

# PROPOSED WORK PROGRAMME AND BUDGET FOR 2006 AND INDICATIVE BUDGET FOR 2007

WCPFC/Comm.2/28 18<sup>th</sup> November 2005

# Paper prepared by the Secretariat

#### Introduction

- 1. Regulation 3 of the Financial Regulations requires the Executive Director to submit a draft budget to all Members of the Commission at least 60 days prior to the annual meeting of the Commission. At the same time, and in the same form as the draft budget, the Executive Director shall prepare and submit to all Members of the Commission a forecast budget for the subsequent financial year. A financial year is for 12 months commencing 1 January and ending on 31 December, both dates inclusive.
- 2. To comply with the abovementioned Regulation, the draft budget for 2006 and forecast budget for 2007 would have been made available to Members on 13 October 2005. Due to the delayed establishment of the Secretariat, it was not possible to circulate a draft budget for 2006 and a forecast budget for 2007 at that scheduled time. The draft budget for 2006 and the forecast budget for 2007 will hereby be circulated approximately 30 days in advance of the Second Session of the Commission.
- 3. The Commission is invited to review the accompanying work programme and budget, amended it as necessary and adopt a work programme and budget for 2006 and an indicative budget for 2007.

# Context for consideration of the budget by the Commission

- 4. The preparation of an accurate budget for the Commission for 2006 is dependent on all components of the proposed work programme being known and costed. In addition, the assessment of Member's contributions for 2006 is dependent on financial disbursements to support activities for the 2005 financial year being essentially complete. In preparing the provisional budget and schedule of assessed contributions for 2006 for the Commission there are uncertainties associated with both items.
- 5. While the Scientific Committee met in August, and recommended a work programme and budget for the Scientific Committee for 2006 to the Commission, the Commission will not have an opportunity to meet and discuss that work

programme and budget until it convenes for its Second Session in mid-December 2005. Without prejudice to the decisions of the Commission, the draft 2006 work programme and budget prepared by the Secretariat incorporates the recommendations of the First Regular Session of the Scientific Committee, as adopted by the Scientific Committee at the Noumea meeting.

- 6. Similar issues arise in respect of work programme elements that might be proposed by the Technical and Compliance Committee. The First Regular Session of the Technical and Compliance Committee (TCC) will not take place until the week immediately prior to the Second Session of the Commission. Apart from outstanding work relating to the vessel registry, the draft 2006 work programme and budget presented here makes no provisions for a program of work that may be recommended to the Commission by the First Regular Session of the TCC when it meets 5-9 December.
- 7. Finally, and mainly in respect of 2006 assessed contributions, it will not be possible to finalise 2005 expenditure by the time the Second Session meets 12-16 December. This is principally because a large number of payments associated with both the TCC and the Second Session will be outstanding at that time. As a result, the balance of funds remaining at the conclusion of the 2005 financial year, and thus the carry forward to 2006, will be unknown at the time of the Second Session.

# Summary of budget requirements for 2006 and indicative costs for 2007

# A. Staff costs

- 8. Annexes I and II of WCPFC/PrepCon/WP. 37 prepared by Working Group I during the Preparatory Conference recommended an organisational structure for the Commission. At PrepCon VI the staff costs of the Commission were estimated to be US\$677,000 in the first year of operation, rising to US\$957,000 in Year 3<sup>1</sup>. The First Session of the Commission adopted a budget of US\$360,000 to support staff costs in 2005. This comprised support for established posts, consultancies, overtime and temporary assistance.
- 9. The budget paper prepared by the Secretariat for the First Session in December 2004, at paragraph 10, noted that, while it was important to establish key functions as soon as possible, the recruitment schedule realised would determine actual staff costs in 2005. In fact, considerable delays were experienced in recruiting to the Secretariat in 2005. Although three senior posts had been advertised and the selection process was progressing, only the Executive Director was on staff by the end of the year. As a result actual expenditure on staff is expected to be only 15% of the budget approved for 2005 at the First Session.
- 10. In estimating annual staff costs, an attempt has been made to include all costs associated with recruiting to, and supporting, a post within the Secretariat in

Based on nine staff in the first year and increasing to 14 by the end of the third year – but subject to ongoing review.

Pohnpei. These estimates are based on the entitlements and benefits provided for in the harmonised terms and conditions adopted by the Council of Regional Organisations in the Pacific (CROP) (see WCPFC2/Comm.2/20).

- 11. There are numerous uncertainties related to staff costs (such as recruitment costs, education costs, etc.) that cannot be accurately estimated until a candidate for a post at the Secretariat accepts the offer of a position. In addition, the draft Staff Regulations leave open, for consideration by the Commission, the prospect of offering staff leave every 12 months as opposed to every 18 months as is the current practice in CROP agencies. The rationale for this is presented in a companion paper (WCPFC/Comm.2/20 Draft Staff Regulations). The decision of the Commission at its Second Session will determine the budget requirements for this line item in both 2006 and 2007.
- 12. To accommodate such uncertainties maximum costs associated with staff recruitment and on-going support has been incorporated into the 2006 and 2007 budget estimates. Thus, salary estimates have been prepared for Point 9 within the CROP Grade for each post.
- 13. It is unlikely recruits will be appointed to the top point of a salary grade. It is more likely appointments will be made to Points 1 to 3 within a grade. Based on the recruitment schedule presented at Appendix C of WCPFC/Comm.2/19, the estimated difference between appointments at Point 9 (the maximum) and Point 1 (minimum) for all recruitment scheduled for 2006 would be US\$94,700 i.e.US\$94,700 less than is currently presented in the draft work programme and budget. For 2007, the difference would be US\$202,000. Actual costs will only become known once the level of appointment is finalised and the staff member's family situation and home base details are known.
- 14. It is anticipated that three senior staff will be established in Pohnpei early during the second quarter 2006 (the Science Manager, Compliance Manager and Finance and Administration Officer). An additional senior post is proposed for recruitment in mid-2006 that of an Information and Communications Technology (ICT) Manager.
- 15. Refinement of the functions of the ICT Manager post, as proposed in WCPFC/Comm.2/19, does not remove the anticipated need for a dedicated data manager and a network administrator in 2007. The data manger will be responsible for maintaining databases associated with any collaborative relationships with FFA, SPC or other organisations plus Secretariat-based activities associated with the vessel register, the regional observer programme, monitoring and reporting on compliance with conservation and management measures, etc. As the Secretariat staffing levels and work programme tasks associated with activities such as the vessel registry, vessel monitoring and the observer programme increase, network administration and general IT support requirements will likewise increase, justifying the post of a network administrator.
- 16. The Commission will require ongoing legal and policy advice. This service will be required within the Secretariat and to ensure the Secretariat is appropriately equipped to advise Members on legal and policy issues and

implementation of the Convention, as required. Such capacity is required to support the development of external relations of the Commission and to ensure that the Commission is able to adequately represent the intention of the Convention, and the decisions of the Commission, in international and regional contexts.

- 17. In the longer term it will be desirable to establish a post of Legal and Policy Adviser within the Secretariat to provide this service. To meet this need in 2006, it is proposed that the Secretariat call for tenders to provide legal and policy advisory services to the Commission under a retainer arrangement. The scope of the proposed arrangement is described in WCPFC/Comm.2/19.
- 18. An amount of US\$50,000, covering fees (US\$30,000), associated travel costs (US\$18,000) and communication and printing expenses (US\$2,000) has been included in the draft 2006 budget to support this service.
- 19. Depending on the ongoing need, to be evaluated during the formulation of the 2007 draft budget, the Secretariat may propose to the Third Session of the Commission that a dedicated post for legal and policy advice be established at the Secretariat. The indicative budget for 2007 provides for this possibility.
- 20. In addition, local recruitment to the posts of Office Manager/Executive Officer, Secretary to the Executive Director, two Administrative Assistants (one for IT and one for corporate services), Secretary/Receptionist, Treasury Assistant, Cleaner/Tea Person, Driver/Maintenance and Security is proposed for early 2006. It is also proposed that a Librarian/Archivist post be established in 2007.
- 21. While staff will be appointed to these posts in 2006, the Secretariat will also explore costs and benefits associated with contracting out some of the services normally associated with these posts. Contracting possibilities exist for building and grounds maintenance, security and cleaning services.
- 22. Reflecting the delays in getting the Secretariat established, the total expenditure on staff in 2005 was estimated to be slightly more than US\$50,000. The indicative budget for 2006 considered at the First Session was US\$757,000. The revised budget estimate for 2006, based on the staff schedule annexed at Attachment B of WCPFC/Comm.2/19, is US\$811,277,000. This cost estimate is based on all staff originally scheduled for recruitment in both 2005 and 2006 being recruited and established in Pohnpei by the end of the third quarter of 2006.
- 23. An indicative budget for staff costs in 2007 is included at Attachment B. It amounts to approximately US\$1.5 million reflecting i) additional staff recruitment in early 2007 (to the posts of observer coordinator, network administrator, data manager, legal and policy adviser and librarian), and a functional Secretariat for the entire year (based on the staffing establishment described in WCPFC/Comm.2/19).
- 24. Consultancy/external technical services during 2006 are provisionally estimated to require US\$210,000. The principal costs are associated with the following tasks:

- Design, development and early stage implementation of a corporate data model for the Commission;
- IT systems design and implementation;
- Document management system design and implementation;
- Financial management systems design;
- The development of a Business Plan for the Commission; and
- Legal and policy advisory services.

The provisional nature of this estimate is because it is expected that the Technical and Compliance Committee and the Second Session may propose additional tasks that can be completed, funds permitting, through consultancy arrangements.

25. The 2006 estimate for travel is based on a Secretariat of four professional staff undertaking a total of five trips each (entirely funded by the Commission at an average cost of US\$4,400 (covering airfare and DSA)) during the year. The 2007 estimate reflects and increase in the number of Secretariat staff travelling during that year.

# B. General operating expenses

- 26. Without 12 months of information concerning the costs of supporting the Secretariat in Pohnpei, and with minimal information for 2005, the 2006 draft work programme and budget and 2007 indicative budget effectively remain estimates.
- 27. The 20% increase in the budget estimate for general operating expenses, compared with the 2006 indicative budget provided to the First Session, will support the Secretariat in the new modern office provided jointly by the People's Republic of China and the Government for the Federated States of Micronesia from early in 2006. It also reflects significant increases in utility costs in Pohnpei during 2005 much of which can be directly attributed to increased global oil prices. In addition, although an item still under negotiation with the Federated States of Micronesia National Government and Pohnpei State Government, Pohnpei State Sales Tax has been provided for in both 2006 and 2007. Expenditure data will be accumulated throughout 2006 so that reasonably accurate budget estimates for 2007 and beyond will be available for future Sessions of the Commission.

#### C. Purchase and maintenance of capital assets

- 28. As described in WCPFC/Comm.1/4 presented to the First Session in December 2004, the new headquarters building will require furniture, computer hardware and accessories, communications and office equipment. The 2006 draft work programme and budget provides US\$175,000 for the purchase of furniture, computer equipment and software in 2006. An indicative budget for these items in 2007 is US\$220,000.
- 29. The Government of the Federated States of Micronesia provided one vehicle to the Commission in 2005. It is anticipated that this vehicle will serve the needs of the Commission throughout 2006. In 2007, additional vehicle purchases,

including a vehicle for the Executive Director, have been provided for in the indicative budget.

- 30. The new headquarters building will require maintenance and upkeep to ensure that its prime condition at the time the Commission takes possession is maintained. As the building ages, demands against this budget line are likely to increase.
- 31. Insurance is a priority item to be addressed in early 2006 once the headquarters building has been completed and valued. While life, health and medical insurance have been included as a component of individual staff costs, other insurance items, such as professional liability, business protection including building and contents, and marine transit remain to be negotiated. The Secretariat will work towards providing supplementary information in respect of insurance at the Second Session.

# D. Meeting costs

- 32. Members will recall paragraph 5 of Article 9 of the Convention relating to cost effectiveness and the frequency, duration and scheduling of meetings of the Commission and its subsidiary bodies. At the time of the preparation of this document in mid-November, the Secretariat had limited information available from 2005 to be able to prepare accurate estimates for the 2006 and 2007 requirements for meetings.
- 33. The First Regular Session of the Scientific Committee at Noumea, New Caledonia in August cost approximately US\$92,000 [US\$54,500 for airfares (US\$23,500) and DSA (US\$31,000) to support participation by representatives from developing States and participating territories and the balance, US\$37,500, for meeting support costs (staff support, secretariat services, meeting printing, refreshments, excursions, meeting shirt, social function, airport transfers, etc. but not including the printing of the report of the meeting]. No cost for the Technical and Compliance Committee or the Second Session of the Commission was available to assist with the preparation of the 2006 budget. In fact, final costs for those meetings are unlikely to be available until early 2006.
- 34. The Second Regular Session of the Scientific Committee has been proposed for Manila, Philippines in August 2006 over a period of two weeks. The costs for the Manila Scientific Committee meeting have been prepared using the experience from the first meeting at Noumea (increased airfares, partly resulting from an increase in the number of participants qualifying for support as a result of recent ratifications to the Convention but a reduced DSA reflecting current UNDP DSA rates for Noumea (US\$178/day) and Manila (US\$152/day)). The budget estimate included in the 2006 draft work programme and budget for this meeting is US\$109,000 [US\$46,800 for airfares (18xUS\$2,600), US\$41,000 for DSA (US\$152x15 daysx18) and US\$21,000 for meeting support].
- 35. Cost estimates for the Second Regular Session of the Technical and Compliance Committee and the Third Session of the Commission in 2006, based on each meeting being of one week duration, is presented in Table 1. It is

assumed that the costs for one of these meetings, held as a stand-alone meeting, would be US\$78,000. These costs include US\$21,000 for meeting support including equipment hire, casual support, social functions, miscellaneous costs associated with such meetings and report printing.

Table 1. Cost estimates for convening the Second Regular Technical and

Compliance Meeting and the Third Session of the Commission in Pohnpei.

Number of	Average	DSA	Support	Total
developing	air		costs	[US\$]
States/participating	fare	[2]		
territories		[3 days travel and 5 days of		
[TCC participants – 18 <sup>2</sup>		meeting		
<b>Annual Session</b>	[@TIC#2 (00]	@US\$140/day]		
participants – 18]	[@US\$2,600]			
36	93,600	40,500	21,000	155,100

- 36. Actual costs for the Second Regular Session of the Technical and Compliance Committee will depend on the venue and timing for that meeting. It will also depend on whether or not that session will be held in association with another meeting or as a stand-alone event.
- The budgetary requirement to support the participation of developing States and participating territories in any meetings of the Northern Committee is currently unknown. A nominal amount of US\$20,000 has been included in the 2006 draft budget to accommodate this (US\$21,000 in 2007).
- 38. The costs of a stand alone Third Session in 2006 in Pohnpei is estimated to be US\$78,000. As a result, and based on in-complete information, the estimated costs for convening meetings of the Commission and its subsidiary bodies in 2006 are estimated to be US\$285,000. Indicative costs for meetings of the Commission and its subsidiary bodies in 2007, US\$300,000, are based on a across the board increase of 5% to support meetings during that year.

#### E. External services

The 2006 work programme and budget estimates for scientific services and scientific research are based on the recommendations of the first regular session of the Scientific Committee in Noumea in August 2005. These activities and costs have been included in the draft 2006 work programme and budget subject to the decisions of the Second Annual Session in relation to the approved programme of work for 2006. The 2007 indicative budget is based on a nominal inflationary factor of 5% applied to the 2006 estimate.

Cook Islands, Federated States of Micronesia, French Polynesia, Fiji, Indonesia, Kiribati, Marshall Islands, Nauru, New Caledonia, Niue, Palau, Papua New Guinea, Philippines, Samoa, Solomon Islands, Tonga, Tuvalu, Wallis and Futuna, and Vanuatu. No support is provided for participants from the host country if the meetings are held in a developing State or participating territory.

- 40. The 2006 estimate for the vessel registry is simply a transfer of funds that were originally provided for in the 2005 budget and, because of the delayed establishment of the Secretariat, remain to be carried forward to 2006.
- 41. The requirements for developing States budget line estimate is taken directly from the recommendation of the First Regular Session of the Scientific Committee. The budget will need to be updated once the recommendation of the First Regular Session of the Technical and Compliance Committee on this item is available.

#### Source of funds

- 42. As required at Article 18(1), the draft budget is accompanied by an indication of which expenses are to be financed from assessed contributions and which are to be financed from other sources (see Attachment A). A break down of staff costs associated with this provisional budget is included (Attachment B).
- 43. The Summary Record for the First Session, at paragraph 15, noted that, calculations of Member's contributions require the Commission Secretariat to provide additional information and background data used as a source for calculating the various elements of the formulae for the assessed contributions (as provided for at Article 18(2) of the Convention). The Record also notes a requirement for transparency in the costing of external services.
- 44. In responding to these directives, the information used to calculate the catch component of the formulae has been appended at Attachment C. An explanation of the source of the information in calculating this component is appended at Attachment D. Gross National Index (GNI) and population information is appended at Attachment E. Attachment F is a summary table incorporating population, GNI and catch information. The table annexed at Attachment G utilises the information presented at Attachment F to calculate the assessed contributions for Members based on a provisional budget for 2006 of US\$2,293,077.
- 45. In relation to external services, the draft work programme and budget approved by the First Regular Session of the Scientific Committee at Noumea provided a break down of costs associated with science and scientific services. In addition, SPC-OFP and the Secretariat are working on a detailed breakdown of services and costs associated with the provision of scientific services to the Commission by SPC-OFP (Attachment H). While the Secretariat has prepared detailed terms of reference and costing for the majority of activities that are proposed for execution by consultancy in 2006 (as summarised at paragraph 24 above) it is possible that either the First Regular Session of the Technical and Compliance Committee or the Second Session of the Commission will propose additional work that can be completed by consultancy.
- 46. Regulation 6.1(c) of the Financial Regulations provides that any cash surplus in the General Account at the end of a financial year that is not required to meet un-discharged commitments will be credited to the Working Capital Fund in accordance with Regulation 4. An earlier version of the Financial Regulations

((WCPFC/PrepCon/WP. Rev 1) suggested that, for the first year of operations of the Commission, surplus cash funds, other than those resulting from the contribution of new Members, may be carried over into the following financial year. This provision was written out of later versions of the Financial Regulations. As noted above, at the time of preparation of this document it is not possible to forecast the likely cash surplus in the General Account as of 31<sup>st</sup> December 2005.

# Assessed contributions

47. The estimated funding requirement from assessed contributions in 2006 is US\$2.293 million. The indicative amount for 2007 is US\$3.056 million. Both estimates will be revised once the Technical and Compliance Committee has decided on its work programme and budget for 2006 (and, if considered, 2007).

# Voluntary contributions

### *Territories and possessions*

48. No provision has been made for independent and voluntary contributions by Participating Territories and possessions. As noted at paragraph 39 of the Final Report of Working Group I to the Preparatory Conference, which was subsequently adopted by the Commission, and in relation to the Annex II of the Rules of Procedure, such contributions are proposed to be fixed in accordance with a methodology to be determined. As an interim measure, WG.I suggested a scheme of contributions could be structured in such a way as to fully reflect the willingness of the territories and possessions to make agreed contributions. Such an arrangement is yet to be agreed to with the territories or possessions.

# Activities to be funded from other voluntary contributions

49. At the time of preparing this draft 2006 work programme and budget, the 2006 estimated budgetary requirement from voluntary contributions related to two activities i) the potential Housing Fund for Secretariat accommodation and ii) the Indonesia Philippines Data Collection Project.

# Housing Fund

50. If the Secretariat's proposal in relation to the accommodation options for staff is adopted by the Commission (see WCPFC/Comm.2/21), the budget will need to be revised to reflect a 2006 requirement of US\$1 million to commence the construction of Secretariat housing. Approximately US\$500,000 of this amount would be required for design and site preparation with the remainder being used for housing construction.

# IPDC Project

51. At the time of preparing this draft budget, US\$167,000 of the scientific research component of the budget was identified for support under the Indonesia/Philippines Data Collection Project. The Project has a balance of US\$16,111 approaching the end of 2005. Communications from New Zealand and France has indicated each will make voluntary contributions to the IPDCP in 2006 amounting to approximately US\$100,000. As a result, the Project faces the

prospect of a funding shortfall in 2006. In addition, no multi-year commitments have been received so no funding has been secured for 2007 for this Project, meaning it will not currently be able to be extended to Indonesia. In order to extend the Project to Vietnam, the Scientific Committee recommended an additional amount of US\$15,000 to support data collection work in 2007.

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# Provisional Financial report and budget estimates (2005-2007) [US\$]

		2005			200	06	2007	
					Indicative			
					Presented	Destand		
	Budget items	Budget	Actual	Variance	to WCPFC1	Revised Budget	Indicative	Proposed source of
P	ART 1	g	(est.)*			8		funds
1	Staff costs		(223)					
	Established posts	300,000	50,719	249,281	700,000	811,277	1,472,937	Ass. Cont.
	General temporary assistance	5,000	_	5,000	7,000	5,000	6,000	Ass. Cont
	Overtime	5,000	_	5,000	10,000	10,000	12,000	Ass. Cont
	Consultancy	50,000	80,591	(30,591)	40,000	210,000	125,000	Ass. Cont
	Sub-total	360,000	131,310	228,690	757,000	1,036,277	1,615,937	
2	Staff travel	60,000	_	60,000	90,000	90,000	120,000	Ass. Cont
	Sub-total	60,000	-	60,000	90,000	90,000	120,000	
3	General operating expenses Electricity (paid by NORMA in	ŕ		· -	ĺ	ĺ	Í	
	2005)	10,000	_	10,000	25,000	30,000	35,000	Ass. Cont
	Communications	25,000	2,000	23,000	55,000	55,000	60,000	Ass. Cont
	Office supplies	12,000	1,500	10,500	22,000	20,000	25,000	Ass. Cont
	Publications and printing	10,000	9,000	1,000	20,000	25,000	30,000	Ass. Cont
	Audit	2,500	-,,,,,,,	2,500	5,000	12,500	12,500	Ass. Cont
	Bank charges	2,000	2,000	2,500	3,000	5,000	6,000	Ass. Cont
	Entertainment	5,000	_,	5,000	12,000	12,000	15,000	Ass. Cont
	Fuel	-	200	(200)	,	3,500	4,500	Ass. Cont
	Water (paid by NORMA in 2005)	_	-	-	_	600	600	Ass. Cont
	Garbage disposal	-	-	=	_	1,200	1,200	Ass. Cont
	Security	-	_	-	-	-	30,000	Ass. Cont
	Pohnpei State Tax	-	-	-	-	10,000	15,000	Ass. Cont
	Miscellaneous	5,000		5,000	10,000	10,000	12,500	Ass. Cont
	Sub-total	71,500	14,700	56,800	152,000	184,800	247,300	
4	Capital expenditure			-				
	Vehicles	35,000	-	35,000	15,000	-	45,000	Ass. Cont
	Computers	55,000	1,803	53,197	40,000	75,000	75,000	Ass. Cont
	Furniture and office equipment	50,000	8,335	41,665	40,000	100,000	100,000	Ass. Cont
	<b>Sub-total</b>	140,000	10,138	129,862	95,000	175,000	220,000	
5	Maintenance of capital assets							
	Vehicle maintenance	1,500	-	1,500	5,000	2,500	5,000	Ass. Cont
	IT maintenance and software							
	licenses	9,000	-	9,000	6,000	30,000	25,000	Ass. Cont
	Buildings and grounds	-	-	-		15,000	25,000	Ass. Cont
	Insurance	4,200	-	4,200	7,000	35,000	37,500	Ass. Cont
_	Sub-total	14,700	-	14,700	18,000	82,500	92,500	
6	Meeting services	20.000		20.000	20.000	70.000	01.000	
	Annual Session	30,000	- 01 00 1	30,000	30,000	78,000	81,900	Ass. Cont
	Scientific Committee Northern Committee	65,650	91,804	(26,154)	65,650	109,000	114,450	Ass. Cont
		-	-	-	-	20,000	21,000	Ass. Cont
	Technical and Compliance Committee	65,650		65,650	65,650	78,000	81,900	Ass. Cont
	Sub-total	161,300	91,804	69,496	161,300	285,000	299,250	Ass. Cont
	Sub-total Part 1	807,500	247,952	559,548	1,273,300	1,853,577	2,594,987	
I	อนม-เบเลเ รลร์เ 1	607,300	247,932	339,348	1,2/3,300	1,033,377	2,394,98/	

		2005			200	06	2007	
Ì	<b>Budget items (continued)</b>	Budget	Actual	Variance	Indicative	Budget	Indicative	Source of
P	PART 2		(est.)					funds
1	Scientific services (OFP-SPC)	127,500	127,500	-	254,500	254,500	267,225	Ass. Cont
2	Scientific research	-	-	-	-	145,000	152,250	Ass. Cont
3	IPDC Project	34,147	18,036	16,111	-	167,000	59,850	Vol. Cont
4	Vessel registry	40,000	-	40,000	-	40,000	42,000	Ass. Cont
5	TCC work plan	-	-	-	-	-	-	Ass. Cont
	Housing Fund [see							
6	WCPFC/Comm.2/21]			-	-	-	-	Vol. Cont
7	Assistance to developing States	-	-	=		150,000	157,500	Vol. Cont
	Sub-total Part 2	201,647	145,536	56,111	254,500	756,500	678,825	
	TOTAL	1,009,147	393,487	615,660	1,527,800	2,610,077	3,273,812	

	General Fund	2,293,077	3,056,462
TOTAL:	Voluntary		
	Contributions	317,000	217,350

- Ass. Cont. Assessed contribution. Vol. Cont. Voluntary contribution

  Actual expenditure for 2005 cannot be determined until all November and December commitments are known.

	2006	2007
	budget	Indicative
Positions		2006 + 4%
Executive Director		
Base salary	98,844	102,798
Superannuation	7,413	7,710
Education	16,950	17,628
Health and medical	5,000	5,200
Life insurance	1,200	1,248
COLDA	18,436	19,173
Recruitment/repatriation fare*	6,000	-
Shipping	-	_
Establishment grant	_	_
Hotel on arrival/departure	_	_
Housing	24,000	24,960
Domestic allowance	3,000	3,120
Electricity	3,000	3,120
Phone	600	624
Representational allowance	5,000	5,000
Leave	10,000	10,400
Sub-total	199,443	200,981
Science Manager	,	,
Base salary (recruitment 2006 April)	63,737	84,983
Superannuation	4,780	6,374
Education	13,221	17,628
Health and medical	3,900	5,200
Life insurance	1,200	1,200
COLDA	11,972	15,963
Recruitment/Repatriation fare	10,000	-
Shipping	5,000	-
Establishment Grant	1,565	-
Hotel on arrival/departure	2,000	-
Housing allowance	8,100	10,800
Annual leave	-	10,000
Sub-total	125,476	152,148
Compliance Manager		
Base salary (recruitment 2006 April)	63,737	84,983
Superannuation	4,780	6,374
Education	13,221	17,628
Health and medical	3,900	5,200
Life insurance	1,200	1,200
COLDA	11,972	15,963
Recruitment/Repatriation fare	10,000	-
Shipping	5,000	-
Establishment Grant	1,565	-
Hotel on arrival/departure	2,000	-
Housing allowance	8,100	10,800
Annual leave	_	10,000
Sub-total	125,476	152,148

Finance and Administration Officer		
Base salary (recruitment 2006 April)	63,737	84,983
Superannuation	4,780	6,374
Education	13,221	17,628
Health and medical	3,900	5,200
Life insurance	1,200	1,200
COLDA	11,972	15,963
Recruitment/Repatriation fare	10,000	ŕ
Shipping	5,000	
Establishment Grant	1,565	-
Hotel on arrival/departure	2,000	-
Housing allowance	8,100	10,800
Annual leave	_	10,000
Sub-total	125,476	152,148
ICT Manager		
Base salary (recruitment 2006 May)	45,369	68,054
Superannuation	3,403	5,104
Education	11,752	17,628
Health and medical	3,467	5,200
Life insurance	800	1,200
COLDA	8,628	12,942
Recruitment/Repatriation fare	10,000	-
Shipping	5,000	-
Establishment Grant	1,565	-
Hotel on arrival/departure	2,000	-
Housing allowance	7,200	10,800
Annual leave	-	10,000
Sub-total	99,184	130,9281
Legal and Policy Adviser		
Base salary (recruitment 2007 January)		68,054
Superannuation	-	5,104
Education	-	17,628
Health and medical	-	5,200
Life insurance	-	1,200
COLDA	-	12,942
Recruitment/Repatriation fare	-	11,000
Shipping	-	5,500
Establishment Grant	-	1,700
Hotel on arrival/departure	-	2,200
Housing allowance	-	10,800
Annual leave	-	-
Sub-total	-	141,328

Data Administrator		 
Base salary (recruitment 2007 January)	_	57,217
Superannuation	_	4,291
Education	_	17,628
Health and medical	_	5,200
Life insurance	_	1,200
COLDA	_	11,009
Recruitment/Repatriation fare	_	10,000
Shipping	_	5,000
Establishment Grant	_	1,565
Hotel on arrival/departure	_	2,000
Annual leave	_	2,000
Housing assistance	_	10,800
Sub-total	-	125,910
Observer Programme Coordinator	-	123,910
Base salary (recruitment January 2007)		57,217
Superannuation	_	4,291
Education	-	17,628
Health and medical	_	-
Life insurance	_	5,200
COLDA	-	1,200
	-	11,009
Recruitment/Repatriation fare	-	10,000
Shipping Establishment Grant	-	5,000
	-	1,565
Hotel on arrival/departure	-	2,000
Annual leave	_	10.000
Housing assistance Sub-total	_	10,800 125,910
Network administrator		123,710
Base salary (recruitment 2007 January)	_	45,358
Superannuation	_	3,402
Education	_	17,628
Health and medical	_	5,200
Life insurance	_	1,200
COLDA		8,893
Recruitment/Repatriation fare	_	10,000
Shipping	_	5,000
Establishment Grant	_	1,565
Hotel on arrival/departure	_	2,000
Annual leave		2,000
Housing assistance	_	10,800
Sub-total	_	111,046
Office Manager/Executive Officer	-	111,040
Base salary (recruitment March 2006)	24,000	32,000
Health insurance	1,050	-
Social Security	1,030	1,400 1,920
Sub-total	26,490	35,320
	20,490	33,320
Secretary to the Executive Director Base salary (recruitment March 2006)	16 500	22 900
Health insurance	16,500	22,800
	1,400 990	1,456
Social Security		1,030
Sub-total	18,890	25,286

Administrative Assistant (Archives and Records)		
Base salary (recruitment March 2006)	13,500	18,000
Health insurance	1,400	1,456
Social Security	810	842
Sub-total	15,710	20,298
Administrative Assistant (Data Entry)	•	
Base salary (recruitment March 2006)	13,500	18,000
Health insurance	1,400	1,456
Social Security	810	842
Sub-total	15,710	20,298
Treasury Assistant		
Base salary (recruitment March 2006)	12,375	16,500
Health insurance	1,400	1,456
Social Security	743	772
Sub-total	14,518	18,728
Secretary/receptionist		-
Base salary (recruitment March 2006)	10,374	13,832
Health insurance	1,400	1,456
Social Security	622	647
Sub-total	12,396	15,935
Driver/Maintenance		
Base salary (recruitment March 2006)	10,374	13,832
Health insurance	1,400	1,456
Social Security	622	647
Sub-total	12,396	15,935
Cleaner Helper		
Base salary (recruitment March 2006)	5,958	6,500
Health insurance	1,400	1,456
Social Security	358	390
Sub-total	7,716	8,346
Security (To be contracted in the long term)		
Base salary (recruitment March 2006)	10,374	-
Health insurance	1,400	-
Social Security	622	-
Sub-total	12,396	-
Librarian		
Base salary	-	18,720
Health insurance	-	1,400
Social Security		1,123
Sub-total	-	21,243
Total	811,277	1,479,744

<sup>\* 2005</sup> actual for ED only, ED's family to travel to Pohnpei in early 2006

Average annual catches (tonnes) of albacore, bigeye, skipjack, yellowfin, blue marlin, black marlin, striped marlin and swordfish in the WCPFC Convention Area during 2002-2004.

Commission Member	Own EEZ, Archip.	%	Own EEZ, Non- Archip.	%	Ex-Own EEZ	%	Total	% in Conv Area	Own EEZ, Discount	%	Ex-Own EEZ	%	Discount Total	% of Catch Compo -nent
Australia	0		6,921	91.1	678	8.9	7,599	0.37	6,921	91.1	678	8.9	7,599	0.52
Canada	0		0	0.0	345	100.0	345	0.02	0	0.0	345	100.0	345	0.02
China	0		0	0.0	36,525	100.0	36,525	1.78	0	0.0	36,525	100.0	36,525	2.50
Cook Islands	0		1,928	98.6	28	1.4	1,956	0.10	771	96.5	28	3.5	799	0.05
European Union	0		0	0.0	1,910	100.0	1,910	0.09	0	0.0	1,910	100.0	1,910	0.13
Fiji Islands	764	5.4	8,027	56.5	5,410	38.1	14,201	0.69	3,211	37.2	5,410	62.8	8,621	0.59
France	0		8,620	93.3	619	6.7	9,239	0.45	3,448	84.8	619	15.2	4,067	0.28
FSM	0		3,157	11.7	23,791	88.3	26,948	1.31	1,263	5.0	23,791	95.0	25,054	1.71
Indonesia	208,871	80.0	52,218	20.0	0	0.0	261,089	12.69	20,887	100.0	0	0.0	20,887	1.43
Japan	0		111,757	23.8	357,126	76.2	468,883	22.79	111,757	23.8	357,126	76.2	468,883	32.08
Kiribati	0		7,749	100.0	0	0.0	7,749	0.38	3,100	100.0	0	0.0	3,100	0.21
Korea, Republic of	0		0	0.0	235,102	100.0	235,102	11.43	0	0.0	235,102	100.0	235,102	16.08
Marshall Islands	0		3,149	7.6	38,033	92.4	41,182	2.00	1,260	3.2	38,033	96.8	39,293	2.69
Nauru	0		9	100.0	0	0.0	9	0.00	4	100.0	0	0.0	4	0.00
New Zealand	0		12,590	43.3	16,455	56.7	29,045	1.41	12,590	43.3	16,455	56.7	29,045	1.99
Niue				n/a		n/a	0	0.00	0	n/a	0	n/a	0	0.00
Palau	0		20	100.0	0	0.0	20	0.00	8	100.0	0	0.0	8	0.00
Papua New Guinea	44,798	27.3	57,196	34.9	61,872	37.8	163,866	7.97	22,878	27.0	61,872	73.0	84,750	5.80
Philippines	205,247	71.3	51,312	17.8	31,161	10.8	287,720	13.99	20,525	39.7	31,161	60.3	51,685	3.54
Samoa	0		2,485	79.9	627	20.1	3,112	0.15	994	61.3	627	38.7	1,621	0.11
Solomon Islands	8,773	37.4	13,968	59.5	731	3.1	23,472	1.14	5,587	88.4	731	11.6	6,318	0.43
Chinese Taipei	0		12,333	4.2	281,345	95.8	293,678	14.28	12,333	4.2	281,345	95.8	293,678	20.09
Tonga	0		810	71.9	317	28.1	1,127	0.05	324	50.5	317	49.5	641	0.04
Tuvalu				n/a		n/a	0	0.00	0	n/a	0	n/a	0	0.00
United Kingdom				n/a		n/a	0	0.00	0	n/a	0	n/a	0	0.00
United States of	0		10,933	10.1	97,499	89.9	108,432	5.27	10,933	10.1	97,499	89.9	108,432	7.42
America	· ·		· ·				· ·		,		Í		· ·	
Vanuatu	0		759	2.2	33,127	97.8	33,886	1.65	304	0.9	33,127	99.1	33,430	2.29
Total	468,453	22.8	365,941	17.8	1,222,702	59.4	2,057,096	100.00	239,097	16.4	1,222,702	83.6	1,461,798	100.00

Sources of tuna and billfish catch estimates, and notes on the data available and the methods used to estimate catches within the archipelagic and EEZ waters of commission members

The following tables provide information on the sources of tuna and billfish catch estimates, and notes on the data available and the methods used to estimate catches within the archipelagic and EEZ waters of commission members. Table 1 deals with the sources of annual catch estimates for the main target tuna species and has been taken from Lawson (in prep.). Table 2 deals with the sources of annual catch estimates for the four main billfish species and was compiled during the preparation of Lawson and Williams (2005).

# 1. Sources of annual catch estimates for albacore, bigeye, skipjack and yellowfin tuna for the WCPFC Convention Statistical Area, by gear and fleet

#### **LONGLINE**

American Samoa <u>Albacore, Bigeye and Yellowfin</u>: The catch estimates for 2002–2004

were taken from Ito et al. (2005).

Australia Albacore, Bigeye and Yellowfin: All estimates for 2002 were provided

by BRS (Bromhead, pers. comm., May 2003). All estimates for 2003–2004 were provided by BRS (Bromhead, pers. comm., April 2004, May

2004, May 2005).

China Albacore, Bigeye and Yellowfin: The catch estimates for 2002–2003

were taken from Song et al. (2004).

Cook Islands Albacore, Bigeye and Yellowfin: The catch estimates for 2002–2004

were taken from Mitchell (2005).

Fed. States of Micronesia Albacore, Bigeye and Yellowfin: The catch estimates for 2002–2004

were taken from Anon. (2005b).

Fiji Islands Albacore, Bigeye and Yellowfin: The catch estimates for 2002–2004

were taken from Amoe (2005). These statistics include joint ventures with Australia, Korea, New Zealand, Chinese Taipei and the United States, but not chartered Chinese Taipei distant-water longliners or

United States longliners fishing as foreign vessels.

French Polynesia Albacore, Bigeye and Yellowfin: The catch estimates for 2002–2003

were taken from Ponsonnet (2004). The catch estimates for 2004 were taken from Ponsonnet (2005). Catches to the east of 150°W have been included. These statistics cover all longliners, including coastal longliners (palangriers côtiers), offshore longliners (palangriers hauturiers) and

converted bonitiers. The catch estimates cover discards.

Indonesia Bigeye: All estimates were determined by adjusting estimates of

yellowfin catches for the inclusion of bigeye; the proportion of bigeye in the catch of yellowfin was estimated as 8.6 per cent (Hampton et al.

#### **LONGLINE**

1996). For the sources of the unadjusted estimates of yellowfin, see 'Yellowfin' below.

<u>Yellowfin</u>: Estimates for 2002–2004 were determined from information provided by the Data and Statistic Sub Directorate of the Directorate General of Capture Fishery (Retnowati, pers. comm., June 2003, April 2004, May 2005). All estimates were adjusted for the inclusion of bigeye; the proportion of bigeye in the catch of yellowfin was estimated as 8.6 per cent (Hampton et al. 1996).

Japan, coastal

Albacore, Bigeye, Skipjack and Yellowfin: Catch estimates for 2002–2004 were provided by the National Research Institute of Far Seas Fisheries (Miyabe, pers. comm., May 2005).

Japan, offshore/distantwater Albacore in the WCPO, Bigeye and Yellowfin: Catch estimates for 2002–2004 were taken from Uosaki et al. (2005).

Kiribati <u>Bigeye and Yellowfin</u>: The catch estimates for 2002–2003 were taken from Awira (2004).

Marshall Islands

Albacore, Bigeye and Yellowfin: All estimates were determined from logsheet and landings data held at SPC; catches were allocated to the year in which the trip ended.

Albacore, Bigeye and Yellowfin: The catch estimates for 2002–2003 were provided by SPC (Chapman, pers. comm., November 2004). The catch estimates for 2004 were taken from Anon. (2004d).

Albacore, Bigeye and Yellowfin: All estimates for 2002–2004 were taken from Etaix-Bonnin (2005).

Albacore, Bigeye and Yellowfin: Catch estimates for 2002 were taken from Kendrick et al. (2004). Catch estimates for 2003 were provided by the Ministry of Fisheries (Harley, pers. comm., May 2005). Estimates of catches of albacore, bigeye and yellowfin for 2004 were taken from Kendrick et al. (2005).

Albacore, Bigeye and Yellowfin: All estimates were determined from logsheet and landings data held at SPC; catches were allocated to the year in which the trip ended.

Albacore, Bigeye and Yellowfin: All estimates for 2002 were taken from Kumoru & Lewis (2003); the catch estimates for tuna were raised on the basis of coverage rates in Table 6 of that report. All estimates for 2003 were taken from Kumoru (2004). The catch estimates for 2004 were provided by the National Fisheries Authority (Asi, July 2005).

<u>Bigeye and Yellowfin</u>: Estimates of the catch of skipjack and the combined catch of yellowfin and bigeye for 2002–2004 were taken from Barut & Garvilles (2005). Catches by species and gear type for 2002–2004 were estimated using the method in Lawson & Williams (1998) and

Nauru

New Caledonia

New Zealand

Palau

Papua New Guinea

Philippines

#### **LONGLINE**

the proportions by gear type for 1996.

Republic of Korea

<u>Albacore in the WCPO, Bigeye and Yellowfin</u>: Catch estimates for 2002–2004 were provided by the National Fisheries Research and Development Institute (NRFDI) (Moon, pers. comm., July 2005).

Samoa

<u>Albacore</u>, <u>Bigeye and Yellowfin</u>: The catch estimates for 2002–2003 were taken from Imo et al. (2004). The catch estimates for 2004 were taken from Imo et al. (2005).

Solomon Islands

Albacore, Bigeye and Yellowfin: All estimates for 2002–2003 were taken from Oreihaka (2004). All estimates for 2004 were taken from Diake (2005).

Spain

Catches for 2004 were reported in Anon. (2005a) as "swordfish 692.5 t, blue shark 1291.4 t, shortfin mako 238.3 t, tunas 88.8 t, billfish 38.2 t and others species 1.2 t".

Chinese Taipei, offshore, foreign ports

Bigeye and Yellowfin: Catch estimates for 2002 were provided by the Overseas Fisheries Development Council (Chang, pers. comm., June 2003). Catch estimates for 2003 were provided by the Fisheries Agency (Tsai, pers. comm., July 2004). The estimates for 2001–2003 represent landings in foreign ports in the Pacific region and may include catches from other ocean areas. Catch estimates for 2004 were taken from Anon. (2005c).

Chinese Taipei, offshore, domestic

Bigeye and Yellowfin: All estimates for 2003–2002 were taken from Anon. (2004). The estimates for 2004 were provided by the Fisheries Agency (Lin, pers. comm. April 2005, May 2005). The estimates for 2002–2003 represent landings in domestic ports and may include catches from other ocean areas.

Chinese Taipei,distantwater Albacore, Bigeye and Yellowfin in the WCPO (Table 21): Estimates of catches of bigeye, yellowfin and other species for 2002–2004 were taken from Anon. (2005c); estimates of albacore catches were provided by the Fisheries Agency (Lin, pers. comm., April 2005, May 2005).

Tonga

Albacore, Bigeye and Yellowfin: The catch estimates for 2002–2003 were determined from logsheet and landings data held at SPC; catches were allocated to the year in which the trip ended. Catch estimates for 2004 were provided by the Ministry of Fisheries (Loto'ahea, pers. comm., May 2005).

United States of America

Albacore, Bigeye and Yellowfin in the WCPO, excluding American Samoa and Hawaii/California: The catches were estimated from landings data, logsheet data and port sampling data held at SPC. These vessels fished or unloaded in the Federated States of Micronesia, Fiji Islands, Guam, Marshall Islands, Palau and Papua New Guinea.

Bigeye and Yellowfin for vessels based in Hawaii and California: The catch estimates for 2002–2004 were taken from Ito et al. (2005). A small proportion of the catches were taken in the Eastern Pacific Ocean.

#### LONGLINE

Vanuatu

<u>Albacore</u>, <u>Bigeye and Yellowfin</u>: The catch estimates for 2002–2004 were determined from logsheet and landings data held at SPC; catches were allocated to the year in which the trip ended.

#### **POLE-AND-LINE**

Australia

Skipjack and Yellowfin: All estimates for 2002–2004 were provided by BRS (Bromhead, pers. comm., May 2003, May 2005).

French Polynesia

<u>Bigeye, Skipjack and Yellowfin</u>: The catch estimates for 2002–2003 were taken from Ponsonnet (2004). All estimates for 2002–2003 cover vessels based in Papeete and those based elsewhere. Catches taken using other methods, such as trolling, harpoon and deep handline, are included. Catches to the east of the WCPO may be included.

Indonesia

<u>Bigeye</u>: All estimates were determined by adjusting estimates of yellowfin catches for the inclusion of bigeye. The proportion of bigeye in the catch of yellowfin was estimated as 10 per cent for pole-and-line (Hampton et al. 1996). For the sources of the unadjusted estimates of yellowfin, see 'Yellowfin' below.

<u>Skipjack</u>: Estimates for 2002–2004 were determined from information provided by the Data and Statistic Sub Directorate of the Directorate General of Capture Fishery (Retnowati, pers. comm., June 2003, April 2004, May 2005).

<u>Yellowfin</u>: Estimates for 2002–2004 were determined from information provided by the Data and Statistic Sub Directorate of the Directorate General of Capture Fishery (Retnowati, pers. comm., June 2003, April 2004, May 2005). All estimates were adjusted for the inclusion of bigeye in the estimated catches of yellowfin; the proportion of bigeye in the catch of yellowfin was estimated at 10 per cent (Hampton et al. 1996).

Japan, coastal

<u>Bigeye, Skipjack and Yellowfin</u>: Skipjack catch estimates for 2002 and bigeye and yellowfin catch estimates for 2002 were taken from Miyabe et al. (2004).

Japan, water/offshore

distant- Albacore, Bigeye, Skipjack and Yellowfin: Estimates of catches for 2002–2003 were taken from Uosaki et al. (2005). These estimates cover

vessels over 20 GRT.

New Zealand

Skipjack and Yellowfin: Catch estimates for 2002 were taken from Kendrick et al. (2004). Catch estimates for 2003 were provided by the Ministry of Fisheries (Harley, pers. comm., May 2005). The catch estimates for 2004 were taken from Kendrick et al. (2005).

Solomon Islands

Skipjack and Yellowfin: The catch estimates for 2002–2003 were taken from Oreihaka (2004). The catch estimates for 2004 were taken from Diake (2005).

#### **POLE-AND-LINE**

United States of America

Skipjack and Yellowfin: Estimates for 2002–2003 were provided by NMFS (Skillman, pers. comm., May 2004).

#### **PURSE SEINE**

Australia, domestic

Bigeye, Skipjack and Yellowfin: All estimates for 2002 were provided by the Bureau of Rural Sciences (Bromhead, pers. comm., May 2003, May 2005).

China

<u>Bigeye, Skipjack and Yellowfin</u>: All estimates for 2002 were determined from logsheet data held at SPC. The catch estimates for 2003 were taken from Song et al. (2004). Estimates of bigeye and yellowfin catches for 2002–2003 were modified following the procedure described in Lawson (in prep.).

Fed. States of Micronesia

<u>Bigeye, Skipjack and Yellowfin</u>: The catch estimates for 2002–2004 were taken from Anon. (2005b). All estimates of bigeye and yellowfin catches were modified following the procedure described in Lawson (in prep.).

Indonesia, domestic

<u>Bigeye</u>: All estimates were determined by adjusting estimates of yellowfin catches for the inclusion of bigeye. The proportion of bigeye in the catch of yellowfin was estimated as 10 per cent for purse seine (Hampton et al. 1996). For the sources of the unadjusted estimates of yellowfin, see 'Yellowfin' below.

<u>Skipjack</u>: The estimates for 2002 were determined by applying the proportion taken by purse seine in 1990 to estimates of the total catch of all gear types; estimates of the total catch for 2002–2004 were provided by the Data and Statistic Sub Directorate of the Directorate General of Capture Fishery (Retnowati, pers. comm., June 2003, April 2004, May 2005).

<u>Yellowfin</u>: Estimates for 2002–2004 were determined from information provided by the Data and Statistic Sub Directorate of the Directorate General of Capture Fishery (Retnowati, pers. comm., June 2003, April 2004, May 2005). All estimates were adjusted for the inclusion of bigeye in the estimated catches of yellowfin; the proportion of bigeye in the catch of yellowfin was estimated at 10 per cent (Hampton et al. 1996).

Japan, coastal

<u>Bigeye, Skipjack and Yellowfin</u>: Catch estimates for 2002 were taken from Miyabe et al. (2004).

Japan, water/offshore

distant-

<u>Bigeye, Skipjack and Yellowfin</u>: The catch estimates for 2002–2004 were taken from Uosaki et al. (2005).

Kiribati

<u>Bigeye</u>, <u>Skipjack and Yellowfin</u>: All estimates for 2002–2004 were determined from logsheet and unloadings data held at SPC. All estimates of bigeye and yellowfin catches were modified following the procedure described in Lawson (in prep.).

#### **PURSE SEINE**

Marshall Islands

<u>Bigeye, Skipjack and Yellowfin</u>: The catch estimates for 2002–2004 were taken from Joseph (2005). Estimates of bigeye and yellowfin catches were modified following the procedure described in Lawson (in prep.).

Mexico

<u>Bigeye</u>, <u>Skipjack and Yellowfin</u>: All estimates were determined from logsheet data held at SPC. All estimates of bigeye and yellowfin catches were modified following the procedure described in Lawson (in prep.).

New Zealand

Bigeye, Skipjack and Yellowfin: Catch estimates for 2002 were taken from Kendrick et al. (2004). For 2003, catch estimates for the New Zealand EEZ were provided by the Ministry of Fisheries (Harley, pers. comm., May 2005) and catches outside the New Zealand EEZ were determined from logsheet data held by the OFP. Catch estimates for 2004 were taken from Kendrick et al. (2005). Estimates of bigeye and yellowfin catches taken outside the New Zealand EEZ were modified following the procedure described in Lawson (in prep.). The skipjack catches do not include those of chartered American vessels in the New Zealand zone.

Papua New Guinea

Bigeye, Skipjack and Yellowfin: All estimates for 2002 were determined from logsheet and unloadings data held at SPC. The catch estimates for 2003–2004 were provided by the National Fisheries Authority of Papua New Guinea (Kumoru, pers. comm., July 2004, July 2005). All estimates of bigeye and yellowfin catches were modified following the procedure described in Lawson (in prep.).

Philippines, domestic

<u>Bigeye, Skipjack and Yellowfin</u>: Estimates of the catch of skipjack and the combined catch of yellowfin and bigeye for 2002–2004 were taken from Barut & Garvilles (2005). Catches by species and gear type for 2002–2004 were estimated using the method in Lawson & Williams (1998) and the proportions by gear type for 1996.

Philippines, distant-water

<u>Bigeye</u>, <u>Skipjack and Yellowfin</u>: Estimates for 2002 were determined from logsheet data held at SPC; these statistics cover catches taken in the waters of Papua New Guinea and Solomon Islands. Catch estimates for 2003–2004 were provided by the National Fisheries Authority of Papua New Guinea (Kumoru, pers. comm., July 2004, July 2005). All estimates of bigeye and yellowfin catches were modified following the procedure described in Lawson (in prep.).

Philippines, ringnet

See Philippines, domestic.

Republic of Korea

<u>Bigeye, Skipjack and Yellowfin</u>: The catch estimates for 2002–2004 were taken from Moon et al. (2004). All estimates of bigeye and yellowfin catches were modified following the procedure described in Lawson (in prep.).

Solomon Islands

<u>Bigeye, Skipjack and Yellowfin</u>: All estimates for 2002 were determined from information provided by the Fisheries Division (Maneiria, pers. comm., June 2002, May 2003). The catch estimates for 2003 were taken

#### **PURSE SEINE**

from Oreihaka (2004). The catch estimates for 2004 were taken from Diake (2005). All estimates of bigeye and yellowfin catches were modified following the procedure described in Lawson (in prep.).

Spain

<u>Bigeye, Skipjack and Yellowfin</u>: All estimates for 2002 were determined from logsheet data held by SPC. Catch estimates for 2004 were taken by Anon. (2005a).

Chinese Taipei

<u>Bigeye, Skipjack and Yellowfin</u>: Catch estimates for 2002–2004 were taken from Anon. (2005c). Estimates of bigeye and yellowfin catches for 2002–2004 were adjusted by the Overseas Fisheries Development Council.

United States of America

<u>Bigeye, Skipjack and Yellowfin</u>: The catch estimates for 2002–2004 were taken from Ito et al. (2005).

Vanuatu

Bigeye, Skipjack and Yellowfin: The catch estimates for 2002–2004 were taken from Naviti (2005); these estimates cover vessels fishing under bilateral access agreements (and not vessels fishing under the FSM Arrangement). All estimates of bigeye and yellowfin catches were modified following the procedure described in Lawson (in prep.).

#### TROLL

American Samoa

Bigeye, Skipjack and Yellowfin: Estimates for 2002–2003 were taken from Ito et al. (2004).

Australia

<u>Albacore, Bigeye and Yellowfin</u>: All estimates were provided by the Bureau of Rural Sciences (Bromhead, pers. comm., May 2003, April 2004, May 2005).

Canada

<u>Albacore</u>, <u>South Pacific</u>: Catch estimates for the 2001/02 – 2003/04 season were taken from Stocker & Shaw (2005). Estimates for the fishing season (November–May) were allocated to the year in which the season ended.

<u>Albacore, North Pacific</u>: Catch estimates for 2002–2004 were provided by Fisheries and Oceans Canada (Stocker, pers. comm., June 2005).

Fiji Islands

<u>Bigeye, Skipjack and Yellowfin</u>: All estimates were provided by the Fisheries Division (Sharma, pers. comm. to Coan, 1997).

Guam

<u>Bigeye</u>, <u>Skipjack and Yellowfin</u>: Estimates for 2002–2004 were taken from Ito et al. (2005). These estimates cover the commercial fishery only and not the recreational fishery.

Japan

Albacore, Bigeye, Skipjack and Yellowfin: All estimates were provided by the National Research Institute of Far Seas Fisheries (Miyabe, pers. comm., May 2005).

New Zealand

Albacore: Catch estimates for the 2001/02–2003/04 seasons were taken

**TROLL** 

from Kendrick et al. (2005).

Northern Marianas

Skipjack and Yellowfin: Estimates for 2002–2004 were taken from Ito et al. (2005).

United States of America

<u>Bigeye</u>, <u>Skipjack and Yellowfin</u>: Estimates for 2002–2004 were taken from Ito et al. (2005). These estimates cover the commercial fishery only and not the recreational fishery.

<u>Albacore</u>, seasonal catches: The catch estimates for the 2001/02–2003/04 seasons were taken from Ito et al. (2005). The catch estimates do not cover discards

Albacore, annual catches: Catch estimates for 2002–2004 were taken from Ito et al. (2005). The catch estimates do not cover discards. Part of the catch was taken in the Eastern Pacific Ocean

#### **OTHER**

Australia, recreation

<u>Albacore</u>: All estimates were provided by the Bureau of Rural Sciences (Bromhead, pers. comm., May 2003).

Australia, unclassified

<u>Bigeye, Skipjack</u> and <u>Yellowfin</u>: All estimates were provided by the Bureau of Rural Sciences (Bromhead, pers. comm., April 2004, May 2005). These catch estimates cover rod and reel, handline, minor line and troll.

French Polynesia poti marara

poti Poti marara are coastal vessels ranging from 18 ft (5.5 m) to 26 ft (7.9 m), with engines ranging from 36-hp outboards to 250-hp inboards, depending on the boat length, age and fishing strategy. Gear types used include about 60 per cent troll, 20 per cent harpoon, 10 per cent deep handline, 7 per cent pole-and-line, as well as spear gun, scoops, scuba diving and nets. Estimates for 2002–2003 were taken from Ponsonnet (2004).

Indonesia, handline

<u>Bigeye</u>: All estimates were determined by adjusting estimates of yellowfin catches for the inclusion of bigeye. The proportion of bigeye in the catch of yellowfin was estimated as 8.6 per cent for handline (Hampton et al. 1996). For the sources of the unadjusted estimates of yellowfin, see 'Yellowfin' below.

Indonesia, unclassified

<u>Bigeye</u>: Estimates for 1970-1998 were determined by adjusting estimates of yellowfin catches for the inclusion of bigeye. The proportion of bigeye in the catch of yellowfin was estimated as 10 per cent for unclassified (Hampton et al. 1996). For the sources of the unadjusted estimates of yellowfin, see 'Yellowfin' below.

<u>Skipjack</u>: The estimates for 2002–2004 were determined by subtracting estimates of catches by the other gear types from estimates of the total catch; estimates of the total catch for 2002 were provided by the Data and

#### **OTHER**

Statistic Sub Directorate of the Directorate General of Capture Fishery (Retnowati, pers. comm., June 2003, April 2004, May 2005).

<u>Yellowfin</u>: Estimates for 2002–2004 were determined from information provided by the Data and Statistic Sub Directorate of the Directorate General of Capture Fishery (Retnowati, pers. comm., June 2003, April 2004, May 2005). All estimates were adjusted for the inclusion of bigeye in the estimated catches of yellowfin; the proportion of bigeye in the catch of yellowfin was estimated at 10 per cent for unclassified gear types (Hampton et al. 1996).

Japan, unclassified <u>Bigeye, Skipjack and Yellowfin</u>: Bigeye, skipjack and yellowfin catch

estimates for 2002 were taken from Miyabe et al. (2004).

Kiribati, artisanal Skipjack and Yellowfin: Catch estimates for 2002–2003 were taken from

Awira (2004); these estimates cover skiffs that troll for tuna.

New Zealand, unclassified <u>Bigeye</u>, <u>Skipjack and Yellowfin</u>: Catch estimates for 2002–2003 were

taken from Kendrick et al. (2004).

Philippines, gill net Bigeye, Skipjack and Yellowfin: Estimates of the catch of skipjack and

the combined catch of yellowfin and bigeye for 2002–2004 were taken from Barut & Garvilles (2005). Catches by species and gear type for 2002–2004 were estimated using the method in Lawson & Williams

(1998) and the proportions by gear type for 1996.

Philippines, handline See Philippines, gill net.

Philippines, unclassified See Philippines, gill net.

Chinese Taipei, Bigeye, Skipjack and Yellowfin: All estimates were provided by

unclassified National Taiwan University (Sun, pers. comm. to Coan, 1997).

# 2. Sources of annual catch estimates for blue marlin, black marlin, striped marlin and swordfish for the WCPFC Convention Statistical Area

American Samoa

Blue marlin, black marlin, striped marlin, swordfish: Estimates for 2002 catches provided by Bob Skillman in his email message of July 4th 2003). Estimates for 2003 were provided by Bob Skillman in his email message of May 21<sup>st</sup> 2004. The 2003 estimates have been carried over to 2004.

Australia

Blue marlin, black marlin, striped marlin, swordfish: Estimates for 2002, 2003 and 2004 were provided by Don Bromhead, Australian Agriculture, Fisheries and Forestry (AFFA) (pers. comm. 21 May 2003, 21<sup>st</sup> July 2004 and 5<sup>th</sup> May 2005, respectively). The 2002, 2003 and 2004 estimates include the compulsory releases of blue and black marlin, and the logbook-reported discards of striped marlin and swordfish. The catch (weight) estimate for releases of blue marlin and black marlin were determined by applying an estimate of average weight for each species obtained from observers active in the adjacent waters of New Caledonia.

China

Blue marlin, black marlin, striped marlin, swordfish: All estimates were determined by applying the species composition (by weight) of billfish species to total target tuna, obtained from observer data held at SPC, to annual catch estimates of target tuna (Lawson and Williams, 2005). The 2003 estimates have been carried over to 2004.

Chinese-Taipei, distantwater Blue marlin, black marlin, striped marlin, swordfish: Convention Area catch estimates for 2002-2003 were provided by Ding-Rong Lin, Fisheries Agency, Council of Agriculture (FA–COA), in his email message of 29 Apr 2005. Convention Area catch estimates for 2004 were provided by Ding-Rong Lin, Fisheries Agency, Council of Agriculture (FA–COA), in his email message of 31 May 2005.

Chinese-Taipei, offshore, east of 130°E – (mainly based in Micronesia) Blue marlin, black marlin, striped marlin, swordfish: All estimates were determined by applying the species composition (by weight) of billfish species to total target tuna, obtained from observer data held at SPC, to annual catch estimates of target tuna (Lawson and Williams, 2005).

Chinese-Taipei, offshore, west of 130°E (mainly based in Chinese-Taipei) Blue marlin, black marlin, striped marlin, swordfish: Estimates for years prior to 2001 were obtained from the Fisheries Yearbooks, published by the Taiwan Fisheries Bureau (Fisheries Production by type of fisheries by species for Code 211 – Tuna Longline), and more recently via the Fisheries Agency web site (<a href="http://www.fa.gov.tw">http://www.fa.gov.tw</a>). Estimates for 2000 have been carried over to 2001 and 2002.

Estimates for 2003 and 2004 were provided by Ding-Rong Lin, Fisheries Agency, Council of Agriculture (FA-COA), in his email messages of 29 Apr 2005 and 31 May 2005, respectively.

Cook Islands

Blue marlin, black marlin, striped marlin, swordfish: Estimates for 2004 and the years prior to 2003 were determined by applying the species composition (by weight) of billfish species to total target tuna from logbooks to annual target tuna catch estimates (Lawson and Williams, 2005). Estimates for 2003 were provided by Andrew Jones in his email of 21<sup>st</sup> July 2004 (he noted that there was some under-reporting of billfish catches from the northern Cook Islands fishery).

Fed. States of Micronesia

Blue marlin, black marlin, striped marlin, swordfish: Estimates were determined by applying the species composition (by weight) of billfish species to total target tuna from observer data (for 2002–2004) to annual target tuna catch estimates (Lawson and Williams, 2005).

Fiji

Blue marlin, black marlin, striped marlin, swordfish: Estimates for 2002, 2003 and 2004 were determined by applying the species composition (by weight) of billfish species to total target tuna, obtained from observer data (2003–2004) collected by Fiji Fisheries Division, to annual catch estimates of target tuna (Lawson and Williams, 2005).

French Polynesia

Blue marlin, black marlin, striped marlin, swordfish: Catch estimates prior to 2003 were provided by Arsene Stein in his email message of 10 April 2003. Catch estimates for 2003 were provided by Cédric Ponsonnet in his email message of 29 May 2004. Estimates do not include trolling and handline billfish catch from the small-scale bonitier and poti marara fisheries, which totalled 124t. for 2003 (essentially blue marlin and striped marlin); these catches are included in catch by other commercial gears (Table 8 – Other commercial fisheries). Estimates for 2003 have been carried over to 2004 at this stage.

Indonesia

Blue marlin, black marlin, striped marlin, swordfish: Estimates were derived by applying the species composition of billfish species to total target tuna (Carrara and Uktolseja, 1997), to annual catch estimates of target tuna (Lawson and Williams, 2005). Estimates of Handline catch was determined by applying the proportion of each billfish species catch to total tuna catch, obtained from the Philippines National Stock Assessment Project sampling data, to annual catch estimates of target tuna (Lawson and Williams, 2005).

Japan, coastal

Blue marlin, black marlin, striped marlin, swordfish: Estimates for 2002–2004 were provided to SPC by the Naozumi Miyabe (Japan National Research Institute of Far Seas Fisheries –NRIFSF) in his email of 31<sup>st</sup> May 2005. Note that the Blue marlin column represents Blue Marlin + Black marlin.

Japan, offshore/distant water

<u>Blue marlin, black marlin, striped marlin, swordfish:</u> Estimates for 2002–2004 were provided to SPC by the Naozumi Miyabe (Japan National Research Institute of Far Seas Fisheries –NRIFSF) in his email of 31<sup>st</sup> May 2005.

Kiribati

Blue marlin, black marlin, striped marlin, swordfish: Estimates determined by applying the proportion of logbook-reported target tuna catch to annual target tuna catch estimates (Lawson and Williams,

2005), to the logbook-reported billfish catches.

Korea

Blue marlin, black marlin, striped marlin, swordfish: Estimates for 2002–2004 were provided by Dae-Yeon Moon in his email of 6<sup>th</sup> July 2005.

Marshall Islands

Blue marlin, black marlin, striped marlin, swordfish: Estimates determined by applying the species composition (by weight) of billfish species to total target tuna from logbooks to annual target tuna catch estimates (Lawson and Williams, 2005).

New Caledonia

Blue marlin, black marlin, striped marlin, swordfish: Annual estimates for years 2002–2004 were determined by applying the species composition (by weight) of billfish species to total target tuna according to observer data (1996–2004) to annual target tuna catch estimates (Lawson and Williams, 2005).

New Zealand

Blue marlin, black marlin, striped marlin, swordfish: Estimates of swordfish catches provided from landings data for years since 1990 taken from *SCTB16 Working Paper NFR 17 New Zealand Domestic Tuna Fisheries in 2001* (Murray and Smith, 2003). Regulations in place under a billfish moratorium (since 1988) restrict the landing of marlin species, hence retained catches of billfish since 1988 are essentially zero. Catch Estimates for 2003-2004 were provided by Shelton Harley, sent via FTP on 9 May 2005. The 2003 estimate for striped marlin represents the estimate of catch released.

Papua New Guinea

<u>Blue marlin, black marlin, striped marlin, swordfish:</u> Estimates were determined by applying the species composition of billfish, from observer data for years 2002–2004) to annual target tuna catch estimates (Lawson and Williams, 2005). The estimates for 2004 were provided by Donna Asi in her email message of 21<sup>st</sup> July 2005.

**Philippines** 

Blue marlin, black marlin, striped marlin, swordfish: Estimates were derived by applying the species composition of billfish species to total target tuna in the adjacent Indonesian longline fishery (Carrara and Uktolseja, 1997), to annual catch estimates of target tuna for the Philippine longline fishery (Lawson and Williams, 2005). Estimates of Handline and Ringnet catch was determined by applying the proportion of each billfish species catch to total tuna catch, obtained from the Philippines National Stock Assessment Project sampling data, to annual catch estimates of target tuna (Lawson and Williams, 2005).

Samoa

Blue marlin, black marlin, striped marlin, swordfish: The estimates for 2002 and 2003 were provided in *SCTB17 Working Paper NFR–23 Samoa Tuna Fisheries Report* (Imo, 2004). The estimates for 2004 were provided by Roseti Imo in his email message of 7<sup>th</sup> June 2005.

Solomon Islands

Blue marlin, black marlin, striped marlin, swordfish: Estimates were determined by applying the species composition of billfish to target tuna catch, provided for 1999 by Edwin Oreihaka, to annual catch estimates of target tuna (Lawson and Williams, 2005). The 2002 estimates have

been carried over to 2003 and 2004.

Tonga

Blue marlin, black marlin, striped marlin, swordfish: All estimates were determined by applying the species composition (by weight) of billfish species to total target tuna, obtained from observer data held at SPC, to annual catch estimates of target tuna (Lawson and Williams, 2005).

United States of America, (Hawaii)

Blue marlin, black marlin, striped marlin, swordfish: Estimates for 2002 were provided by Bob Skillman in his email message of July 4<sup>th</sup> 2003. Estimates for 2003 were provided by Bob Skillman in his email message of May 21<sup>st</sup> 2004. The 2003 estimates have been carried over to 2004.

United States of America, (FSM and Marshall Islands)

Blue marlin, black marlin, striped marlin, swordfish: All estimates were determined by applying the species composition (by weight) of billfish species from logbooks to annual catch estimates of target tuna (Lawson and Williams, 2005).

Vanuatu

Blue marlin, black marlin, striped marlin, swordfish: Estimates for 2002–2004 were determined by applying the species composition (by weight) of billfish species to total target tuna, obtained from observer data covering the Fiji fleet for the period 2002–2004, to annual catch estimates of target tuna (Lawson and Williams, 2005).

3. Notes on the coverage of operational (logsheet catch and effort) data available for the period 2002–2004 to determine catches in member country's EEZs and archipelagic waters, and the methods used to estimate catches by EEZ, in the absence of adequate data.

Commission Member	Notes on the coverage of operational data available and methods used to estimate catches for "Own EEZs" and archipelagic waters, where relevant.
Cook Islands	Represents catches by the Cook Islands domestic longline fleet. Coverage of operational (logsheet catch and effort) data for the period 2002-2004 is 89%. The proportion of catch in the Home EEZ obtained from operational data for the period 2002–2004 has been applied to the total catch estimate to determine the estimated "Own EEZ" and "Ex-Own EEZ" catches.
Federated States of Micronesia	Represents catches by the FSM longline and purse seine fleets. Coverage of operational (logsheet catch and effort) data for the period 2002-2004 is 53.4% and 99%, respectively. The proportion of catch in the Home EEZ obtained from operational data for the period 2002–2004 (for these two fleets) has been applied to the total catch estimates to determine the average annual estimated "Own EEZ" and the "Ex_Own EEZ" catches.
Fiji Islands	Represents catches by the Fiji domestic longline fleet. Coverage of operational (logsheet catch and effort) data for the period 2002-2004 is 92%. The proportion of catch in the Home EEZ and in Fiji archipelagic waters (see Figure 2) obtained from operational data for the period 2002–2004 has been applied to the total catch estimate to determine the estimated "Own EEZ, archipelagic", "Own EEZ, non-archipelagic" and "Ex-Own EEZ" catches.
France	Represents catches by the French Polynesian and New Caledonian longline fleets (there are no Wallis and Futuna vessels fishing in the Convention Area at this stage). Coverage of operational (logsheet catch and effort) data for the period 2002-2004 is 71% and 78%, respectively. The proportion of catch in the Home EEZ obtained from operational data for the period 2002–2004 (for these two fleets) has been applied to the total catch estimates to determine the average annual estimated "Own EEZ" and the "Ex_Own EEZ" catches.
Indonesia	Represents catches by domestic longline, handline, pole-and-line (baitboat), purse seine and "unclassified-geared" fleets. Operational data are not currently available for these fleets, and it has been assumed that fishing occurs entirely within the Indonesian EEZ.
	The Commission currently assumes that the proportion of "Own EEZ catches taken in archipelagic waters" for these fleets is 80%.
Kiribati	Represents catches by the domestic longline and regional purse seine fleets. Operational data are currently not available for the longline fleet, and it has been assumed that fishing occurs entirely within the Kiribati EEZ.
	Coverage of operational (logsheet catch and effort) data for the Kiribati

Commission Member	Notes on the coverage of operational data available and methods used to estimate catches for "Own EEZs" and archipelagic waters, where relevant.
	purse seine fleet for the period 2002-2004 is 100%. The proportion of catch in the Home EEZ obtained from operational data for the period 2002–2004 (for the purse seine fleet) has been applied to the total catch estimate to determine the average annual estimated "Own EEZ" and the "Ex_Own EEZ" catches.
Marshall Islands	Represents catches by the domestic longline and regional purse seine fleets. Operational data are currently not available for the longline fleet, and it has been assumed that fishing occurs entirely within the Marshall Islands EEZ.
	Coverage of operational (logsheet catch and effort) data for the Marshall Islands purse seine fleet for the period 2002-2004 is 100%. The proportion of catch in the Home EEZ obtained from operational data for the period 2002–2004 (for the purse seine fleet) has been applied to the total catch estimate to determine the average annual estimated "Own EEZ" and the "Ex_Own EEZ" catches.
Nauru	Represents catches by the domestic longline fleet. Operational data are currently not available for the longline fleet, and it has been assumed that fishing occurs entirely within the Nauru EEZ.
Niue	This fleet started fishing in May 2005.
Palau	Represents catches by the Palau domestic longline fleet. Coverage of operational (logsheet catch and effort) data for the period 2002-2004 is 9%. The proportion of catch in the Home EEZ obtained from operational data for the period 2002–2004 has been applied to the total catch estimate to determine the estimated "Own EEZ" and "Ex-Own EEZ" catches.
Papua New Guinea	Represents catches by the PNG domestic longline and purse seine fleets, and the regional purse seine fleet fishing under the FSM Arrangement. Note that the vessels fishing under the FSM Arrangement have in the past had a flag of registration obtained from Vanuatu, although the "Home Party" is PNG, which is how the catches have been allocated in this calculation. Coverage of operational (logsheet catch and effort) data for the period 2002-2004 is 91% for the longline fleet and 98% for the purse seine fleets combined.
	The proportion of catch in the Home EEZ and in the PNG archipelagic waters (see Figure 3) obtained from operational data for these fleets for the period 2002–2004 has been applied to the total catch estimates to determine the estimated "Own EEZ, archipelagic", "Own EEZ, non-archipelagic" and "Ex-Own EEZ" catches.
Philippines	Represents catches by domestic longline, gillnet, handline, pole-and-line (baitboat), purse seine and ringnet fleets, but also the "distant-water" Philippines-flagged vessels fishing outside of Philippine waters.

Commission Member	Notes on the coverage of operational data available and methods used to estimate catches for "Own EEZs" and archipelagic waters, where relevant.
	Operational data are currently not available for the domestic fleets, and it is has been assumed that fishing (for these fleets) occurs entirely within the Philippines EEZ.
	Coverage of operational (logsheet catch and effort) data for the Philippine purse seine fleet based outside of the Philippines for the period 2002-2004 is 83%.
	The Commission currently assumes that the proportion of "Own EEZ catches taken in archipelagic waters" for the domestic Philippine fleets is 80%.
Samoa	Represents catches by the Samoa domestic longline fleet. Coverage of operational (logsheet catch and effort) data for the period 2002-2004 is 44%. The proportion of catch in the Home EEZ obtained from operational data for the period 2002–2004 has been applied to the total catch estimate to determine the estimated "Own EEZ" and "Ex-Own EEZ" catches.
Solomon Islands	Represents catches by the Solomon Islands domestic longline, pole-and-line and purse seine fleets, and the regional purse seine fleet. Coverage of operational (logsheet catch and effort) data for the period 2002-2004 is 20% for the longline fleet, 64.5% for the pole-and-line fleet and 58.4% for the purse seine fleets combined.
	The proportion of catch in the Home EEZ and in the Solomon Islands archipelagic waters (see Figure 4) obtained from operational data for these fleets for the period 2002–2004 has been applied to the total catch estimates to determine the estimated "Own EEZ, archipelagic", "Own EEZ, non-archipelagic" and "Ex-Own EEZ" catches.
Tonga	Represents catches by the Tonga domestic longline fleet. Coverage of operational (logsheet catch and effort) data for the period 2002-2004 is 93%. The proportion of catch in the Home EEZ obtained from operational data for the period 2002–2004 has been applied to the total catch estimate to determine the estimated "Own EEZ" and "Ex-Own EEZ" catches.
Tuvalu	No fleets currently operating in the Convention Area.

#### REFERENCES

- Amoe, J. 2005. Fiji tuna and billfish fisheries. Working Paper FR WP-12. First meeting of the Scientific Committee of the Western and Central Fisheries Commission, 8-19 August 2005, Noumea, New Caledonia. Fisheries Division, Ministry of Fisheries and Forests, Fiji. 7 pp.
- Anon. 2004. Update on tuna fisheries of Taiwan in Pacific region. Working Paper NFR–25. Seventeenth Meeting of the Standing Committee on Tuna and Billfish, 9–18 August 2004, Majuro, Marshall Islands. Overseas Fisheries Development Council and the Fisheries Administration, Council of Agriculture, Chinese Taipei. 9 pp.
- Anon. 2005a. Fisheries report of EU-Spain for the year 2004. Working Paper FR WP-16. First meeting of the Scientific Committee of the Western and Central Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. Research Program on Tuna and Tuna-like Species, Instituto Español de Oceanografía, Coruña, Spain. 3 pp.
- Anon. 2005b. FSM tuna fisheries report. Working Paper FR WP-7. First meeting of the Scientific Committee of the Western and Central Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. National Oceanic Resource Management Authority, federated States of Micronesia. 12 pp.
- Anon. 2005c. Tuna fisheries status report of Chinese Taipei in the western and central Pacific region. Working Paper FR WP-6. First meeting of the Scientific Committee of the Western and Central Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. Deep-Sea Fisheries Research and Development Center, Fisheries Administration, Chinese Taipei. 12 pp.
- Anon. 2005d. Nauru tuna fishery report. Working Paper FR WP-18. First meeting of the Scientific Committee of the Western and Central Fisheries Commission, 8-19 August 2005, Noumea, New Caledonia. Fisheries and Marine Resources Authority, Nauru. 4 pp.
- Awira, R. 2004. The domestic tuna fisheries of Kiribati. Working Paper NFR–12. Seventeenth Meeting of the Standing Committee on Tuna and Billfish, 9–18 August 2004, Majuro, Marshall Islands. Fisheries Division, Ministry of Fisheries and Marine Resources, Tarawa, Kiribati. 9 pp.
- Barut, N. & E. Garvilles. 2005. Philippines Fishery Report. Working Paper FR WP–8. First Meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. National Fisheries Research and Development Institute (NFRDI). Bureau of Fisheries and Aquatic Resources. Philippines.
- Diake, S. 2005. National tuna status report for Solomon Islands for 2004. Working Paper FR WP–19. First Meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. Fisheries Division, Honiara, Solomon Islands. 6 pp.
- Etaix-Bonin, R. 2005. New Caledonia annual report on tuna fishing and related activities. Working Paper FR WP-15. First Meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. Service de la marine marchande et des pêches maritimes, Noumea, New Caledonia. 7 pp.

- Hampton, W.J., A.D. Lewis & P.G. Williams. 1996. Estimates of western and central Pacific Ocean bigeye tuna catch and population parameters. Working Paper. World Meeting on Bigeye Tuna, November 1996, La Jolla, California, United States of America. South Pacific Commission, Noumea, New Caledonia.
- Imo, R., A. Mulipola, S. Time & U. Faasili, Jr. 2005. Samoa tuna fisheries report. Working Paper FR WP–22. First Meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. Fisheries Division, Ministry of Agriculture and Fisheries, Apia, Samoa. 8 pp.
- Ito, R., D. Hamm, A. Coan & J. Childers. 2004. Summary of U.S. fisheries for highly migratory species caught in the western-central Pacific Ocean, 1999–2003. Working Paper NFR–29. Seventeenth Meeting of the Standing Committee on Tuna and Billfish, 9–18 August 2004, Majuro, Marshall Islands. National Marine Fisheries Service, La Jolla, California and Honolulu, Hawaii, United States of America. 28 pp.
- Ito, R., D. Hamm, A. Coan & J. Childers. 2005. Summary of U.S. fisheries for highly migratory species in the western-central Pacific, 2000–2004. Working Paper FR WP–17. First Meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. National Marine Fisheries Service, La Jolla, California and Honolulu, Hawaii, United States of America. 27 pp.
- Jacob, P. 2004. Nauru tuna fishery report. Working Paper NFR-15. Seventeenth Meeting of the Standing Committee on Tuna and Billfish, 9–18 August 2004, Majuro, Marshall Islands. Nauru Fisheries and Marine Resources Authority, Nauru. 5 pp.
- Joseph, G. 2005. Tuna fisheries report for the Marshall Islands. Working Paper FR WP-14. First Meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. Marine Resources Authority, Majuro, Marshall Islands. 18 pp.
- Kendrick, T., T. Murray & S.J. Baird. 2004. New Zealand tuna fisheries in 2002 and 2003. Working Paper NFR-17. Seventeenth Meeting of the Standing Committee on Tuna and Billfish, 9–18 August 2004, Majuro, Marshall Islands. Ministry of Fisheries, Wellington, New Zealand. 13 pp.
- Kendrick, T., S. Harley & T. Murray. 2005. New Zealand domestic tuna fisheries in 2003 and 2004. Working Paper FR WP-1. First Meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. Ministry of Fisheries, Wellington, New Zealand. 13 pp.
- Kumoru, L. 2004. National fisheries report Papua New Guinea. Working Paper NFR–21 Seventeenth Meeting of the Standing Committee on Tuna and Billfish, 9–18 August 2004, Majuro, Marshall Islands. National Fisheries Authority, Port Moresby, Papua New Guinea. 12 pp.
- Lawson, T.A. & P.G. Williams. 1998. Review of annual catch estimates for tuna fisheries of the Philippines. Internal Report 34. Oceanic Fisheries Programme, Secretariat of the Pacific Community, Noumea, New Caledonia. 15 pp.
- Lawson, T. A. & P. Williams. 2005. Estimates of annual catches in the WCPFC Convention Area. Working Paper ST IP–1. First Meeting of the Scientific Committee of the WCPFC. Noumea, New Caledonia. 8th–19th August 2005.

- Lawson, T.A. (editor) (in preparation). Secretariat of the Pacific Community Tuna Fishery Yearbook 2004. Secretariat of the Pacific Community, Oceanic Fisheries Programme. Noumea, New Caledonia.
- Likiliki, P.M., S.V. Matoto & U. Fa'anunu. 2005. Tonga tuna fisheries status report. Working Paper FR WP-9. First Meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. Ministery of Fisheries, Nuku'alofa, Tonga. 12 pp.
- Mitchell, J. 2005. Cook Islands national fisheries report. Working Paper FR WP–20. First Meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. Ministry of Marine Resources, Rarotonga, Cook Islands. 3 pp.
- Miyabe, N., M. Ogura, T. Matsumoto & Y. Nishikawa. 2004. National tuna fisheries report of Japan as of 2004. Working Paper NFR-11. Seventeenth Meeting of the Standing Committee on Tuna and Billfish, 9–18 August 2004, Majuro, Marshall Islands. National Research Institute of Far Seas Fisheries, Shimizu, Japan. 24 pp.
- Moon, D.-Y., S.-S. Kim & J.-R. Koh. 2005. Korean tuna fisheries in the western and central Pacific Ocean. Working Paper FR WP–20. First Meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. National Fisheries Research and Development Institute, Busan, Republic of Korea. 9 pp.
- Murray, T. 1990. Review of research and of recent developments in south Pacific albacore fisheries with emphasis on large-scale pelagic driftnet fishing. Information Paper 2. Third South Pacific Albacore Research Workshop, 9–12 October 1990, Noumea, New Caledonia. Pelagic and Inshore Fisheries Research Group, Ministry of Agriculture and Fisheries, Wellington, New Zealand. 27 pp.
- Naviti, W. 2005. Vanuatu tuna fisheries report. Working Paper FR WP–20. First Meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. Fisheries Department, Port Vila, Vanuatu. 9 pp.
- Oreihaka, E. 2004. Tuna fisheries in the Solomon Islands in 2003. Working Paper NFR–24. Seventeenth Meeting of the Standing Committee on Tuna and Billfish, 9–18 August 2004, Majuro, Marshall Islands. Fisheries Division, Honiara, Solomon Islands. 8 pp.
- Ponsonnet, C. 2004. Tuna fisheries in French Polynesia in 2003. Working Paper NFR-8. Seventeenth Meeting of the Standing Committee on Tuna and Billfish, 9–18 August 2004, Majuro, Marshall Islands. Service des Ressources Marines, Tahiti, French Polynesia. 14 pp.
- Ponsonnet, C. 2005. Tuna fisheries in French Polynesia in 2004. Working Paper FR WP–21. First Meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. Service des Ressources Marines, Tahiti, French Polynesia. 10 pp.
- Song, L., L. Xu & X. Dai. 2004. National Tuna Fishery Report of China in WCPO. Working Paper NFR-4. Seventeenth Meeting of the Standing Committee on Tuna and Billfish, 9–18 August 2004, Majuro, Marshall Islands. Shanghai Fisheries University, Shanghai, China.
- Stocker, M. & W. Shaw. 2005. Canadian albacore tuna fisheries in the north and south Pacific Ocean in 2004. Working Paper FR WP–5. First Meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. Fisheries and Oceans Canada, Nanaimo, British Columbia, Canada. 8 pp.

Uosaki, K., H. Okamoto & Y. Nishikawa. 2005. National tuna fisheries report of Japan as of 2004. Working Paper FR WP-5. First Meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission, 8–19 August 2005, Noumea, New Caledonia. National research Institute of Far Seas Fisheries, Shimizu, Japan. 22 pp.

**Gross National Index and population data** 

GNI per capita, Atlas method (current US\$)									
	2001	2002	2003	2004	Ave 2002- 2004				
Australia	19890	19580	21960	26900	22813				
Canada	22140	22610	24470	28390	25157				
China	900	970	1100	1290	1120				
Fiji	2000	2040	2280	2690	2337				
France	22880	22180	24750	30090	25673				
Indonesia	710	830	940	1140	970				
Japan	35780	33650	34190	37180	35007				
Kiribati	990	900	880	970	917				
Korea, Rep.	10580	11270	12050	13980	12433				
Marshall Islands	2200	2400	2490	2370	2420				
Micronesia, Fed. Sts.	1860	1860	1990	1990	1947				
New Zealand	13440	13450	15530	20310	16430				
Palau	6420	6390	6580	6870	6613				
Papua New Guinea	580	510	490	580	527				
Philippines	1030	1020	1060	1170	1083				
Samoa	1410	1390	1540	1860	1597				
Solomon Islands	620	560	560	550	557				
Tonga	1500	1430	1510	1830	1590				
United Kingdom	25310	25560	28320	33940	29273				
United States	34760	35430	37870	41400	38233				
Vanuatu	1170	1070	1150	1340	1187				

Population									
-					Ave 2002-				
	2001	2002	2003	2004	2004				
<u>Australia</u>	19414000.00	19662800.00	19881000.00	20120000	19887933				
Canada	31081900.00	31362000.00	31630000.00	31902430	31631477				
<u>China</u>	1271850000.00	1280400000.00	1288400000.00	1296500000	1288433333				
<u>Fiji</u>	817000.00	823300.00	835000.00	848000	835433				
<u>France</u>	59190600.00	59485000.00	59762000.00	59990540	59745847				
<u>Indonesia</u>	209014100.00	211816800.00	214674200.00	217587500	214692833				
<u>Japan</u>	127140000.00	127399000.00	127573000.00	127764400	127578800				
<u>Kiribati</u>	92807.00	94704.00	96377.00	97813	96298				
Korea, Rep.	47343000.00	47640000.00	47911730.00	48142220	47897983				
Marshall Islands	52500.00	52500.00	57000.00	60000	56500				
Micronesia, Fed. Sts.	120227.00	122380.00	124560.00	126767	124569				
New Zealand	3880500.00	3939100.00	4009200.00	4061000	4003100				
<u>Palau</u>	19500.00	19600.00	19700.00	20000	19767				
Papua New Guinea	5254114.00	5378120.00	5501871.00	5625215	5501735				
<u>Philippines</u>	78317030.00	79944220.00	81502620.00	82986910	81477917				
Samoa	174000.00	176200.00	178000.00	179000	177733				
Solomon Islands	430764.00	443296.00	456645.00	470861	456934				
Tonga	100722.00	101163.00	101524.00	101803	101497				
United Kingdom	59050000.00	59229000.00	59329000.00	59405000	59321000				
United States	285318000.00	288369000.00	290810000.00	293507400	290895467				
Vanuatu	201188.00	205573.00	210164.00	214969.00	210235				
Source: World Development Indicators database									
[http://www.worldbank.org/data/onlinedatabases/onlinedatabases.html]									

# Attachment F

Consolidated table incorporating population, GNI and catch data used in the calculation of assessed contributions for 2006.

		Population	GNI	Proportion	GNI	GNI	Proportion	Catch				Proportion
	<b>Commission Members</b>	('000s)	ave.	of all	(Pop x GNI p/c)	as %	of NWC	ave. 200	2-2004		Total	of Catch
		ave	2002-2004	ave GNIs		of total	(weighted		In own EEZ	In EEZ	with disc.	component
		2002-2004	p/c				average)	EEZ	(non-Arch.)	discounted	applied #	
1	Australia	19,888	22813	8.48%	453,704,944	1.44%	4.96%	678	6,921	6,921	7,599	0.52%
1	Canada	31,631	25157	9.35%	795,741,067	2.53%	5.94%	345	0	0	345	0.02%
1	China	1,288,433	1120	0.42%	1,443,044,960	4.58%	2.50%	36,525	0	0	36,525	2.50%
1	Cook Islands	19	4689	1.74%	89,091	0.00%	0.87%	28	1,928	771	799	0.05%
1	European Union	454,652	18967	7.05%	8,623,384,484	27.38%	17.22%	1,910	0	0	1,910	0.13%
1	Fiji	835	2337	0.87%	1,951,395	0.01%	0.44%	5,410	8,027	3,211	8,621	0.59%
1	France	59,746	25673	9.54%	1,533,859,058	4.87%	7.21%	619	8,620	3,448	4,067	0.28%
1	FSM	125	1947	0.72%	243,375	0.00%	0.36%	23,791	3,157	1,263	25,054	1.71%
1	Indonesia	214,693	970		208,252,210	0.66%	0.51%	0	52,218	20,887	20,887	1.43%
1	Japan	127,579	35007	13.01%	4,466,158,053	14.18%	13.60%	357,126	111,757	111,757	468,883	32.08%
1	Kiribati	96	917	0.34%	88,032	0.00%	0.17%	0	7,749	3,100	3,100	0.21%
1	Korea, Rep.	47,898	12433	4.62%	595,515,834	1.89%	3.26%	235,102	0	0	235,102	16.08%
1	Marshall Islands	56	2420	0.90%	135,520	0.00%	0.45%	38,033	3,149	1,260	39,293	2.69%
1	Nauru	13	800	0.30%	10,400	0.00%	0.15%	0	9	4	4	0.00%
1	New Zealand	4,003	16430	6.11%	65,769,290	0.21%	3.16%	16,455	12,590	12,590	29,045	1.99%
1	Niue	2	800	0.30%	1,600	0.00%	0.15%			0	0	0.00%
1	Palau	20	6613	2.46%	132,260	0.00%	1.23%	0	20	8	8	0.00%
1	Papua New Guinea	5,502	527	0.20%	2,899,554	0.01%	0.10%	61,872	57,196	22,878	84,750	5.80%
1	Philippines	81,478	1083	0.40%	88,240,674	0.28%	0.34%	31,161	51,312	20,525	51,685	3.54%
1	Samoa	178	1597	0.59%	284,266	0.00%	0.30%	627	2,485	994	1,621	0.11%
1	Solomon Islands	457	557	0.21%	254,549	0.00%	0.10%	731	13,968	5,587	6,318	0.43%
1	Chinese Taipei	23,000	14630	5.44%	336,490,000	1.07%	3.25%	281,345	12,333	12,333	293,678	20.09%
1	Tonga	101	1590	0.59%	160,590	0.00%	0.30%	317	810	324	641	0.04%
1	Tuvalu	12,000	1328	0.49%	15,936,000	0.05%	0.27%	0	0	0	0	0.00%
1	United Kingdom	59,321	29273	10.88%	1,736,503,633	5.51%	8.20%	0	0	0	0	0.00%
1	United States	290,895	38233	14.21%	11,121,788,535	35.32%	24.76%	97,499	10,933	10,933	108,432	7.42%
1	Vanuatu	210	1187	0.44%	249,270	0.00%	0.22%	33,127	759	304	33,430	2.29%
27	Total Countries	2,722,831	269,098	100.00%	31,490,888,644	100.00%	100.00%	1,222,702	365,941	239,097	1,461,798	100.00%
# Does not include own EEZ Archipelagic waters												
			Provisional	Budget	USD				2,293,077			-
·	1						1					1

# **Provisional Breakdown of 2006 Budget Contributions**

Commission Members	Base fee 10% of budget	National wealth component 20% of budget	Catch component 70% of budget	Total contribution 100% of budget	% of budget by member
Australia	8,493	22,743	8,344	39,581	1.73%
Canada	8,493	27,232	379	36,103	1.57%
China	8,493	11,462	40,107	60,062	2.62%
Cook Islands	8,493	3,996	877	13,366	0.58%
European Union	8,493	78,955	2,098	89,546	3.91%
Fiji	8,493	2,006	9,466	19,965	0.87%
France	8,493	33,046	4,466	46,005	2.01%
FSM	8,493	1,661	27,511	37,665	1.64%
Indonesia	8,493	2,343	22,936	33,771	1.47%
Japan	8,493	62,352	514,866	585,711	25.54%
Kiribati	8,493	782	3,404	12,678	0.55%
Korea	8,493	14,931	258,158	281,581	12.28%
Marshall Islands	8,493	2,063	43,146	53,702	2.34%
Nauru	8,493	682	4	9,179	0.40%
New Zealand	8,493	14,479	31,893	54,865	2.39%
Niue	8,493	682	0	9,175	0.40%
Palau	8,493	5,636	9	14,138	0.62%
Papua New Guinea	8,493	470	93,062	102,025	4.45%
Philippines	8,493	1,565	56,754	66,812	2.91%
Samoa	8,493	1,363	1,780	11,636	0.51%
Solomon Islands	8,493	476	6,938	15,907	0.69%
Chinese Taipei	8,493	14,917	322,479	345,888	15.08%
Tonga	8,493	1,356	704	10,553	0.46%
Tuvalu	8,493	1,248	0	9,741	0.42%
United Kingdom	8,493	37,589	0	46,082	2.01%
USA	8,493	113,565	119,065	241,124	10.52%
Vanuatu	8,493	1,013	36,709	46,215	2.02%
Total assessed contributions	229,308	458,615	1,605,154	2,293,077	100.00%