organization covering all 22 countries and territories of the Pacific.

10. SPC is a Pacific island development organization with a mandate as a technical advisory, training, and research organization, and has developed a clear vision of its corporate goals and strategic priorities for the 21st century.

11. SPC member countries comprise 22 Pacific Island countries and territories plus the 5 remaining founding countries: American Samoa, Australia, Cook Islands, Fiji Island, France, French Polynesia, Guam, Kiribati, Federated States of Micronesia, Nauru, New Caledonia, New Zealand, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Pitcairn Islands, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, United Kingdom, United States, Vanuatu, and Wallis and Futuna.

B. Forum Fisheries Agency

12. The Forum Fisheries Agency (FFA), in Honiara, is involved in the sustainable management and development of tuna resources in the western and central Pacific Ocean. To do this, FFA assists member countries to manage, conserve, and use the tuna resources in their exclusive economic zones and beyond through enhancing national capacity and strengthening regional solidarity.

13. Communication is crucial to the FFA's aims and services to member countries. FFA's web site (www.ffa.int) is the central node of its new approach to information sharing between member countries, external funding agencies, and other interested readers.

14. The FFA member countries are Australia, Cook Islands, Fiji Islands, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, and Vanuatu.

COST ESTIMATES AND FINANCING PLAN (**\$**)

Item	Total Cost
A. Asian Development Bank Financing^a	
1. Consultants	
a. Remuneration and Per Diem for International Consultants	160,000
b. International and Local Travel	33,000
c. Reports and Communications	5,000
2. Workshop	60,000
3. Publication	
a. Printing	15,000
b. Editing	7,000
4. Miscellaneous Administration and Support Cost	5,000
5. Contingencies	15,000
Subtotal (A)	300,000
B. Forum Fisheries Agency Financing	
1. Office Accommodation and Transport	18,000
2. Remuneration and Per Diem of Staff	27,000
3. Miscellaneous Administration and Support Costs	20,000
4. Others	7,000
Subtotal (B)	72,000
Total	372,000

^a Financed from Asian Development Bank's technical assistance funding program.
Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

A. Output

1. The review will be formulated into a report of a standard suitable for publication in the *Pacific Studies Series* of the Asian Development Bank (ADB), and will therefore follow font and font size, paper size, margins, spelling, nomenclature, references, citations, names, etc. as specified in ADB's *Handbook of Style and Usage*.

2. The team leader will be responsible for consolidating the various inputs to the final report. Three weeks prior to the regional workshop, a draft report will be submitted to the Forum Fisheries Agency (FFA), in electronic form as well as hard copy, for clearance to distribute to involved organizations and agencies in the FFA member countries for comments. The draft report will be discussed during the workshop and comments will be incorporated as appropriate before submitting the final report to FFA and ADB. FFA will receive the report in electronic format, 5 hard copies, and 2 CD-ROMs. ADB will receive the final report in electronic version, 3 hard copies, and 1 CD-ROM.

3. The Project will interpret the collected catch and length-frequency data for the last 15 years of the four main commercial tuna fish species caught in the western and central Pacific Ocean (WCPO). The data will be provided from the database at the Secretariat of the Pacific Community (SPC). An international consultant will translate the data into a write-up in a lay person's language verifying whether the various tuna catch levels of the WCPO are sustainable. The technical assistance (TA) will also (i) document the existing license agreements and arrangements (government-to-government, government-to-industry, government-to-company) and the current levels of returns to the FFA member countries, including the direct and indirect costs and benefits, from these access arrangements; and (ii) formulate a discussion paper identifying alternative methods and arrangements to negotiate license fees arrangements, based on the expected higher attractiveness for access in a total allowable catch regime and taking into consideration subregional comparative advantages.

4. International individual consultants will be engaged for the specific tasks. The fisheries agreements specialist will undertake activities described in para. 3 (i) and the fisheries management specialist (team leader) will undertake the activities in para. 3 (ii) in the formulation of alternative access and license regimes.

B. International Consultants

1. Fisheries Management and Licensing Specialist, Team Leader (4 person-months)

5. The specialist will formulate possible alternative access agreements and license arrangements generating revenues over existing agreements, and arrangements and suitable for the different Pacific developing member countries (PDMCs) based on their tuna abundance and seasonality.

6. The specialist should have

- (i) at least 10 years' experience and knowledge of fisheries management and licensing arrangements for tuna fishery and/or other fishery, within and/or outside the Pacific region;
- (ii) demonstrated working knowledge in at least one of the alternative approaches to licensing arrangements outside the Pacific region;
- (iii) knowledge of the implications and possibilities for the Pacific island countries under the adopted Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (the CMFS Convention);
- (iv) leadership skills to oversee the project and ensure the requirements from other team members are satisfactorily met; and
- (v) ability to lead a workshop and present findings and recommendations.

A working knowledge of alternative approaches such as catch limits, quota system and rights-based management system is desirable.

7. Specific tasks required of the consultant are as follows:

- (i) As the team leader, the specialist will be responsible for the overall output of the TA. The specialist will work closely with the other team members to ensure that the requirements are performed satisfactorily. In addition, the specialist will liaise with the TA leader (Manager, Economics and Marketing of the Forum Fisheries Agency Secretariat) on an ongoing basis to ensure that the TA is progressing effectively.
- (ii) Identify options to increase license fee revenues from licensing foreign fishing vessels in FFA member countries and evaluate their applicability for the tuna fishery. Options should include, but not be limited to, (i) accelerated domestic fleet development, (ii) multilateral access arrangements, (iii) direct licensing, (iv) joint ventures, (v) charters, (vi) rights based systems, (vii) auctioning of licenses, (viii) resource rent charge, (ix) quotas, and (x) other options as appropriate.
- (iii) Evaluate the effectiveness of each option in the tuna fishery and/or other fishery, within and/or outside the Pacific region. In conducting the evaluation, include consideration of
 - (a) catch allocation and imposition of limits on the fishery;
 - (b) any implications associated with the CMFS Convention, particularly in relation to catch allocation;
 - (c) the institutional capacity of Pacific island countries to administer the various approaches; and
 - (d) the monitoring, control, and surveillance framework required to support each option.
- (iv) Analyze the potential for various options to increase access fees by at least 20% over the current levels.
- (v) Identify the potential costs and benefits of each option for the PDMCs, including

- (a) estimating the increased value of an existing fishery that will be regulated by a total allowable catch regime;
 - (b) estimating the costs and benefits of increased landings of juvenile tuna species by purse seiners versus the increased value to the longline fishery; and
 - (c) elaborating on the interactions and consequences between longline and purse seine catches and making appropriate recommendations.
- (vi) Recommend the most feasible option(s) suitable for various PDMCs and describe how each option might be implemented, including the need for any transitional phase.
 - (vii) Perform an economic benefit analysis for countries with large and year-round tuna resources and which prioritize long-term license agreements with distant water fishing nations that are willing to invest in onshore facilities. The analysis will in particular document the added benefits for such agreements and if alternative license agreements are applicable in these circumstances.

2. Fisheries Agreement Specialist (1 person-month)

8. The specialist should have

- (i) extensive knowledge and at least 10 years' of experience with access and licensing arrangements in the Pacific region;
- (ii) demonstrated working knowledge of the licensing arrangements currently used in the region (government-to-government, government-to-distant water fishing nation industry, and government-to-fishing-company); and
- (iii) empathy with the development aspirations of the Pacific Island countries.

9. Specific tasks required of the consultant are as follows:

- (i) Collect and review the data on the access and licensing agreements for all PDMCs for the last 5 years to measure the level of returns to Pacific island countries from various forms of arrangements for tuna management and development.
- (ii) For the major access agreements, gather and assess the catch data, prices, and level of license fees for each of the FFA members to determine the level of returns to PDMCs. The assessment should include the "in-kind" assistance package under the access agreements.
- (iii) Liaise with the science editor and/or SPC's oceanic fisheries programme manager to ensure that catch data for the empirical analysis are complete and/or consistent with the catch data information held in the selected countries.
- (iv) Analyze the effectiveness of the various forms of license fee payments currently used by island countries in their access agreements. Identify the strengths and the weaknesses and factors that may constrain the Pacific island countries in pursuing alternative methods of payments.
- (v) Identify and analyze the direct and indirect costs and benefits from various forms of licensing arrangements.

- (vi) Identify the institutional capacities of the FFA member countries to administer the current arrangements, in particular, the monitoring, control, and surveillance capacity of the countries to enforce the provisions as highlighted in the agreements.
- (vii) Analyze the advantages and disadvantages of the types of agreements currently in place, such as the government-to-government type agreement, government-to-industry, and government-to-individual-commercial-company agreements.

3. **Science Editor** (2 person-months)

10. The science editor should have at least 10 years' experience in editing scientific documents and broad experience on fisheries issues.

11. The editor's duties will include, but not be limited to, liaising closely with the SPC Director of the Marine Resources Division and the Oceanic Fisheries Program Manager in Noumea, New Caledonia, to produce a series of documents with graphics that explain, in terms easily comprehensible to the lay person, the current status and prospects for sustainability of fishing on stocks of tuna in the WCPO and, as far as is known, the status of the pelagic ecosystem that supports or is impacted by these fisheries.

12. These documents will include an overall report addressing the whole scope of the issues, targeted primarily at decision-makers, and one or more articles targeted at regional and international business and popular science magazines.

13. The outputs will include a particular focus on long-term trends in Pacific island oceanic fisheries and ecosystems, and will take account of the differences between subregions.

14. The editor will base this public information-oriented work on existing scientifically-oriented outputs of the SPC Oceanic Fisheries Program, and other relevant institutions, as far as possible, and will be able to commission additional data-analyses and "database-views" from the Oceanic Fisheries Program where needed to better illustrate or explain particular issues and trends.

15. Views from other institutions, individuals and fishery stakeholders, may also be sought and incorporated by the editor as necessary to illustrate or explain particular oceanic fishery issues and trends.

16. The key skills required are

- (i) a good understanding of, and considerable experience with, fisheries science concepts;
- (ii) excellent writing skills and experience in producing specialized public information products;
- (iii) an ability to translate the results of the review into language comprehensible to the lay person; and
- (iv) initiative, impartiality and the ability to work without major supervision toward a defined set of outputs, and set aside any personal opinions as necessary to achieve those outputs.