

SECRETARIAT OF THE PACIFIC COMMUNITY
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COMMITTEE OF REPRESENTATIVES OF GOVERNMENTS AND ADMINISTRATIONS
(Koror, 14-17 November 2005)

DIVISIONAL PRESENTATION : MARINE RESOURCES

(Paper presented by the Secretariat)

INTRODUCTION

1. At previous CRGAs, the Marine Resources Divisional presentation has provided a brief description of the Division and an overview of the kind of work that it does. Rather than repeat this general background material, this year we will rely upon the SPC Governing Council's knowledge of SPC's structure and function, and concentrate upon developments and issues. For more detail, representatives are referred to CRGA 35 papers on the budget, and the Programme Reviews, Strategic Plans and Reports provided in previous CRGA meetings and on the website [at <http://www.spc.int/mrd/org/org.html>]. In addition, triennial reports for all three programmes and summaries of the top-level frameworks of the new strategic fisheries programme plans will be annexed to this paper.

2. Given the theme of the Pacific Community Conference this year – on Youth – and given that the previous two Divisional presentations to CRGA have concentrated on Coastal Fisheries, Oceanic Fisheries and Maritime issues, the Divisional presentation this year will have an Aquacultural flavour. Whereas fisheries worldwide, and now in the Pacific, are essentially reaching the limit of their production (and in some cases have surpassed it), aquaculture will be increasingly called upon to provide the additional protein needs of the expanding populations of land resource-poor Pacific Island countries. It is one growth area where youth are likely to play a crucial role. If not quite an old man's game yet, fisheries are limited, regulated, increasingly capitalised and competitive, and no longer provide many new horizons for those starting out on the sustainable enterprise path.

3. The future of fisheries in the Pacific Islands region is likely to be consolidation to ensure sustainability of rural subsistence protein sources, and continued “domestication” of currently foreign fisheries in Pacific Island EEZ waters. In the longer term, if the trend in developed countries is a guide, changes in the use of marine spaces:- towards recreation, tourism, non-extractive uses, and the increasing influence of the cash economy and social specialisation, as well as increasing impacts on fisheries ecosystems by land-based sources of pollution¹, will gradually **reduce** the output of subsistence and commercial fisheries. Aquaculture, on the other hand, provides prospects for **increasing** production, and particular prospects for youth, not only in enterprise development but in schools and institutions. However, aquaculture brings its own set of development issues to be tackled, and preferably these will be tackled strategically rather than in hindsight. Some of the issues framing the aquaculture development picture will be presented for discussion during this session.

1. INSTITUTIONAL DEVELOPMENTS

4. Although this is the third and final year of the current divisional Strategic Plans, and thus no major new programme-funded initiatives have occurred, the inception and development of major new

¹ It might be noted that these land-based impacts on coastal fisheries are mainly outside the jurisdiction of marine-use managers, and thus constitute one of the main institutional problems that need to be solved by an ecosystem approach to fisheries, particularly for coastal fisheries.

project initiatives moves on independent, and often longer, cycles. Major new projects that started this year included an Oceanic Fisheries Management project, jointly carried out by SPC and FFA, and funded by the Global Environment Facility through UNDP, and the smaller EU-funded DevFish project, also jointly implemented by FFA and SPC. DevFish is a new activity for the European Union, whilst the GEF project is essentially an evolutionary development of a previous GEF-funded project, unbundled from that project's coastal component (which is currently managed by SPREP). There were no major new initiatives in reef and lagoon fisheries or aquaculture at SPC in 2005.

5. Arising from the Divisional presentation at the 2004 CRGA, where a series of “mini policy briefs” on what we called “the fish and ships sector” was included in the discussion paper for the first time, in 2005 the Divisional embarked upon the production of a series of more substantial Policy Briefs (see <http://www.spc.int/mrd/policy>), published via email and for the attention of Pacific Island decision-makers. The “Status of Tuna Stocks” policy brief has already been revised once, following new assessments emerging from the Scientific Committee of the Western and Central Pacific Tuna Commission, and additional briefs on other fisheries subjects, including adapting the Ecosystem Approach to Pacific Island Coastal Fisheries, on Fish Aggregation Devices, and possibly on the issues pertaining the management of straddling stocks on tropical Pacific high seas are planned. Our aim is to be factual and impartial, providing the cons as well as the pros, but at the same time to provide information that is specifically relevant to Pacific Island negotiating positions within the international community.

1.1 Regional Maritime Programme

6. Self-help mechanisms that were established in PICTs are starting to work. The adoption of networking as a business model now enables use of regional expertise on a multi-lateral basis facilitated by RMP. The audit and compliance regime for STCW-95 and the ISPS code based on the network concept has proved to be functioning well. Feedback from representatives of Maritime New Zealand, the Australian Department of Transport and Regional Services and the United States Coast Guard indicates that the audit system in place in the Pacific is of a very high standard: in fact, of a higher standard than checking systems these countries have in place for their own ports. There appears to be significant support for the audit based system to be widened to encompass additional maritime sector activities, including: ship operations; port operations; safety of seafarers including fishermen; and maritime administration practices. Audits in these areas could also use a best practice approach.

7. While RMP already provides legal and policy advice and prepares briefing papers for senior government officials on significant issues affecting the maritime sector, more mentoring could be undertaken, and involvement at the more senior levels needs further work. RMP is planning to hold a Transport Ministers' advisory meeting in 2006 which it is hoped will go some way towards improving senior politicians' understanding of the maritime sector.

8. The regime of using maritime rules to complement national acts and regulations needs to be better explained and current legal processes modified, so that the rules can be amended (reviewed) by trained and qualified lower level maritime directors or ministers instead of constantly going to parliament or cabinet for minor changes. The Pacific International Maritime Law Association (PIMLA) could be utilised as a think-tank to review current processes and propose improvements.

9. Fishing vessel security is an emerging issue in the region. SPC and FFA collaborated in developing a brief on the issue for the Forum, and RMP has commenced an in-depth study to investigate this issue. Funding will be needed to implement recommended options and to encourage stakeholders to further collaborate to eliminate the perceived threats.

1.2 Coastal Programme

10. The Coastal Fisheries Programme, or rather the Coastal Programme (as it is proposed that it be called under the new Strategic Plan – see Annex 2) continued during 2005 to provide a multidisciplinary mixture of support targeted on Pacific Island domestic fisheries and aquaculture priorities. The main stakeholders and beneficiaries of programme support continue to be Pacific Island fisheries and marine

resources departments, but in fisheries and aquaculture development and in vocational training the programme also assists the development of the private sector. As with all SPC programmes, in-country work is programmed through, and validated by, SPC Official Contact Points, and endeavours to avoid providing any unfair commercial advantage.

11. The sector, both institutionally and commercially, continues to evolve. In particular, the non-governmental sector is rapidly becoming more active in coastal fisheries-related work, and the SPC Coastal Programme now needs to work less directly with communities, in view of the increasing number of other players. In this area, SPC concentrates on assisting fisheries departments to develop community interfaces.

12. The current Coastal Fisheries Programme Strategic Plan period ends in 2005. Based on an evaluation of this experience, a new Strategic Programme Plan has been drafted and is currently being commented upon by stakeholders. A summary of the new strategic programme plan, together with a summary of the report on the results of the work of the Programme during current strategic plan period is appended in Annex 2.1

13. 10 years ago SPC produced a major review of the status of Pacific Island coastal fisheries, and for the first time roughly estimated their value (in terms of direct income, plus substitution value). One of the tasks of the SPC Reef Fisheries Observatory is to produce a similar, but much more detailed and rigorous overview by the end of the EU-funded reef fisheries assessment projects. But already we are seeing signs that the guardedly optimistic situation of 10 years ago (where we pointed out that “although there are notable problems around urban capitals and in export fisheries for certain species, by and large the situation of coastal fisheries in the Pacific Islands is much better than in the Caribbean and Southeast Asia, and there is still time for the region to get effective systems in place that conserve these fisheries at current levels of production”) is now more pessimistic. With a couple of notable exceptions, the human populations of many Pacific Islands has increased significantly over the past decade, while urbanisation and tourist populations have increased even more rapidly.

14. Many Pacific Island coastal fisheries are at a crisis point as a result of the impacts of modernisation outpacing the ability of fishery management systems to cope with the change. As pointed out in the introduction, the impacts of land-based activities on coastal fisheries and aquaculture ecosystems are becoming large – and in some cases probably have a greater adverse effect on subsistence fisheries than fishing itself – whilst fisheries managers only have jurisdiction over fishers.

15. The primary goal of the Coastal Programme during the next Strategic Plan period will be to help tackle this problem at its roots, by assisting countries to apply the Ecosystem Approach to Coastal Fisheries – management that takes account of all impacts on the fisheries ecosystem – in line with the timetable agreed to by countries at the World Summit on Sustainable Development.

1.3 Oceanic Fisheries Programme

16. The Oceanic Fisheries Programme is the principal vehicle for the delivery of technical services, including fishery monitoring and data management, stock assessment, and biological and ecological research, to SPC members in support of national and regional tuna fisheries management. The OFP continues to be at the forefront of tuna fisheries science in the region and worldwide. In 2005, the Programme began what is likely to be an ongoing and close collaboration with the Western and Central Pacific Fisheries Commission. It undertook a range of regional stock assessments and other work on behalf of the Commission for presentation to the inaugural meeting of the Commission’s Scientific Committee, which met at SPC headquarters in Noumea in August.

17. A major development during 2005 was the initiation of the new GEF-UNDP funded Oceanic Fisheries Management Project. The Project is being executed and managed by FFA; however the OFP is responsible for the major scientific aspects of the work programme, including enhancement of national fisheries monitoring and stock assessment capacity and enhancing understanding of the structure of the pelagic ecosystem and the fishery impacts thereon. The project is the early stages of implementation and is expected to continue for five years.

18. The other major programme development is the scheduled completion of the Oceanic Component of the PROCFish project in February 2006. The project has provided valuable resources to the region for enhanced fishery monitoring and biological/ecological research. The OFP is currently discussing the prospects for a continuation of some aspects of this work, and the initiation of new work (in particular large-scale tuna tagging) via a new EC-funded project with the EC-ACP Unit of ForSec and the EC Delegation.

19. The current Oceanic Fisheries Programme Strategic Plan period ends in 2005. Based on an evaluation of this experience, a new Strategic Programme Plan has been drafted and is currently being commented upon by stakeholders. A summary of the new strategic programme plan, together with a summary of the report on the results of the work of the Programme during current strategic plan period is appended in Annex 2.2

20. The application of the ecosystem approach to Oceanic Fisheries is likely require a different focus by SPC and by countries than for Coastal Fisheries. Land-based impacts are of comparatively lower importance in oceanic waters, and fisheries themselves are usually the main factor impacting the pelagic fishery ecosystem. As such, the application of the ecosystem approach to tuna fisheries is likely to be an order of magnitude less complex than applying this approach to coastal fisheries although, since oceanic fisheries are an order of magnitude larger than coastal fisheries, it is a task of equal importance.

1.4 Hosted Programmes

21. The SPC as a whole provides office-space, at cost, to certain other organisations or projects working in the marine sector and based in New Caledonia, but not governed by the Marine Resources Division Strategic Plans nor the SPC Corporate Plans. The SPC Marine Resources Division has no formal responsibility for, nor control over these projects, but is associated with their work through Memoranda of Understanding, as it is with other organisations working in related fields in other locations in the world. These include:

- Worldfish Pacific Islands office: SPC is providing administrative support for this office, on a full cost-recovery basis, pending completion of a host agreement with the sovereign authorities;
- CRISP (Coral Reef Initiative in the South Pacific): this French Government project is independent of SPC and it funds joint projects with other agencies and NGOs in the Pacific Islands region. Administrative support is provided, at cost, by the SPC Corporate Services and Programme Support Division;
- Centre pour l'Initiation de l'Environnement – this New Caledonian environmental information and education NGO has been housed for several years in the SPC staff club crèche area, which was otherwise unutilised.

1.5 Staff

22. The staff of the Division is detailed in Annex 1. Overall, adding together both locally-recruited and internationally-recruited grades, the Marine Resources Division now has 50% Pacific Island staff. The attainment of this benchmark is the culmination of a gradual change initiated 8 years ago, when the Division was created, at which point it had less than 25% Pacific Island staff. However, the main increase has been in the professional grades, and this percentage is unlikely to further increase significantly in the near future without running the risk of stripping national marine resource administrations of their most highly experienced and qualified staff. The aim of the Division is to provide an internationally-excellent standard of sectoral specialist advice and cutting-edge science, focussed through local experience and a knowledge of island issues on the ground (or, in this case, in the water), particularly direct experience of the issues that Pacific Island national government services have to deal with.

23. Apart from the general increase in staff, and occasional turnover (which however remains low compared to most other CROP agencies), there was also a significant change in the Divisional hierarchy, with the appointment of a Coastal Fisheries Programme (CFP) Manager. As with many SPC sectoral

programmes, the limited SPC core funding that comes to the programme provides for one staff member. In the CFP this core-funded post has been under the Fisheries Development Section since 1995, but coincidentally with the advent of the EU-funded DevFish project, which provides an additional Fisheries Development staff member to SPC, the core funding has been transferred to the programme manager level, in line with other sectoral programmes (where core-funding supports the programme leadership and thus provides for a “core” level of activity in each programme even if all other project or voluntary funding fails).

1.6 Funding

24. The planned total budget of the Division in 2006 is approximately 8,700,000 CFP units, made up as follows (see CRGA budget documents for details):

Cfp units	2003 total	2004 total	2005 total	2006 total	% core (2006)
Oceanic Fisheries	3,178,000	2,275,000	2,855,000	2,605,000	2.84%
Coastal Fisheries	3,114,000	4,045,000	3,518,000	4,452,000	5.13%
Maritime	1,350,000	1,434,000	727,000	1,364,000	7.91%
Divisional Direction	297,000	312,000	248,000	262,000	100.00%
Total	7,941,000	8,066,000	7,348,000	8,682,000	4.24%

* Figures are rounded to the nearest 1,000 CFP units. There may be rounding errors in summary totals

1.7 Highlights

25. The many outputs of the Marine Resources Division are regularly reported to funding clients by individual projects or programmes, and to member country clients both individually during each national sub-project and collectively during the sectoral meetings involving each of the Division's constituent programmes. Many more outputs and activities are described in Programme Reports than are highlighted here (see Annex 3 for summaries of the triennium programme reports).

26. The following table briefly summarises the most notable or newsworthy (in the view of each section leader) output of each section in the Divisional work-programme in 2005

Marine Resources Division highlights – 2005 (note: this by no means constitutes the entire output of work-programmes – just a single memorable output from each section – see Annex 3 for details)	
Directors Office	Coordinated the production by CROP of Pacific Islands regional issues report to UN Oceans meeting (UNICPOLOS 6)
Regional Maritime Programme	
Maritime Training and Information	Seminars, technical training courses and workshops for 476 maritime sector personnel during year.
Maritime Institutions	Port security audits conducted in 10 PICs have shown significant levels of compliance with the ISPS Code and STCW/ISM audits assessed maintenance of “white-list” status by maritime administrations and training institutes
Exchange of Information and Experience in Maritime Sector	RMP now provides secretariat and treasurer functions for several Pacific Islands Maritime Associations and is negotiating to do likewise for the Association of Pacific Ports (APP)
Oceanic Fisheries Programme	
Statistics & Monitoring	Training attachments at SPC Headquarters to improve national capacity in the management of fisheries data and sampling programmes were conducted for national fisheries staff from Fiji, French Polynesia, Kiribati, Nauru, Palau, Papua New Guinea and Samoa.
Stock Assessment and Modelling	Compilation of National Tuna Fishery Status Reports (NTFSRs) completed for Tokelau, Solomon Islands, Papua New Guinea and French Polynesia and additional analyses were completed for other member countries, whilst regional stock assessments for skipjack, yellowfin, bigeye and South Pacific albacore were completed and presented to the inaugural meeting of the WCPFC Scientific Committee.

Biology and Ecology	Archival tag deployments in Papua New Guinea expand information on the vertical habitat utilisation of tunas and their behaviour in association with fish aggregation devices
Coastal Fisheries Programme	
Aquaculture:	Economic and marketing workshop utilising economic modelling software developed earlier by SPC and partner organisations
Fisheries development:	Fishing gear trials led to the Section developing new deep-setting techniques ² for tuna longline gear that will reduce bycatch (particularly sea turtles) while maintaining good catch rates for the target tuna species;
Coastal Fisheries Management:	Regional legal workshop on coastal fisheries management regulation co-convened with the US Western Pacific Regional Fisheries Management Council and FAO;
Fisheries training:	Business management training course at the New Zealand School of Fisheries;
Fisheries information:	Book on ciguatera fish poisoning produced in collaboration with the France Institute for Research in Development;
Reef Fisheries Observatory:	Operationalised the Reef Fisheries information/data Repository under access guidelines agreed by the 3 rd SPC Heads of Fisheries Meeting.

2. ISSUES IN THE SECTOR DURING 2005

27. Some of these issues are mentioned in other parts of this paper, but are gathered together here for reference and possible discussion. This is by no means a full and prioritised list of issues, but draws the attention of CRGA to several matters which may need further thought at the SPC Governing Council level.

Update on status of tuna stocks.

28. The SPC Oceanic Fisheries Programme provides the best internationally available scientific knowledge about the status of tuna fishery resources in the Pacific Islands region. As with all fisheries science, these assessments are based on the information available about a resource that is mobile, difficult to measure, and extremely widespread. The OFP sharpens its tools, increases its data-holdings, and stock assessments are refined from year to year in the light of new knowledge.

29. Several improved assessments were presented to the region during the recent meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission. As CRGA members will recall, the Standing Committee on Tuna and Billfish has been drawing attention to the worrying assessments of the regional bigeye tuna stock for the past two years, pointing out that current levels of fishing mortality may not be sustainable as the level of recruitment of juveniles to the fishery declines along with the downturn in the climatic cycle upon which this recruitment depends. Figure 6 in Annex 3.2 (OFP Triennial report), based on the most recent assessment, illustrates our best estimate of the likely impact of fishing on the regional biomass of bigeye tuna.

30. It is not SPC's role to suggest specific management actions either to member countries individually, or to the region through FFA or the WCPFC, but as in previous years, we would suggest that fishing mortality in general on bigeye tuna not be increased if the risk of long-term damage to the health of the stock is to be reduced.

31. There is likely to be pressure on resource custodians to maintain, or even increase fishing pressure given the exceedingly good catch rates of bigeye that have been obtained by longliners in some areas of the Pacific this year. This should not however be taken as a signal that the current level of fishing mortality on bigeye is sustainable over the longer term, since this is likely to be a relatively short-term phenomenon. Tuna catch rates are notoriously variable, and do not bear an obvious direct relationship to biomass. This might be seen as a "windfall" that helps some of the existing vessels to pay off their bank-loans, but any new investment on the strength of these bigeye catch-rates would not be advisable.

² Including a prize from the WWF in recognition of the personal contribution of one staff member

32. In addition to the existing worries about the status of the bigeye tuna stock, a flag has been set against the status of yellowfin tuna for the first time since the mid 1990's (see Figure 6 in Annex 3.2 for an illustration of the likely effect of fishing on the regional biomass of the yellowfin stock). Paradoxically, the broad regional indicators for the status of the albacore tuna stocks remain optimistic, but the albacore tuna fishery itself has been causing major problems to Pacific Island longliners and canneries. Catch rates have been low in recent years, and below break-even levels in certain places.

33. It should also be noted that since both purse-seining and longlining catch both bigeye and yellowfin, it would be procedurally impossible to cap or reduce fishing mortality on one species without effectively capping or reducing fishing mortality on the other.

34. Skipjack tuna stocks remain resilient, but since skipjack is the lowest in value of the main tuna species, and since there are no fishing methods for skipjack that do not also catch other tunas, skipjack is not considered to be a major alternative development option. Pole and lining is probably the most selective method for skipjack, but it is dependent on skilled labour and is not considered as economically efficient as purse-seining.

35. Despite all the advances in knowledge recently, it remains true that the great uncertainties about stock status, the effect of environmental cycles, and the obscure relationship between abundance and catchability, make the management of tuna fisheries extremely difficult, particularly the management of island-based tuna fisheries development. Island-based enterprises cannot move to new areas when local catch-rates fall. Most tuna fisheries are currently operating very close to the verge of financial survival and although there are good times and bad times, these times fluctuate so widely and unpredictably that many small operators do not survive the fluctuations. State-owned fishing corporations appear to fare no better, although by international standards most of these would be classed as small operators, and thus similarly vulnerable.

36. The status of tuna stocks is not the only major factor that tuna fishery managers need to take into account, of course. Other major factors are the state of the markets, and non-target species conservation concerns. We will consider conservation in the following section, but the state of markets for tuna is outside SPC's remit, at least when it comes to advising Forum Island Countries. We would however point out that for most Pacific Island groups, apart from perhaps French Polynesia, the main value for tuna fisheries lies the export, rather than the domestic, market. The market for canned tuna is not a high value market compared to that for fresh tuna, and there have been recent signs of a major downturn in the demand for canned tuna in the USA and parts of Europe. Part of this is due to changing consumer fashions, particularly a change in preference towards fresh fish, but also because of reductions in allowable limits for mercury in foodstuffs.

Conservation in tuna fisheries

37. Conservation is something which kicks in when management has not been able to cope. Although the lower bounds of the confidence intervals around our assessments do not rule it out, conservation is not yet deemed necessary for any Pacific Island tuna stock. Qualitative *conservation action*, in the form of large scale closures or other drastic and economically painful measures, would actually be procedurally easier to justify and enact in comparison with the detailed data requirements and fine-tuning that is necessary in trying to *manage* tuna fisheries for sustainable development purposes.

38. However, before any tuna species reaches the absolute limit of sustainability and becomes a conservation case, it is likely that tuna fisheries will need to be reduced, or subject to gear modifications, or otherwise restricted because by-catches of *non-tuna* species exceed sustainability reference points. There is a problem because non-target catch species assessments are currently far less precise than target catch assessments, and when information is limited the tendency is to assume the worst. In part this lack of information is because these other species are caught in much smaller numbers, but it is also because for much of the history of tuna fisheries this bycatch was only patchily recorded so there is little historical time-series information available. Also, there has not been much money available for the assessment of anything but the most important species to the fishery.

39. Things are changing rapidly. Human perceptions about the importance of the catch of non-target species are changing, and rapid strides are also being made in the modification of fishing gear and fishing behaviour to avoid as much bycatch as possible – something that nobody bothered to minimise in years gone by, although it usually requires comparatively little effort when the need is discerned. Monitoring is also rapidly improving. However, we still nowhere near being able to produce an assessment of the status of, say, the silky shark population, in the same way as we can produce an assessment of the regional status of skipjack tuna. Certain indicators can be monitored, however, and this work will become an increased priority under the next OFP Strategic Plan.

40. Conservation worries also apply to target fisheries as well as non-target species impacted by fisheries. One need that is becoming obvious, as fisheries increase and as Pacific Island tuna stocks move from being “robust” and “the last great global fishery with remaining catch potential” to becoming a focus for tighter and more cohesive, concerted management, is that the point at which management ceases and conservation begins, needs to be clarified and agreed. There are already criteria in place, but different sets of managers use different criteria. The main criterion used nowadays in fisheries derives from the Precautionary Approach, and its application to fisheries is guided by the FAO Code of Conduct for Responsible Fisheries. This makes use of the concept of “target” and “limit” reference points. When assessment shows that a stock of fish is on its Target Reference Point, then it is probably being fished at its optimum sustainable potential, and management actions are normally quantitative actions aimed at keeping the stock on this knife-edge, according to a pre-arranged management plan. But if assessment shows that the indicator has exceeded the “limit” reference point then it may be a signal that more drastic conservation action is necessary and that “management has failed”.

41. However, other signals for conservation action have been developed by conservation agencies. The most widespread is the use of criteria for setting up nationally or internationally-agreed *lists* of endangered or threatened species and populations. Such listings are usually followed by qualitatively drastic actions aimed at quickly remedying the problem, including trade restrictions (which can be implemented through the Convention on International Trade in Endangered Species (CITES)). Once a species or population is listed as threatened or endangered, it is not easily de-listed.

42. The threatened species listing process originated in a terrestrial conservation setting, and the main criteria for listing and delisting are based on the rate-of-change in abundance or area. Terrestrial species, particularly the animals and plants upon which the methodology was fine-tuned, are more easily assessed, and the environmental influences on their status more easily predicted than marine species, particularly open-ocean species. It is likely that the natural fluctuations that occur in some marine species, particularly pelagic species, even in the absence of fishing, may be large enough to technically trigger endangered species status. The international committees that develop conservation listing criteria now, belatedly, include some fisheries expertise, but it is highly likely that disagreements will continue to emerge between fisheries and conservation managers about the exact point when a stock or population crosses the threshold into endangered status.

43. Before such disagreements emerge in this region there is possibly an opportunity for the Pacific Islands to develop better-harmonised, locally-applicable criteria, acceptable to both the fisheries and conservation communities, and we will begin to explore this possibility, in consultation with the Pacific Regional Environment Programme.

Trawling and high seas fishery management issues

44. We briefly drew the attention of CRGA to this issue last year, seeking comment, and in particular seeking guidance on the question of whether or not SPC would be required to provide a regional level of assistance to countries in their approach to the issue. We took the silence of CRGA as a signal that SPC should not take on this additional fisheries responsibility. However, given the fact that this trawling and high seas fisheries management will be on the table in United Nations meetings in which island member countries will be taking part, including the UN General Assembly, and in view of the fact that Australia and New Zealand have declared an intention to convene a conference to consider the possibility of setting up a new arrangement to manage fisheries for straddling stocks on the high seas in the South Pacific, we thought it would be useful to provide an opportunity for discussion in case any

member country has a brief on the subject to share, to supplement the information that New Zealand provided to the Forum Fisheries Committee earlier in the year.

Expansion of Regional Maritime Programme Responsibilities

45. There is strong support for RMP to broaden its services to include harbour and port operations. Often the boundary between the maritime and port sectors is blurred and a significant number of personnel can legitimately claim involvement in both sectors. This was recognised by RMP and partially addressed by many port staff undertaking RMP supported training. The operational efficiency and safety of the maritime and port sectors impact significantly on each other, and increasing the scope of RMP to include port operations would be consistent with the safety and economic component of the programme's mission.

International Coral Reef Initiative

46. The International Coral Reef Initiative will hold its first meeting under the co-chairship of Palau and Japan, in Koror, just two weeks before this CRGA meeting. Although at the time of writing this paper the meeting is yet to be held, it is possible that there will be coral reef issues which are of relevance for attention or consideration by the members of the SPC governing council. SPC became an associate member of the Initiative this year, since the linkages will benefit our work on behalf of the region in reef fisheries, particularly our understanding of the ecosystems that support reef fisheries, and we will provide an opportunity here for a short presentation by the Palau co-chair if relevant ICRI issues do arise.

3. SECTORAL MEETINGS

3.1 Fifth SPC Heads of Fisheries Meeting (HoF5)

47. There was no Heads of Fisheries meeting in 2005, following a signal from that meeting itself to next convene in 2006. The next meeting (HoF5) is however planned for early in 2006 (possibly mid-March), and will discuss latest developments in the fisheries and aquaculture sectors, review the implementation of the regional Coastal Fisheries Management Strategies, and take part in the European Union's mid-term review of the PROCFISH/C reef fisheries assessment project. HoF will also play a greater role in the oversight of SPC's regional oceanic fisheries scientific advisory services than previously, now that the informal Standing Committee on Tuna and Billfish has been superseded by the Scientific Committee of the WCP Fisheries Commission (which is formally responsible to a much wider range of countries than the SPC membership – the direction of the OFP strategic plan remains the joint prerogative of the SPC membership). However, the main task of HoF5, and the main reason for bringing the meeting forward from its usual time-slot in August, will be to develop the details of the SPC fisheries programme's strategic plans, the high-level frameworks for which are presented to CRGA here as Annex 2.

3.2 First Regular Session of the Scientific Committee of the Western and Central Pacific Fisheries Commission

The annual Standing Committee on Tuna and Billfish is currently in abeyance. In its place New Caledonia, and SPC, jointly hosted the first substantive meeting of the Scientific Committee of the Western and Central Pacific Fisheries Commission (WCPFC) in August 2005. Like the SCTB, this is a meeting of scientists from all nations with a stake in the tuna fishery in the Pacific Islands region. It has a similar structure and agenda as previous SCTB meetings but, unlike the SCTB, which was an independent advisory group founded by SPC, this is a formal subsidiary body of the WCPFC and has a formal linkage to regional tuna fishery management processes through the WCPFC. Although it provides the same scientific peer review of SPC work that SCTB provided in the past, its focus is more on the high seas and distant-water management requirements of the WCPFC than the EEZ and domestic fishery management requirements of most SPC members. The outputs of the meeting are available on the OFP website (www.spc.int/oceanfish), as well as the website of the WCPFC

3.3 PacMA meeting

The 10th meeting of the Pacific Islands Maritime Association (PacMA) was held in Nadi, Fiji Islands from 14 to 15 March 2005. There was significant support for the security audit based system. Members agreed to streamlining the maritime training syllabi and tasked the survey subcommittee to compile a regional survey standard to be part of the Pacific Maritime Legislation and Regulations (PIMLAR). Fishing vessel security was acknowledged as an emerging issue and members agreed that they needed to take a united stance on the matter so RMP agreed to seek funding to conduct an in-depth analysis of the issue. PacMA members also heard progress reports from affiliated associations and discussed lessons learned from the sinking of the MV Ovalau in Fiji. Country reports affirmed priority issues that RMP had planned to address such as security auditing, technical training, skills upgrading, maritime advice and mentoring as well as the establishment of a regional network of databases.

3.4 Other meetings

48. Other subregional or subsectoral Marine Resources meetings convened by SPC during the course of the year included:

- PacWIMA meeting convened by RMP for women from the Pacific maritime sector – report will be on www.spc.int/maritime by March 2006
- PIMLA meeting convened by RMP for Pacific legal officers and lawyer graduates of the International Maritime Law Institute in Malta – report will be on www.spc.int/maritime by March 2006

4. CONCLUSION

49. This paper has provided an overview of the operations of the Division, and summarised some of the major issues. More detailed outputs of the constituent sections and programmes of the Division are available either as annexes, or on the SPC website.

50. CRGA is invited to discuss the work of the Marine Resources Division, provide guidance on its direction as appropriate and, if appropriate, endorse the broad thrust of the Programme Strategic Plans presented in framework form in Annex 2.

10th July 2005

Annex 1

Staff of the Marine Resources Division 2005

<i>Title</i>	<i>Name</i>	<i>Origin</i>	<i>Prog</i>	<i>Grade</i>	<i>Funds</i>
STAFF RECRUITED BY INTERNATIONAL ADVERTISEMENT					
DIRECTOR	ADAMS, TIM	UK	EXEC	L7	Core
OCEANIC FISHERIES PROG MANAGER	HAMPTON, JOHN	AUSTRALIA	OFD	K7	Core
COASTAL FISHERIES PROG MANAGER	CHAPMAN, LINDSAY	AUSTRALIA	CFD	K5	Core
*MARITIME PROGRAMME COORDINATOR	HOGAN, JOHN	NEW ZEALAND	RMP	J9	PROG
*PRINCIPAL FISHERIES SCIENTIST (STATS & MONITORING)	LAWSON, TIM	CANADA	OFD	J9	PROG
FISHERIES TRAINING SPECIALIST	LUCIANI, TERIIHAUROA	FR.POLYNESIA	CFD	J8	PROG
FISHERIES DATABASE SUPERVISOR	WILLIAMS, PETER	AUSTRALIA	OFD	J8	PROG
*FISHERIES INFORMATION ADVISER	GAUDECHOUX, JEAN-PA	FRANCE	CFD	J7	PROG
*FISHERIES TRAINING ADVISER	BLANC, MICHEL	FRANCE	CFD	J7	PROG
†PRINCIPAL FISHERIES SCIENTIST (BIOLOGY & ECOLOGY)	LEHODEY, PATRICK	FRANCE	OFD	J7	EU
†PRINCIPAL FISHERIES SCIENTIST (REEF FISHERIES)	POWER, MARY	EIRE	CFD	J7	EU
LIVE REEF FISHERIES SPECIALIST	YEETING, BEING	KIRIBATI	CFD	J7	McA
FISHERIES INFORMATION SPECIALIST	DESURMONT, AYMERIC	FRANCE	CFD	J6	PROG
*COASTAL FISHERIES MANAGEMENT ADVISER	FA'ASILI, UETA	SAMOA	CFD	J5	PROG
*AQUACULTURE ADVISER	PONIA, BEN	COOK ISLANDS	CFD	J5	PROG
*PRINCIPAL FISHERIES SCIENTIST (STOCK ASSM & MODELLING)	LANGLEY, ADAM	NEW ZEALAND	OFD	J5	PROG
†REEF FISHERIES DATA MANAGER	MAGRON, FRANCK	FRANCE	CFD	J5	EU
†SENIOR FISHERIES SCIENTIST (SOCIOECONOMICS)	KRONEN, MECKI	GERMANY	CFD	J5	EU
†SENIOR FISHERIES SCIENTIST (REEF INVERTEBRATE FISHERIES)	FRIEDMAN, KIM	UK	CFD	J5	EU
†SENIOR FISHERIES SCIENTIST (REEF VERTEBRATE FISHERIES)	VIGLIOLA, LAURENT	FRANCE	CFD	J4	EU
†SENIOR FISHERIES SCIENTIST	KIRBY, DAVID	UK	OFD	J4	EU
†SENIOR FISHERIES SCIENTIST (SOCIOECONOMICS)	VUNISEA, ALITI	FIJI	CFD	J4	EU
†SENIOR FISHERIES SCIENTIST (REEF VERTEBRATE FISHERIES)	SAUNI, SAMASONI	TUVALU	CFD	J4	EU
†FISHERIES RESEARCH SCIENTIST (ECOSYSTEMS)	ALLAIN, VALERIE	FRANCE	OFD	J3	GEF
†PORT SAMPLING AND OBSERVER SUPERVISOR	SHARPLES, PETER	UK	OFD	J3	EU
†BIOLOGICAL TECHNICIAN	LEROY, BRUNO	FRANCE	OFD	J3	EU
SENIOR FISHERIES SCIENTIST (STOCK ASSESSMENT)	MOLONEY, BRETT	AUSTRALIA	OFD	J2	PROG
New GEF Oceanic scientist post	Under recruitment			J	GEF
New GEF Oceanic scientist post	Under recruitment			J	GEF
FISHERIES DEVELOPMENT OFFICER	BEVERLY, STEPHEN	USA	CFD	I9	PROG
FISHERIES MONITORING SUPERVISOR	BROGAN, DEIRDRE	EIRE	OFD	I9	GEF
RESEARCH OFFICER/ANALYST	SCHNEITER, EMMANUEL	FRANCE	OFD	I9	PROG
FISHERIES DEVELOPMENT OFFICER	SOKIMI, WILLIAM	FIJI	CFD	I9	PROG
PROGRAMMER/RESEARCH OFFICER	MILLAR, COLIN	AUSTRALIA	OFD	I9	PROG
†PORT SAMPLING AND OBSERVER TRAINER	FUKOFUKA, SIOSIFA	TONGA	OFD	I9	GEF
†RESEARCH OFFICER (DATA)	BOUYE, FABRICE	NEW CALEDONIA	OFD	I8	EU
AQUACULTURE OFFICER	NANDLAL, SATYA	FIJI	CFD	I7	PROG
MARITIME LEGAL OFFICER	TUFUGA, FAGALOA	SAMOA	RMP	I5	Core
MARITIME TRAINING OFFICER	VATA, APENISA	FIJI	RMP	I5	PROG
MARITIME PORT SECURITY OFFICER	TAMANI, TIMOCI	FIJI	RMP	I4	PROG
MARITIME TECHNICAL SECURITY OFFICER	RIGAM, ALOBI	PNG	RMP	I4	PROG
†FISHERIES SCIENTIST (REEF)	AWIRA, RIBANATAAKE	KIRIBATI	CFD	I4	EU
†FISHERIES SCIENTIST (REEF)	BOBLIN, PIERRE	FRANCE	CFD	I4	EU
†FISHERIES SCIENTIST (REEF)	LASI, FERRAL	SOLOMON IS	CFD	I4	EU
†FISHERIES SCIENTIST (REEF)	PAKOA, KALO	VANUATU	CFD	I4	EU
†FISHERIES DEVELOPMENT OFFICER (DEVFISH)	MANIEVA, JONATHAN	PNG	CFD	I4	EU
MARITIME INFORMATION OFFICER	STREETER, MEGAN	FIJI	RMP	I2	PROG
COASTAL FISHERIES MANAGEMENT OFFICER	Under recruitment			I	PROG
PACIFIC ISLAND ASSOCIATE STAFF					
COASTAL FISHERIES MANAGEMENT ASSOCIATE (short-term)		PACIFIC ISLANDS	CFD	non	COMM
FISHERIES INFORMATION & TRAINING ASSOCIATE (short-term)		PACIFIC ISLANDS	CFD	non	PROG

WORLD FISH-RECRUITED STAFF					
RESEARCH SCIENTIST/OIC	NASH, WARWICK	AUSTRALIA	WF	non	WF
PRINCIPAL SCIENTIST	BELL, JOHANN	UK	WF	non	WF
ECOLOGIST	PURCELL, STEVE	AUSTRALIA	WF	non	WF
TECHNICAL COORD AQUACULTURE	Under recruitment		WF	non	WF
STAFF RECRUITED BY LOCAL ADVERTISEMENT					
SECRETARY TO THE DIRECTOR, MARINE RESOURCES	LECOMTE, HELENE	NEW CALEDONIA	EXEC	H1	Core
TOFP PROGRAMME ADMINISTRATOR	PARRY, KAY	UK	OFF	H8	EU/PRG
TOFP FISHERIES OBSERVATORY ADMINISTRATOR	BUI, MARIE-THERESE	NEW CALEDONIA	CFP	H1	EU
TOFP FISHERY MONITORING SUPERVISOR - LIAISON OFFICER (NC)	Under recruitment	NEW CALEDONIA	OFF	H1	EU
TOFP FISHERY MONITORING SUPERVISOR - LIAISON OFFICER (FP)	YONGER MARIE	FRENCH POLYNESIAN	OFF	H1	EU
AQUACULTURE RESEARCH ASST DOCUMENTALIST/ PROGRAMME ASSISTANT (OFFP)	AGUDO, NATACHA IXEKO, HELENE	FRANCE NEW CALEDONIA	WF OFF	H1 G4	WF PROG
MARITIME PROGRAMME ADMINISTRATOR	RABUKAWAQA, INISE	FIJI	RMP	G3	PROG
FISHERIES DEVELOPMENT ASSISTANT	CHOI, YOUNGMI	KOREA	CFP	G2	PROG
FISHERIES TRAINING ASSISTANT	BURY, CHRISTINE	FRANCE	CFP	G2	PROG
PROJECT RESEARCH ASSISTANT	LE TURC, ALEXANDRE	FRANCE	WF	G1	WF
FISHERIES INFORMATION ASSISTANT	MEZIERE, SOPHIE	FRANCE	CFP	G1	PROG
AQUACULTURE ASSISTANT	HNAUJIE, MARIE-ANGE	NEW CALEDONIA	CFP	G1	PROG
CLERICAL ASSISTANT	MIRC, GENEVIEVE	NEW CALEDONIA	WF	F1	WF
DATA ENTRY TECHNICIAN (OFFP)	SAVEA, SONIA	NEW CALEDONIA	OFF	E9	PROG
DATA ENTRY TECHNICIAN (OFFP)	LENORMAND, NATHALIE	NEW CALEDONIA	OFF	E9	PROG
DATA ENTRY TECHNICIAN (OFFP)	LE PIRONNEC, SYLVIE	NEW CALEDONIA	OFF	E9	PROG
DATA ENTRY TECHNICIAN (OFFP)	NGUYEN, CHRISTINE	NEW CALEDONIA	OFF	E5	PROG
DATA ENTRY TECHNICIAN (OFFP)	CHUVAND, STEPHANIE	NEW CALEDONIA	OFF	E1	PROG
DATA ENTRY TECHNICIAN (OFFP)	DIOHOUE, MARIEPIERRE	NEW CALEDONIA	OFF	E1	PROG

*Section Head post

†Posts restricted to ACP & EU nationals

PROG=Programme funding by NZ, Aus, France WF=WorldFish

Note: this list was compiled on 1st August 2005 and may have changed by the time of CRGA**Marine Resources Division staffing in the SPC context**

Division, according to staff list chapters	N	% of total SPC staff	% of staff core-funded*
TOTAL I – ADMINISTRATION	44	15.66%	93%
TOTAL II – PROG.MANAGEMENT AND SUPPORT	40	14.23%	93%
TOTAL III – SOCIAL RESOURCES	59	21.00%	20%
TOTAL IV – MARINE RESOURCES	63	22.42%	5%
TOTAL V - LAND RESOURCES	75	26.69%	4%
GRAND TOTAL SPC	281	100.00%	35%

*NB: this number is not the same as “% of divisional staff budget coming from core”, since some staff are paid more than others, and there is a much higher proportion of lower-paid locally-recruited staff in the administration than in the sectoral divisions

Annex 2

Fisheries Programmes' Strategic Programme Plans 2006-9

The top-level frameworks for the new strategic plans for both SPC Fisheries Programmes are summarised here. These plans are evolutionary rather than revolutionary – several sectoral and regional organisational reviews have taken place during the preceding plan period and the general message to come out of them is that SPC's fisheries work compares favourably with other activities in the region and elsewhere, in terms of efficiency and applicability. Careful steering and ongoing validation rather than reform and restructuring have been the main guiding principles of the secretariat during the development of these plans.

The new strategic plans are not finalised, and require substantial brainstorming, feedback and discussion by member countries and territories before that stage is reached. This CRGA is taken as an opportunity to receive general high-level feedback on the proposed basic aims and objectives of the two SPC fisheries programmes from SPC's primary stakeholders before the final drafts are produced in early 2006. If there are any particular regional priorities pertaining to fishery assessment, development or management that need to be emphasised, or any particular modes of programme operation that are preferred, we would be pleased to hear from the governing council.

Full use will be made of the SPC Heads of Fisheries Meeting to develop the details of these plans, and because of this we are planning to hold the 5th HOF meeting early in the new year, possibly in mid-March.

The current strategic plans (2002-5) can be found on the web³.

³ <http://www.spc.int/mrd/org/org.html>

Annex 2.1

**Draft Strategic Plan 2006-2009 for the
Coastal Fisheries Programme**

Annex 2.2

**Draft Strategic Plan 2006-2009 for the
Oceanic Fisheries Programme**

Annex 2.2 - The summary draft of the OFP Strategic Plan will be tabled separately. The workload involved in preparing for and running the 1st Scientific Committee of the WCP Fisheries Commission did not permit this to be finished in time for the first mail-out of CRGA papers.

Although they can be described briefly, the development of these high-level mission statements requires considerable discussion and background work. It is however already proposed that the main goal of the OFP during the programme period 2006-9 will be “to provide the scientific support necessary to assist SPC members, both individually and collectively, in applying the ecosystem approach to the management of tuna fisheries”

Annex 3

Triennial Programme Reports

3.1 Coastal Fisheries Programme summary

See also http://www.spc.int/mrd/org/cfp_triennial.doc on the website

(insert CFP-triennial.doc here)

3.2 Oceanic Fisheries Programme Triennial Report 2002-5

See also http://www.spc.int/mrd/org/ofp_triennial.doc on the website

(insert OFP-triennial.doc here)

3.3 Regional Maritime Programme Triennial Report 2002-5

See also http://www.spc.int/mrd/org/rmp_triennial.doc on the website

(insert RMP-triennial.doc here)