SOUTH PACIFIC COMMISSION

MEETING OF COASTAL STATES AND DISTANT-WATER FISHING NATIONS (Noumea, New Caledonia, 18 - 22 June 1984)

REPORT

Noumea, New Caledonia
June 1984

I. OPENING ADDRESS

1. The Meeting was opened by the Secretary-General of the South Pacific Commission, Mr Francis Bugotu, who offered a special welcome to those who came from outside the region to assist the South Pacific Commission.

II. APPOINTMENT OF CHAIRMAN AND OTHER OFFICE BEARERS

- After the Secretary-General's welcome, His Excellency Mr Jacob Kairi from Papua New Guinea was unanimously elected Chairman of the Meeting. Mr Don MacKay (New Zealand) was elected Vice-Chairman of the Meeting and thereby Chairman of the Drafting Committee. Those participating in the Drafting Committee were representatives of Australia, Federated States of Micronesia, France, Japan, Papua New Guinea, the United States of America, and Vanuatu.
- 3. The representative of Mexico expressed the pleasure of his Government at participating in the Meeting.

III. APPROVAL OF AGENDA AND TIMETABLE

4. After some discussion and clarification by the Tuna Programme Co-ordinator, Dr R.E. Kearney, the agenda was adopted as proposed.

AGENDA

- 1. Opening address
- 2. Appointment of Chairman and other office bearers
- 3. Approval of agenda and timetable
- 4. Review of background to the directive of the Twenty-Third South Pacific Conference to convene this meeting
- 5. Consideration of the objectives, achievements and future activities of the Tuna and Billfish Assessment Programme, including the uses of information generated by the Programme
- 6. Consideration of the types of additional input required and possible sources:
 - (a) Statistics for SPC area and beyond
 - (b) Scientific results from other sources for SPC areaand beyond
 - (c) Financing of the Programme
- 7. Ways and means of obtaining the necessary input. This could include exploration of alterations to the operation of the Programme which would expedite obtaining the inputs identified in agenda item 6.
 - (a) Possible arrangements that countries or institutions can make to increase the data coverage
 - (b) Possible initiatives to attract additional funding
- 8. Identification of the measures necessary to facilitate optimum use of the results of the Programme:
 - (a) Where further development of fisheries is possible
 - (b) If the need for conservation is identified
- 9. Other business
- 10. Adoption of report

IV. REVIEW OF BACKGROUND TO THE DIRECTIVE OF THE TWENTY-THIRD SOUTH PACIFIC CONFERENCE TO CONVENE THIS MEETING

5. The Chairman read page 7 of Working Paper No. 1 outlining the terms of reference of the Meeting.

"The Conference noted the report submitted by the Secretariat which included the recommendations of the Fifteenth Regional Technical Meeting on Fisheries and agreed:

- to continue for two years in the first instance the Tuna and Billfish Assessment Programme with priority accorded to the collection and evaluation of catch and effort data and assessment of interaction between fisheries;
- to direct the Secretariat to consult with the Forum Fisheries Agency about convening a meeting of coastal states, distant-water fishing nations and international organisations with an interest and experience in this field, to explore ways and means of obtaining input from the distant-water fishing nations in pursuing the objectives of the revised priorities of the extended Tuna and Billfish Assessment Programme."

V. CONSIDERATION OF THE OBJECTIVES, ACHIEVEMENTS AND FUTURE ACTIVITIES OF THE TUNA AND BILLFISH ASSESSMENT PROGRAMME, INCLUDING THE USES OF INFORMATION GENERATED BY THE PROGRAMME

- 6. The Programme Co-ordinator reviewed aspects of the Tuna Programme as outlined in Working Paper No. 2.
- (i) The goals of the statistical programme would be better served if additional data were forthcoming from fisheries in international waters, from those nations not presently forwarding data, and from artisanal fisheries. The importance of statistical input such as size information was also discussed. Progress in expanding the data base was noted, including the recently developed agreement with the American Tunaboat Association (ATA) to provide as from 1984 statistics for its purse-seine fleet operations in the region. At the request of the representative of New Zealand, sources and gaps in SPC data were identified.
- (ii) Various aspects of interaction were presented. Problems of interaction within the SPC region were compared to those in the eastern Pacific. The difficulties of assessing interaction with inadequate fisheries statistics were stressed. The recent expansion of the purse-seine fleet has highlighted this problem. Tagging scheduled for 1985-86 is designed to assess interactions.

- (iii) Billfish stocks were discussed, and the decline in longline CPUE of blue marlin in particular was emphasised as an example of stock deterioration. Limited observer data appears to indicate an increase in the catches of blue marlin by the purse-seine fleet, but additional scientific monitoring is necessary to document the extent of these catches. After considerable discussion it was noted that the lack of accurate reporting of these incidental catches of blue marlin makes it difficult for the Commission to assess the stock.
- (iv) Skipjack stock assessments are now available for all regions of the SPC. The general results and methods of these assessments were extensively discussed.
- (v) The status of yellowfin tuna stocks was discussed. Stocks, as indexed by longline CPUE, have been declining with the exception of a strong recovery beginning in late 1982. This recovery occurred at the same time as El Nino and was suspected to be related to it. The recovery was more pronounced in the area to the east of the principal purse-seine area. It was noted that longline data could exaggerate the decline of the stock and thereby result in an underestimation of the maximum sustainable yield. It was also noted that even though the standard of available longline data had improved, estimates of standing stock size based on yellowfin tag recovery data are greater than previous estimates of the population based on longline data. However, these results should be regarded with caution in view of the small number of yellowfin tuna actually tagged during the Skipjack Programme.
- (vi) Several countries mentioned the albacore fishery as a possible source of development or in some cases redevelopment, and the Tuna Programme was requested to give greater emphasis to this fishery in its work programme.
- (vii) The problem of inaccurate reporting of bigeye catches in surface fisheries was discussed.
- (viii) Most remaining items in Working Paper No. 2 (priority items Nos. 6-12) were adequately covered in the working paper and were presented by Dr Kearney with little elaboration.
- (ix) With respect to priority item No. 8 (associating oceanographic and fisheries data), the representative of France commented that it was an opportune time to develop this research and indicated his Government's willingness to co-operate with the Commission and other countries in this respect.

- (x) With respect to priority item No. 10, the representative of Vanuatu asked for clarification of the word "optimal" and stressed that price should be included in the calculation.
- (xi) The observer programme (priority item No. 11) received considerable discussion. It was recognised that the SPC observer programme was of considerable value in guiding local observer programmes as well as for the generation of scientific information. It was noted that observers whose primary function is science should not be used for surveillance purposes.

VI. CONSIDERATION OF THE TYPES OF ADDITIONAL INPUT REQUIRED AND POSSIBLE SOURCES

A. Statistics for SPC area - and beyond

- 7. There was considerable discussion of the problem of data requirements. It was suggested that specific data holdings be detailed in order to identify gaps. A working committee was formed to construct, with the help of the Secretariat, a table listing present data holdings.
- 8. The representative of Mexico informed the meeting that his Government had provided information in accordance with its access arrangements and would continue to provide such information for Mexican vessels.
- 9. The representative of Japan offered his Government's collaboration with SPC on the analysis of early purse-seine data.
- 10. The representative of Western Samoa expressed great concern that the maximum sustainable yield cannot be calculated due to insufficient data. The possibility that catches could exceed the maximum sustainable yield poses a problem for countries planning to develop commercial fisheries. This concern was endorsed by the representatives of France and Japan.

B. Scientific results from other sources for SPC area - and beyond

11. The representative of Japan presented information on the status of tuna stocks in the FAO area 71, which were in general agreement with information previously presented by SPC.

- 12. At the request of the French delegation, a scientist from ORSTOM gave details of a quick and relatively inexpensive method of assessing surface tuna stocks by aerial survey. It was requested that the methodology be reproduced in a bilingual document published by SPC.
- 13. The representative of Mexico presented his country's experience in developing a national tuna fleet. The importance of a regional organisation in equitable allocation of the resource was pointed out. A set of fundamental principles adopted by a number of coastal states of Latin America was presented.
- 14. Presentations were made on IATTC, FAO and ICCAT. It was noted that IATTC receives data from all countries fishing in the eastern Pacific whether they are members or not. This co-operation is ensured by the strict conditions of confidentiality imposed on the information. In ICCAT the detailed statistics are obtained through the governments and consolidated by the Secretariat. For both ICCAT and IATTC this information is then available to all member countries.
- 15. The tabular presentation of SPC data holdings, which is attached as the Appendix, was presented and clarified. Considerable satisfaction was expressed over the recent progress in filling gaps. The existence of gaps in the data available for earlier years made it difficult to evaluate changes in catches taken at that time. This was particularly important for the period 1980 to 1983 covering the commencement of the El Nino phenomenon. Without accurate data for this period it would be difficult to pursue the objectives of priority item No. 8 of the Tuna Programme.

C. Financing of the Programme

- 16. The Programme Co-ordinator expressed optimism that the core programme funding is secure and indicated that the United States had pledged \$172 000. The possibility of funding additional tagging was less certain.
- 17. The representative of France confirmed his Government's commitment to continuing to fund the Tuna Programme without being able to comment on the precise amount. The French Government proposed to recommend for positive consideration by other EEC members any request for funding of the Programme which is presented by the Pacific ACP members within the framework of the successor convention to Lome II.
- 18. The representative of Vanuatu pointed out the shortcomings of <u>ad</u> <u>hoc</u> funding for what should be a continuing programme.

VII. WAYS AND MEANS OF OBTAINING THE NECESSARY INPUT

- 19. The Meeting expressed strong support for the work of the Tuna Programme and generally endorsed the concept of establishing and funding it on a permanent basis. There was considerable discussion on various ways of achieving this objective, including suggestions by the representatives of France, Japan, Marshall Islands, and the United States. The representative of Japan gave his Government's reasons for ceasing publication of detailed statistics on its distant-water fisheries, but it is providing logbook data under access agreements. Japan also gave the background to Japan's contribution to the current FAO programme on tuna research in the Indo-Pacific area.
- 20. After extensive discussion the Chairman presented the following summary:
- (i) Since the time when the South Pacific Conference directed that this Meeting be convened there has been a significant increase in the data input from distant-water fishing nations (DWFNS).
- (ii) There remain data gaps, but the situation will be further improved as a result of offers of additional input which have been made during the course of the Meeting.
- (iii) The Meeting has indicated strong support for the continuation of the work being done by the Tuna Programme.
- (iv) From the indications given by those DWFNS attending the Meeting, there are some difficulties in their full co-operation, given the existing mechanisms under which the Programme operates.
- (v) The present <u>ad hoc</u> arrangement for financial input into the Programme does not provide a satisfactory basis for its continuation, but any improvement will be difficult under existing mechanisms.
- (vi) It would therefore be useful for some consideration to be given to mechanisms which would:
 - (a) enable those DWFNS who are already members of the Programme to participate fully in the provision of data input;
 - (b) enable those DWFNS who are not members of the Programme to participate fully in the provision of data input and financial input.

- (vii) There has been some useful discussion of alternative approaches, but it seems that some delegations are not in a position to take that to a conclusion.
- (viii) While the Programme Co-ordinator has presented a paper outlining possible alternative approaches, it would now be useful for the Secretariat to prepare a detailed paper on possible mechanisms which would enable the objectives in (vi) to be met. Such a paper would be prepared in consultation with other regional organisations (SPEC, FFA), the countries of the region, and DWFNS (including those invited to the meeting but not participating in it). Given the success of the Programme so far, it may be desirable for any new approach to depart to the least possible extent from the present situation.
- (ix) Alternative approaches could then be considered, if possible, by the Sixteenth Regional Technical Meeting on Fisheries, and at the next South Pacific Conference.

VIII. IDENTIFICATION OF THE MEASURES NECESSARY TO FACILITATE OPTIMUM USE OF THE RESULTS OF THE PROGRAMME:

- 21. The representative of Vanuatu suggested that Australia and New Zealand use the SPC logbook form in supplying data to the Programme. The representative of Australia indicated that his Government had supplied full information on tropical tuna fishing in its zone, and the representative of New Zealand indicated his Government's willingness to do so.
- 22. Considerable concern was expressed for the protection of artisanal fishermen in the region. The Secretariat indicated that some progress had been made in the analysis of this problem based on skipjack tagging data and further work will be done in this area.
- 23. The Director of Investigations of IATTC described a major programme to identify large-scale interactions between stocks and expressed the hope that SPC would co-operate in this programme, including assisting through the collection of samples from the central and western Pacific.
- 24. The representative of Western Samoa called attention to his country's experience with purse-seiners fishing near FADs. There has been severe and persistent depletion of fish populations around FADs and also complete removal of the FAD itself.

- 25. The representatives of Tonga, Solomon Islands and Western Samoa expressed strong reservations that an expanded Tuna Programme which included DWFNS would tend to be less responsive to needs of small island countries. The representative of Solomon Islands also indicated that he was not in a position to discuss other than technical matters and could not discuss, formulate or determine positions that required policy decisions, for example, the further extension of the Tuna Programme or the involvement of DWFNS within the Programme.
- 26. The Deputy Director of SPEC affirmed SPEC's readiness to participate in discussions on alternative arrangements, and noted that institutional developments and changes in the region generally proceeded cautiously and on the basis of consensus.

IX. OTHER BUSINESS

- 27. The technical observer from Indonesia briefly described the tuna fishery in his country. He also indicated that 6 500 skipjack had recently been tagged in Indonesia, and said he hoped that data on the skipjack resource could be obtained from this programme.
- 28. The representative of the Federated States of Micronesia expressed his Government's appreciation for the valuable work carried out by the Tuna and Billfish Assessment Programme, and in particular noted the high calibre and excellent performance of the Programme Co-ordinator. He also expressed his Government's appreciation to the DWFNS, regional and international organisations for their participation. In particular, he noted the expression of support for continued funding and provision of new data by the DWFNS. He also stressed the importance of furthering study on interactions in fisheries in the region through further tagging and artisanal data collection.
- 29. SPC was requested to contact those invited DWFNS who did not attend the Meeting and ask them to provide additional data on the activities of their vessels in the region, particularly in the high seas areas. The Meeting agreed that these countries should receive the Meeting report.
- 30. In his concluding remarks the Chairman noted the importance of the Programme. There was keen interest in its continuation, which would need to be placed in the same highly professional manner notwithstanding the loss of the Programme Co-ordinator later in the year.

31. The Deputy Director of Programmes expressed the Secretariat's regret at the Programme Co-ordinator's forthcoming departure. He noted the very high calibre of Dr Kearney's work and his contribution to the Programme since its inception. He assured delegates that the Secretariat was convinced that it was very much in the interests of the SPC that the Programme be continued as successfully as in the past.

X. ADOPTION OF REPORT

32. The report of the meeting was adopted.

TABLE 1. SPC REGION EEZS - DATA HELD OR AVAILABLE TO THE TUNA AND BILLFISH ASSESSMENT PROGRAMME

,			1984	1980-83	Prior to 1980	Remarks
Japan	purs	e-seine	С	С	Limited fishing;* some general summaries available	
USA (AT	A)	n	С	***	Limited fishing; detailed data available on some vessels in PFDF reports	
Korea		11 II	C(?)	C(?)	N.A.	
Mexico		#	C	N.A.	N.A.	
Philipp:	ınes			bly incomplete		
Russia		11	N.D.	N.D.	N.D.	
Taiwan			C(3)	C(?)	N.A.	
Other D	IFNS	**	C (most a	re ATA members)		
	n Is.	es purse-sein , Fiji, Papus		able on request		
Japan p	ole-a	nd-line	c	C	Summaries	Data were published as 1° square summaries up to 1979
Coastal	state	es pole-and-l	ine Avail	able on request		
Japan 1	ongli	ne	С	С	Summaries	Data were published as 5° square summaries up to 1980
Korea	",	k*	C(?)	C(?)	Summaries	Summaries for earlier years bein revised
Taiwan	11 ,	**	C(?)	Not generally available	Summaries	Data have been published as 5° squares since 1977
	Solome	es longline on Is., Tongs a)		able on request		
Artisan	al and	d subsistence	Gener	ally not collected; a	available where collected	
<u>Footnot</u>	e8					
(1) C	= 4	Complete wher	A 20028 AUTAM	ents or licencino are	rangements in force; where no	n screep spragment
			pt general summ	aries from US purse-		n meneng afreement?
(3) N.D (4) *	. =] =]	No data avail Many data hav	able. e been collecte	d, but currently not	available.	
(5) **				-based longliners.		
			ther all vessel			
(7) ***	= !				vailable to SPC. Monthly 1° s ut currently cannot be releas	

TABLE 2. HIGH SEAS AREAS WITHIN SPC REGION - DATA HELD OR AVAILABLE TO THE TUNA AND BILLFISH ASSESSMENT PROGRAMME

	1984	1980-83	Prior to 1980	Remarks
US purse-seine	P	**	Limited fishing; data available on some vessels in PFDF reports	
Japan purse-seine	Some general s	summaries availab	Le*	
" pole-and-line	*	*	Summaries	Data were published as 1° square summaries up to 1979
" longline	*	*	Summaries	Data were published as 5° square summaries up to 1980
Korea longline	Summaries	Summaries	Summaries	Summaries for earlier years being revised
Taiwan longline	Summaries	Summaries	Summaries	Data have been published as 5° squares since 1977
Others	No data availa	able to SPC		

Footnotes

- P = Monthly 1° square summaries within agreement area; general summaries from other high seas areas.
- * = Many data have been collected, but currently not available.
- ** = Some partial, general summaries have been made available to SPC.

 Monthly 1° square summaries are available to countries with
 access agreement, but currently cannot be released to SPC.

 There is also detailed information on that portion of the
 fleet covered in Pacific Fisheries Development Foundation
 (PFDF) reports.

TABLE 3. AREAS CONTIGUOUS TO SPC REGION - DATA HELD OR AVAILABLE TO THE TUNA AND BILLFISH ASSESSMENT PROGRAMME

IATTC area	Data	available	on	request		
Australia purse-seine	11	91	11	. 11		
" longline	11	11	11	11		
New Zealand purse-seine (incl. US seiners in	11	17	11	11		
New Zealand waters)						
" other	11	H	11	11		
Japan pole-and-line						
" longline	Same	status as	ino	licated in Tab	1e 2	
Korea longline						
Taiwan longline						
Other (including):						
Indonesia purse-seine						
" pole-and-line			٠.			
" longline	Very	little in	for	nation in the	detai	
" artisanal		necessary for stock assessment. Some				
Japan purse-seine		-		are available		
Korea purse-seine	•					
Philippines purse-seine						
" pole-and-line						
" longline						
" artisanal						
Taiwan purse-seine						

ANNEX I

LIST OF WORKING PAPERS PRESENTED AT THE MEETING

SPC/Coastal-DWFNS/Inform	mal 1 -	Provisional list of participants.
WP.1		Relevant sections of reports of:
		 (a) 1983 Planning and Evaluation Committee Meeting (b) Fifteenth Regional Technical Meeting on Fisheries (c) Twenty-Third South Pacific Conference.
WP.2		Review of progress with priority items within the Tuna and Billfish Programme.
WP.3	-	The Tuna Programme Fisheries Statistical System.
WP.4	-	The future requirements for the conserva- tion of the tuna resources of the region and the role of the Tuna and Billfish Assessment Programme.
WP.5	-	Brief descriptions of the operations of:
		 (a) Inter-American Tropical Tuna Commission (IATTC) (b) International Commission for the Conservation of Atlantic Tuna (ICCAT)
WP.5	(Add.1) -	Brief description of the operations of the South Pacific Forum Fisheries Agency
WP.6	-	Draft budget for the Tuna and Billfish Assessment Programme.
Background Paper 1	-	Regional requirements for resource assessment and conservation and some alternative institutional arrangements
2	-	Conservation of the tuna resources of the western and central tropical Pacific
3	-	Paper submitted by Japan

ANNEX II

LIST OF PARTICIPANTS

American Samoa

Mr Henry S. Sesepasara

Director

Office of Marine Resources

P.O. Box 3730 PAGO PAGO, 96799

Australia

Mr A.C. Byrne

Assistant Secretary

External Relations Branch

Fisheries Division

Department of Primary Industry

Edmund Barton Building CANBERRA, A.C.T. 2600

Dr Stephen Henningham

Consul

Australian Consulate-General

NOUMEA, New Caledonia

Cook Islands

Mr Julian Dashwood

Secretary

Ministry of Marine Resources

Development P.O. Box 85 RAROTONGA

Federated States of Micronesia

Mr Asterio Takesy

Deputy Secretary of External Affairs

PONAPE

Senator Sasao Gouland

Chairman

Micronesian Maritime Authority

PONAPE

Mr Peter Sitan

Deputy Executive Director

Micronesian Maritime Authority

PONAPE

<u>Fiji</u>

Dr Antony D. Lewis

Principal Fisheries Officer

Fisheries Division

Ministry of Agriculture and Fisheries

P.O. Box 358

SUVA

France

M. Gaston Le Paudert Conseiller des Affaires Etrangères Second Délégué de la France auprès de la Commission du Pacifique Sud B.P. 420 NOUMEA, Nouvelle-Calédonie

Dr Jean-Claude Le Guen Inspecteur Général de Recherches Délégué de l'ORSTOM pour l'Asie du Sud-Est et le Pacifique B.P. 2666 NOUMEA, Nouvelle-Calédonie

M. Jean-Pierre Hallier
Maître de recherche à l'ORSTOM
Centre ORSTOM de Nouméa
B.P. A5
NOUMEA, Nouvelle-Calédonie

M. Jacques Chabanne
Maître de recherche principal à l'ORSTOM
Spécialiste en recherche halieutique
Centre ORSTOM de Papeete
B.P. 529
PAPEETE, Tahiti

French Polynesia

M. Bruno Ugolini
Chef du Département pêche
Etablissement pour la valorisation des
activités aquacoles et maritimes
B.P. 20
PAPEETE, Tahiti

Guam

Dr Paul Callaghan University of Guam UOG Station (CBPA) MANGILAO 96913

Japan

Dr Sigeiti Hayasi Director Office of Planning and Co-ordination for Research Far Seas Fisheries Research Laboratory SHIMIZU

Mr Hiroshi Miki Second Secretary Embassy of Japan SUVA, Fiji

Kiribati

Mr Barerei Onorio Chief Fisheries Officer Fisheries Division Ministry of Natural Resource Development P.O. Box 276 BIKENIBEU, Tarawa

Marshall Islands

Mr Robert Carpenter Chief Fisheries Officer Department of Resources and Development MAJURO, 96960

Mexico

Dr Fernando Castro y Castro Deputy Minister of Fisheries Secretaria de Pesca Av. Alvaro Obregon 269-80 C.P. 06700, MEXICO D.F.

Mr Eduardo Medina Mora Icaza Co-ordinator of Advisers for Fisheries Infrastructure Secretaria de Pesca Av. Alvaro Obregon 269 C.P. 06700, MEXICO D.F.

Mr Guillermo Gomez Sanchez
Deputy Director of Analysis of
International Fisheries Policies
Secretaria de Pesca
Av. Alvaro Obregon 269
C.P. 06700, MEXICO D.F.

New Caledonia

M. André Gopéa
Conseiller de Gouvernement chargé
du secteur de l'environnement
Conseil de Gouvernement
B.P. C5
NOUMEA

M. Jean-Louis Jourde Chef du Service Territorial de la Marine Marchande et des Pêches Maritimes B.P. 36 NOUMEA

M. Pierre Rosenberg
Ingenieur chargé des pêches au Service
Territorial de la Marine Marchande et
des Pêches Maritimes
B.P. 36
NOUMEA

New Caledonia (cont.)

M. Renaud Pianet Océanographe biologiste Specialiste des thonidés Centre ORSTOM de Nouméa B.P. A5 NOUMEA

New Zealand

Dr R.S. Grant Consul-General New Zealand Consulate-General B.P. 2219 NOUMEA, New Caledonia

Mr Don MacKay Assistant Head Legal Division Ministry of Foreign Affairs WELLINGTON

Dr J.L. McKoy Section Leader Coastal Finfish Section Fisheries Research Division Ministry of Agriculture and Fisheries P.O. Box 297 WELLINGTON

Dr M.J. McBryde South Pacific Division Ministry of Foreign Affairs WELLINGTON

Palau

Mr Ramon Rechebei Chief International Trade Division Bureau of Foreign Affairs Dept. of State KOROR, 96940

Papua New Guinea

His Excellency Mr Jacob Kairi
High Commissioner for Papua New Guinea
in Solomon Islands
Papua New Guinea High Commission
HONIARA, Solomon Islands

Mr Louis Aitsi Acting Director of Fisheries Fisheries Division Department of Primary Industry P.O. Box 417 KONEDOBU Papua New Guinea (cont.)

Mr L. Rodwell

Fisheries Economist Fisheries Division

Department of Primary Industry

P.O. Box 417 KONEDOBU

Mr C. Warokra Legal Adviser

Department of Justice

P.O. Wards Strip

WAIGANI

Solomon Islands

Mr N. Crozier

Principal Fisheries Officer Ministry of Natural Resources

HONIARA

Tokelau

Mr Foua Toloa

Agriculture and Fisheries Extension

Officer |

c/- Office for Tokelau Affairs

P.O. Box 865

APIA, Western Samoa

Tonga

Mr Semisi Fakahau

Principal Fisheries Officer

Fisheries Division

Ministry of Agriculture, Fisheries and

Forests P.O. Box 14 NUKU'ALOFA

Tuvalu

Mr Michael Batty Fisheries Adviser Fisheries Division

Ministry of Commerce and Natural Resources

VAIAKU, Funafuti

United States of America

Mr Brian Hallman

Office of Fisheries Affairs
Bureau of Oceans and International
Environmental and Scientific Affairs
Department of State

WASHINGTON D.C.

Ms Barbara Rothschild

Chief

Office of International Fisheries International Organizations and

Agreements Division

National Marine Fisheries Service

WASHINGTON D.C. 20235

United States of America (cont.)

Mr Peter E. Reid Member and Vice-Chairman Western Pacific Fishery Management Council P.O. Box 1478 PAGO PAGO, American Samoa 96799

Mr O.E. Kerns Jr.
Executive Director
U.S. Tuna Foundation
2040 Harbour Island Drive, Suite 208
SAN DIEGO. California 92101

Mr Richard Shomura
Director
National Marine Fisheries Service
Honolulu Laboratory
P.O. Box 3830
HONOLULU, Hawaii 96812

Mr August Felando President American Tunaboat Association 1 Tuna Lane SAN DIEGO, California 92101

Mr Charles Fullerton
Director
Regional Office - Southwest Region
National Marine Fisheries Service
300 S. Ferry
Terminal Island
CALIFORNIA 90731

Mr Anthony V. Nizetich
Inter-Ocean Services Co.
150 West 7th Street
San Pedro
CALIFORNIA 90371
(Consultant representing Starkist
Foods Inc.)

Vanuatu

Mr James Crossland
Director of Fisheries
Fisheries Department
Ministry of Agriculture, Forestry and
Fisheries
P.O. Box 129
PORT VILA

Wallis and Futuna

M. Bernard Gatel
Chef du Service de l'économie
rurale
MATA'UTU

Wallis and Futuna (cont.)

M. Xavier Felomaki

Chef du Bureau des Iles Wallis et Futuna auprès du Haut-Commissariat de Nouvelle-

Calédonie

NOUMEA, Nouvelle-Calédonie

Western Samoa

Mr Ueta Faasili Fisheries Officer Fisheries Division

Department of Agriculture and Fisheries

P.O. Box 1442

APIA

OBSERVER

Dr Purwito Martosubroto

Director

Research Institute for Marine Fisheries

Jl Krapu 12 Sunda Kelapa Jakarta - Utara

INDONESIA

ORGANISATIONS

Food and Agriculture Organization (FAO)

Dr John A. Gulland

Chief, Marine Resources Service Fishery Resources and Environment

Division

Food and Agriculture Organization

of the United Nations Via delle Terme di Caracalla

00100 ROME

Mr Harry Sperling, Jr.
Programme Leader, RAS/73/025
Regional Fisheries Development

Programme (Pacific)

Office of UNDP Regional Representative

for the South Pacific

UNDP Private Bag

SUVA, Fiji

Forum Fisheries Agency (FFA)

Mr Philipp Muller

Director

Forum Fisheries Agency

Box 629

HONIARA, Solomon Islands

Mr David Evans

Fisheries Development Officer

Forum Fisheries Agency

Box 629

HONIARA, Solomon Islands

Inter-American Tropical Tuna Commission (IATTC) Dr James Joseph
Director of Investigations
Inter-American Tropical Tuna Commission
c/- Scripps Institution of Oceanography
LA JOLLA, California 92093

South Pacific Bureau for Economic Co-operation (SPEC)

Dr Peter Adams
Deputy Director
South Pacific Bureau for Economic
Co-operation
G.P.O. Box 856
SUVA, Fiji

SPC Secretariat

Mr F. Vitolio Lui Deputy Director of Programmes

Dr Robert Kearney
Tuna Programme Co-ordinator
(Director of the Meeting)

Dr John Sibert Senior Fisheries Scientist

Dr Thomas Polacheck Fisheries Statistician

Mr Charles Ellway Fisheries Scientist

Mr Richard Farman Fisheries Scientist

Mr Robert Gillett Fisheries Scientist

Mr Gary Preston Assistant Fisheries Adviser

Mr Barney Smith Fisheries Adviser

Mr Wil Smith Systems Manager, Tuna Programme

Mme Carol Moulin
Personal Assistant to Tuna
Programme Co-ordinator

Ms Veronica van Kouwen Research/Administrative Assistant

SPC Secretariat (cont).

M. Hervé Pichon Interpreter

Mlle Françoise Raynaud Interpreter

Ms Phillida Stephens Interpreter

M. Gérard Désroches Translator

Mlle Nicole Ries Secretary to the Meeting

Mr David Mills Maintenance Technician