

Introduction

1. The Fifth Ordinary and Plenipotentiary Meeting of the Contracting Parties to the Convention on Conservation of Nature in the South Pacific (Apia Convention) and the Fifth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Natural Resources and Environment of the South Pacific Region and Related Protocols (SPREP Convention) were convened jointly in Guam on 9 October 2000. Delegates from 16 States and Territories namely: American Samoa, Australia, Cook Islands, Federated States of Micronesia, Fiji, France, Guam, Marshall Islands, Nauru, New Zealand, Northern Marianas, Papua New Guinea, Samoa, Tokelau, United States of America and Wallis and Futuna, participated in the Meeting. Three non Parties namely: Kiribati, Niue and Tuvalu attended as observers. Representatives from the United Nations Development Programme (UNDP) and the World Meteorological Organization (WMO) also attended the Meeting as observers. The list of Participants is attached as Annex I.

Agenda Item 1: Joint Official Opening of the Meeting

2. The Representative of Australia as current Chair of the SPREP Convention and also on behalf of Fiji as current Chair of the Apia Convention, called the Meeting to order and introduced the Representative of Fiji, who led the Meeting in Prayer.

3. The Meeting was opened by the Representative of Guam Mr Jesus Salas, Administrator, Guam Environmental Protection Agency. In his opening remarks, the Representative of Guam welcomed representatives of the Contracting Parties and other participants and referred to this Meeting as essential for the future development of these Conventions.

4. He reminded the Meeting that the SPREP Convention, as the legal framework of the SPREP Action Plan, provided a strong sense of regional coherence necessary for effective regional representation at Global fora. However, he noted with

regret that at present, neither Convention was playing the role for which it was originally created nor was either Convention being used to full effectiveness in catalysing the development of activities under the Action Plan.

5. He noted that the Fourth Meeting of the Contracting Parties had already reiterated the importance of Parties considering seriously better implementation of both Conventions and he further emphasised the need to make strong recommendations for necessary action to be taken at this Meeting.

6. In closing, the Representative of Guam stressed the need to seriously consider possible amendment to the Apia and SPREP Conventions to bring them into line with relevant Global Conventions. His address is attached as Annex II.

7. In his introductory address, SPREP's Director, Mr Tamari'i Tutangata, reminded the Meeting that whilst environmental concern is global in nature, particular regional concerns also need to be taken into account so that global instruments are directly relevant to the region. In noting the difficulties in implementing global environmental agendas experienced by Secretariats of international conventions, he also explained that such bodies were in fact recognising that regional frameworks are an important tool to effectively implement global activities. In light of this, the SPREP Director emphasised the need to have effective regional frameworks in place, in order to maximise the full benefit of assistance through global mechanisms.

8. He further stressed that the need to revise the Apia and SPREP Conventions was becoming increasingly obvious, when taking into consideration new issues identified by the Pacific region such as protection of genetic resources, benefit sharing and biosafety which are not addressed at present by the existing regional legal framework.

9. In closing, the Director reiterated the need to readjust the regional legal framework to take into consideration the exponential growth of the legal environmental agenda. His address is attached as Annex III.

Agenda Item 2: Organisation of the Meeting

2.1 Rules of Procedure

10. The respective Rules of Procedure for the Meeting of the Contracting Parties to the Apia and SPREP Conventions applied for the conduct of the Meeting.

2.2 Election of Officers

11. The Meeting unanimously elected the following officers from among the delegates designated by the Contracting Parties attending the Meeting:

Chairperson: Ms I'o Tuakeu-Lindsay (Cook Islands). Vice Chairperson: Mr R.M. Gabriel Jugnet (France).

2.3 Organisation of Work

12. English and French were the Working languages of the Meeting. Simultaneous interpretation in these languages was provided by the Secretariat. The Working documents of the Meeting were available in both working languages.

13. The Meeting conducted its work in plenary sessions. No *ad hoc* working groups were established by the Chairperson.

Agenda Item 3: Adoption of the Agenda

14. The Secretariat explained that the present Agenda was proposed for a joint Meeting due to the very limited time allocated to hold separately the Fifth Ordinary Meeting of the Apia and SPREP Conventions. The Secretariat also outlined the fact that, while avoiding duplication related to procedural matters, the proposed Agenda was accurately reflecting the needs and development under the respective Conventions.

15. The Provisional Agenda proposed by the Secretariat and contained in document 5AC/5SC/Agenda, was adopted by the Meeting and is appended as Annex IV.

16. The Working Documents which were made available to the Meeting as support to the various Agenda Items are listed in Annex V to this report.

Agenda Item 4: Presentation of Reports by the Secretariat under Rule 11 of the Rules of Procedure of the Apia Convention and Rule 12 of the Rules of Procedure of the SPREP Convention

17. The Secretariat introduced the reports on work undertaken or achieved as part of the Action Plan towards implementation of the Conventions since the Fourth Ordinary Meetings as contained in document 5AC/5SCWP.5. The Secretariat informed the Meeting that project proposals related to the implementation of these Conventions for the next biennium are described in the Action Plan and will be dealt with at the 11th SPREP Meeting.

18. In response to a request for clarification from the delegate of Papua New Guinea relating to harmonisation of the Conventions with national and regional activities such as the transboundary movement of hazardous wastes, the Secretariat referred to the Waigani Convention and its efforts to bring this Convention into force. As well, the Secretariat outlined briefly the work of the Pacific Ocean Pollution Program (PACPOL) which had developed a template for marine pollution legislation. The Cook Islands has passed such legislation and Fiji, Samoa and Vanuatu are moving towards similar legislative development.

19. In response to an inquiry from the delegate of Guam relating to integrated Watershed Management and Coastal Planning, the Secretariat explained that the issue of 'integration' was very important and was being addressed under the new International Waters Programme, details of which would be outlined under Agenda Item WP.7.3.2.12 of the Eleventh SPREP Meeting.

20. The delegate of Tuvalu sought clarification on linkages between the Conventions and SPREP's Action Plan and work programme development.

21. In response, the SPREP Director explained that SPREP's new Action Plan 2001–2004 had been developed through an extensive in-country consultative process to ensure that it effectively addresses Members' needs. He explained that the SPREP Convention (created under the auspices of SPREP as one of UNEP's Regional Seas Programmes) had been originally developed as a legislative framework to the earliest Action Plan in 1982. At that time the linkages were strong. Later development of SPREP has highlighted its unique features as a UNEP Regional Seas Programme. It works now not only with the SPREP and Apia Conventions but also with a range of other regional and international instruments and as such, the activities under the Action Plan are no longer restricted to the two Conventions.

22. The delegate of Fiji commended the Secretariat on its efforts to implement the SPREP and Apia Conventions and requested clarification as to whether the issue of ship groundings would be addressed through PACPOL. The Secretariat advised that this could be dealt with under the PACPOL Response Plan if a grounding was to result in an oil spill.

23. The Meeting noted the Secretariat's report outlining work achieved in fulfillment of the provisions of the Apia and SPREP Conventions and related Protocols under the SPREP Action Plan 1997–2000.

Agenda Item 5: Country Reports on the Implementation of Obligations under the SPREP and Apia Conventions

24. A number of representatives of Contracting Parties to the Apia and SPREP Conventions submitted information on national progress in implementing the Conventions over the two year period (1998–2000).

25. The Representative of Australia presented his country's National Report, highlighting a number of actions to implement both Conventions. He offered Australia's assistance (in particular, Environment Australia) in answering enquiries from Members on environmental issues. Australia's National Report is contained in Annex VI.

26. The Representative of Samoa presented his country's National Report on implementation of the Apia Convention which highlighted the range of community-based Marine Protected Areas and Fishery Reserve initiatives currently underway; recent production of draft Environment (Bio-prospecting) Regulations 1999 and promotion of awareness raising on the importance of protecting Samoa's biological diversity. Samoa's National Report is contained in Annex VI.

27. The Representative of Papua New Guinea presented his country's National Report on the Apia and SPREP Conventions (in line with the standardised reporting format previously produced by the Secretariat). He stated that Papua New Guinea is doing what it can to implement the requirements of these two Conventions, noting that many articles in these two regional instruments have complementary implementing mechanisms such as the Basel Convention, Convention on Trade in Endangered Species of Wild Fauna and Flora (CITES) as well as domestic legislation. He noted also the need to mobilise and strengthen, through regional meetings and awareness programmes, countries' commitment to implementing the requirements of these regional instruments. The representative further outlined Papua New Guinea's progress in the development of the new Environment Act and various regulations and guidelines including a review of its Water Quality Guidelines. He expressed his country's interest in sharing experiences with other Pacific island countries with a view to developing standards together. Papua New Guinea's National Report is contained in Annex VI.

28. The Representative of the Cook Islands presented her country's National Report on both Conventions. She referred specifically to SPREP assistance in extending existing legislation to cover outer islands and to proposed SPREP assistance for development of legislation to prevent ocean dumping. She highlighted customary powers currently being used through Marine Protected Areas to successfully conserve natural resources and referred also to other conservation activities such as the Takitumu Conservation Area (TCA) bird conservation efforts. The Cook Islands' National Report is contained in Annex VI.

29. The Representative of Guam echoed Australia's offer of assistance to other PICs, noting that Guam has significant expertise in some environmental management areas.

30. The Representative of Wallis and Futuna advised the Meeting that her territory was currently working on the implementation of the Conventions. She stressed that, in the early stages, her territory had approached SPREP for technical assistance but that the organisation had not been able to respond and that the levels of technical and financial support offered by SPREP to Wallis and Futuna were currently causing some frustration. The delegate reminded the Meeting that, unlike other French island territories, Wallis and Futuna was very small and its resources very limited; she added that Wallis and Futuna's report would be transmitted to the Secretariat once completed.

31. The SPREP Director explained that the Secretariat is cognizant of this concern and stated this matter would be further discussed at the Eleventh SPREP Meeting..

32. The Meeting noted the efforts by Parties in implementing the provisions of the Apia and SPREP Conventions.

Agenda Item 6: Items Requested at Previous Meetings

33. The Secretariat presented items resulting from requests at the Fourth Meeting of the Contracting Parties to the Apia and SPREP Conventions as follows:

6.1 At the Meeting of the Contracting Parties to the Apia Convention

6.1.1 Draft Information Paper on Biosafety, Access to Genetic Resources and Intellectual Property Rights

34. The Secretariat introduced the *Draft Information Paper on Biosafety, Access to Genetic Resources and Intellectual Property Rights* as contained in documents 5AC/WP 6.1.1 and 5AC/WP 6.1.1/Att.1 and brought to the attention of the Meeting that these issues were not really covered by the Apia Convention. The Secretariat saw advantage

in greater linkage between the Apia Convention and the Convention on Biological Diversity. The Secretariat informed the Meeting that the issues of Biosafety, Access to Genetic Resources and Intellectual Property Rights would be examined in a more detailed manner at the Eleventh SPREP Meeting under Agenda Items 7.3.2.1 and 7.3.2.2. The Secretariat also referred to a detailed "Convention on Biological Diversity Information Package" on these issues which has been produced as a Reference Document (5AC/5SC/RD7) for a two-day Workshop of Legal Experts proposed to convene in Apia in March, 2001. This workshop will analyse those issues addressed in the CBD and not contained in the Apia Convention.

35. The Representative of Australia recalled requests from the Fourth Meeting of the Parties for the development of model legislation for the implementation of the Apia Convention. He requested further input from Members as to whether priority should be given to the development of such legislation rather than focusing primarily on amendments to the Convention. He further asked Members to consider whether a two-day workshop would be the most appropriate approach or whether text, for model legislation, could be drafted by a consultant.

36. Representatives of American Samoa, Cook Islands, Fiji, Nauru, Papua New Guinea, Samoa, Tokelau, Tuvalu and Wallis and Futuna gave their support for the two-day workshop as proposed by the Secretariat with a request for clarification on the procedure of such a workshop. The Representative of Wallis and Futuna called for strengthening of SPREP's legal section. Several representatives also requested that assistance be provided by the Secretariat when countries are developing national legislation; assistance for ratification of the Apia and SPREP Conventions and assistance with clarification of the range of international legal instruments. The Representative of Kiribati specifically requested assistance with advice from the Secretariat on her country's obligations under the range of international conventions.

37. In responding, the Secretariat explained that the regional workshop had been proposed in direct response to Member requests and noted that it would focus on Biosafety issues. As such, relevant technical experts together with legal advi-

sors would be expected at the workshop. The Secretariat further clarified that it would seek the participation of all Members and not merely from Parties to the Apia Convention.

38. Following explanation by the Representative of Fiji about an effective approach undertaken by SPREP with PACPOL model legislation development, the SPREP Director explained that a common approach within SPREP was that outlined by Fiji whereby model legislation is developed by the Secretariat, then taken for in-depth in-country consultation. This is combined with regional workshops to share experience and make best use of resources, especially as there is not a wealth of experience/expertise in some Member countries in certain environmental management areas.

39. The Meeting noted the work undertaken by the Secretariat on access to genetic resources, biosafety and intellectual property rights and approved a workshop to discuss these issues.

6.1.2 Proposed Amendment to the Apia Convention

40. The Secretariat presented the Amendment to the Apia Convention as contained in documents 5AC/WP 6.1.2 and 5AC/WP 6.1.2/Att.1. These amendments related to change of reference in certain articles from “South Pacific Commission” to “South Pacific Regional Environment Programme” and insertion of a new article to include procedures for making future amendments to the Convention. *However, the Secretariat outlined that the simple substitution of SPC by SPREP in Article IX was non satisfactory due to the fact that this Article refers to the territorial scope of SPC while SPREP has no territorial scope.* The Meeting also considered amending the text (Article XI) to delete reference to “Western” from the term “Western Samoa”. The Meeting adopted the amended text by consensus and agreed that the amendments would enter into force when two-thirds of the Parties had submitted instruments of ratification. The Secretariat was requested to draft a proforma instrument of ratification for the Parties. The amended text appears as Annex VII.

6.1.3 Report on Informal Discussions with the Regional Coordinating Unit of the United Nations Environment Programme for the Caribbean (UNEP-CAR/RCU)

41. The Secretariat reported on its informal discussions with the UNEP-CAR/RCU as Secretariat to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention) on its approach and experience in the field of protection of nature as described in documents 5AC/WP 6.1.3 and 5AC/WP 6.1.3/Att.1.

42. In doing so, the Secretariat outlined that the main development which had occurred within the Caribbean Environment Programme (CEP) was the entry into force of the Protocol Concerning Specially Protected Areas and Wildlife (SPA) in June 2000, one decade after its adoption in 1990. The Secretariat further informed the Meeting that no less important was the SPAW-Regional Activity Centre (SPAW-RAC), established to support the scientific and technical implementation of the Protocol, which became operational on 1 January 2000 as well as the development of a number of tools such as the Guidelines on Revenue Generation. Finally, it was noted that based on a Memorandum of Understanding (MOU) signed in March 1997 between the RCU and the Secretariat of the CBD, no joint activities have yet been developed.

43. The Meeting:

- agreed that in due course it may be desirable to amend the Apia Convention in light of developments under the Convention on Biological Diversity through development of a Protocol or other mechanism;
- encouraged the Secretariat to continue to develop closer links with UNEP-CAR/RCU; and
- agreed that the Secretariat conclude a Memorandum of Understanding with the Secretariat of the CBD.

6.2 At the Meeting of the Contracting Parties to the SPREP Convention

6.2.1 Draft Information Paper on Proposed Amendment to the Dumping and Emergency Protocols to the SPREP Convention

44. Following a general presentation by the Secretariat of the Proposed Amendment to the Dumping and Emergency Protocols to the SPREP Convention to bring them into line with the 1996 Protocol to the London Dumping Convention (1972) and the Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC), as contained in documents 5SC/WP 6.2.1 and 5SC/WP 6.2.1/Att.1, it was outlined that more time was needed to carefully examine these amendments. In light of this, it was agreed that a Meeting of Legal, Technical Experts be convened during 2001, subject to the availability of funds.

45. The Meeting encouraged the Secretariat to seek funding to convene a Meeting of Legal, Technical Experts in collaboration with IMO, during 2001 to discuss proposed amendments to the Dumping and Emergency Protocols to the SPREP Convention.

6.2.2 Draft Information Paper on Guidelines/Model Legislation on EIA, Biosafety and Persistent Organic Pollutants

46. This Item was introduced by the Secretariat to provide information on development of model legislation on Biosafety, Persistent Organic Pollutants (POPs) and Environmental Impact Assessment (EIA) as previously requested by Parties (contained in documents 5SC/WP 6.2.2). In so doing, it was explained that the development of such Guidelines was as yet at too early a stage, when taking into consideration the status of development of the relevant Global Conventions. Also, the Secretariat pointed out that the issue related to EIA had already been addressed under Agenda Item 4.

47. The Representative of the USA noted that the POPs Convention had not yet been finalised and cautioned against the development of model legislation for POPs at this stage.

48. The Meeting:

- noted the work undertaken by the Secretariat on issues related to Biodiversity, in particular on Biosafety;
- encouraged the Secretariat to increase its efforts to obtain the necessary funds to hold the additional two-day workshop associated with the Regional Workshop on Biosafety in March 2001;
- directed that the workshop examine Draft Regional Model Legislation on Biosafety;
- noted the Report on the Management of Persistent Organic Pollutants in Pacific Island Countries (POPs in PICs) --Wastes and Obsolete Chemical Contaminated Sites produced by SPREP with assistance from AusAID;
- directed that this report be used as the basis for steps toward the development of Regional Model Legislation on the Management of Hazardous Chemicals;
- encouraged the Secretariat in its efforts to attract additional funding for legal activities related to Management of Hazardous Chemicals; and
- noted that the Secretariat will continue work on model EIA legislation.

6.2.3 Proposed Amendment to the Rules of Procedure for Meetings and Conferences of Contracting parties to the SPREP Convention

49. The Secretariat introduced the proposed amendment to the Rules of Procedure to the SPREP Convention as contained in documents 5SC/WP 6.2.3 and 5SC/WP 6.2.3/Att1. Two proposals were presented to the Meeting consisting of deleting the related Rule which makes reference to the "Secretary-General" or, alternatively, amending the reference to relate it to Article VI of the Agreement Establishing SPREP (1993).

50. The Meeting agreed with Proposal I to delete the definition of Secretary-General from the Rules of Procedure. The Amended text is contained in Annex VIII.

Agenda Item 7: Any Item Proposed by a Contracting Party

51. The Parties were invited to raise any other Items not covered under the preceding Agenda Items but which were relevant to the scope of the Meeting.

52. The Representative of the Marshall Islands called upon the Secretariat for technical assistance, and also regarding classification as a Small Island State (SIS).

53. The SPREP Director stated that the Marshall Islands' need for SPREP assistance could be favourably addressed upon specific request. With regard to the request for SIS classification, however this was a matter more appropriately addressed by the Eleventh SPREP Meeting..

Agenda Item 8: Financial Statements of 1998 and 1999

54. In respect of Regulation 27 and 28 to the Financial Regulations for the Apia and SPREP Conventions, the Secretariat presented the audited Annual accounts for 1998 and 1999 and made some comments on the financial operations of the Conventions. Also, the Secretariat indicated that the Regulations do not require separate audited accounts to those of the SPREP Meeting and that the small annual budgets for the Conventions do not justify separate audited accounts. Therefore, the Secretariat invited the Meeting to note the relevant sections of the audited accounts to be presented at the Eleventh SPREP Meeting. The Meeting adopted the parts of the audited SPREP Financial Statement for 1998 and 1999 relevant to the Apia and SPREP Conventions and expressed gratitude to the Governments of Australia and New Zealand for their funding of the Meetings of the Parties.

Agenda Item 9: Consideration and Adoption of the Budget for the Biennium 2001 and 2002

55. The Secretariat presented the 2001-2002 Budgets as contained in Document 5AC/5SC WP.9. At this point, the Secretariat stressed the crucial need for the Contracting Parties to make timely payment of their contributions under these Conventions.

56. The Meeting, in approving the budgets for the biennium 2001-2002, asked the Secretariat to use its best endeavours to find donor funding for

the workshops and, only in the event of it being unsuccessful, to use Convention budget funds for this purpose and to take the necessary action to urge Parties to make prompt payment of their contributions to the 2001-2002 Budget.

Agenda Item 10: Other Business

57. There was no other business raised by the Parties.

Agenda Item 11: Date and Venue of the Next Meeting

58. The Meeting recalled the decision of the Joint Extraordinary Meeting of the Parties to the Apia and SPREP Conventions, Tonga, 1996 to hold joint Meetings of the Parties together with the biennial SPREP Meeting. Accordingly, the Meeting agreed to convene the Sixth Ordinary Meeting of the Contracting Parties to the Apia and SPREP Conventions at the same time and venue as the twelfth SPREP Meeting.

Secretariat note: This decision was made prior to a decision of the Eleventh SPREP Meeting to hold annual SPREP Meetings. The reader should note that biennial Meetings of the Parties to the Apia and SPREP Conventions are proposed.

Agenda Item 12: Adoption of the Report

59. The Draft report of the Meeting was adopted by the Meeting with the amendments and corrections as reflected in this report.

Agenda Item 13: Closure of the Meeting

60. In her closing remarks, the Chairperson thanked the Government of Guam for its support in organising and hosting the Meeting. She also thanked the SPREP Secretariat and thanked the Representatives for their contributions to the Meeting.

Decisions of the Meeting

The Meeting

Having noted the work achieved by the Secretariat in the fulfillment of the obligations of the Apia and SPREP Conventions and related Protocols under the SPREP Action Plan 1997-2000;

Having noted the efforts by Parties in implementing the provisions of the Apia and SPREP Conventions;

Recognising the importance of the Apia and SPREP Conventions as the legal framework for the SPREP Action Plan and its potential to assist governments by ensuring coherence in policies, technical assistance and coordination among parties, and with regional and global organisations;

Further recognising the need to increase the number of Contracting Parties to the Apia and SPREP Conventions;

Decides:

I. On amendments

1. **To adopt** the amended text of the Apia Convention as well as **to agree** that the Amendments would enter into force when two thirds of the Parties had submitted instruments of Ratification and, that a proforma instrument of ratification for the Parties be drafted.

2. To adopt the proposed amendment to Rule 2 of the Rules of Procedure for Meetings and Conferences of Contracting Parties to the SPREP Convention by deletion of the definition of "Secretary General" from the Rules of Procedure.

II. On biodiversity issues

3. **To take note** of the work undertaken by the Secretariat on issues related to biodiversity, in particular on biosafety, access to genetic resources and intellectual property rights.

4. **To welcome** the initiative of the Secretariat to convene a three day workshop in Apia, March 2001, attended by all SPREP Members to examine issues related to biosafety.

5. **To approve** to hold an additional two days workshop of Legal Experts, associated with the regional Workshop, March 2001, to examine how issues related to Biosafety, access to genetic resources and intellectual property rights could be addressed under the Apia Convention as well as Draft Model Legislation on Biosafety and **to further encourage** the Secretariat to increase its efforts to obtain the necessary funds to this end.

6. **To agree** on the potential need to amend the Apia Convention in light of the developments under the Convention on Biological Diversity through the development of a Protocol or other mechanisms.

7. **To take note** of the collaboration between the Secretariat and the Secretariat of the Convention on Biological Diversity and **to agree** that a Memorandum of Understanding be concluded between the Secretariats.

8. **To encourage** the Secretariat to develop closer links with the Regional Coordinating Unit of the United Nations Environment Programme for the Caribbean (UNEP-CAR/RCU).

III. On Persistent Organic Pollutants (POPs) issues

9. **To note** the Report on the Management of Persistent Organic Pollutants (POPs) in Pacific Islands Countries – Wastes and Obsolete Chemical Contaminated Sites produced by SPREP with assistance from AusAID.

10. **To request** the Secretariat to develop Regional Model Legislation on the Management of Hazardous Chemicals and agreed that the Report on the Management of Persistent Organic Pollutants (POPs) be used as the basis for steps toward such a development.

11. **To encourage** the Secretariat in its efforts to attract additional funding for legal activities related to the management of Hazardous Chemicals.

IV. On Environmental Impact Assessment (EIA)

12. **To request** the Secretariat to continue its work on the development of Model Legislation on Environmental Impact Assessment (EIA).

V. On Marine Pollution issues

13. **To agree**, subject to the availability of funds, that a Meeting of Legal, Technical Experts be convened to examine the proposed amendments to the Dumping and Emergency Protocols to the SPREP Convention to bring them into line with the 1996 Protocol to the Convention on the Prevention of Marine Pollution, by dumping of wastes and other Matter (London, 1972) and the Convention on Oil Pollution Preparedness, Response and Cooperation 1990 (OPRC).

14. **To encourage** the Secretariat to seek funding to convene such a Meeting of Legal, Technical Experts in collaboration with IMO.

VI. On financial issues

15. **To adopt** the parts of the audited SPREP financial statement for 1998 and 1999 relevant to the Apia and SPREP Conventions.

16. **To extend** to the Governments of Australia and New Zealand the Parties' appreciation and gratitude for their funding which enabled the convening of the Contracting Parties Meetings of the Apia and SPREP Conventions.

17. **To approve** the Budget for the biennium 2001–2002 and **to further** request the Secretariat, in using its best endeavours, to allocate the necessary funding to convene the Workshops. Only in the event of such suggested allocation being unsuccessful, the Secretariat will use the Conventions Budget funds for this purpose.

18. **To request** the Secretariat to take the necessary actions aimed at urging Parties to make prompt payment of their contributions to the 2001–2002 budget.

VII. Others

19. **To take note** of requests of technical and legal assistance from Contracting Parties as well as the offer by a number of Contracting Parties to provide assistance in different forms and areas and to share experiences.

20. **To acknowledge** the efforts and work undertaken by the Secretariat to prepare for and convene this Meeting.

Annexes

Annex I : Participants List

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Annex II: Remarks by Host Country

by Mr Jesus T. Salas (Guam Environmental Protection Agency Administrator, SPREP Guam National Representative and Guam Delegation Leader)

Hafa Adai my fellow Pacific Islanders, and members of the SPREP and Apia Conventions. It is a privilege for me to be given this opportunity to say a few brief words. First, on behalf of our Governor, Carl T.C. Gutierrez, and the Government of Guam, it gives me great pleasure to welcome you to our island.

We've been looking forward to this momentous occasion when we could gather here in the Western Pacific. You and I are here because of our concern for our environment and its effect on the well-being of our people. We are here for one purpose—to take positive steps to fight the degradation of our Pacific environment. And as we progress much further into the third millenium, we can see all around us that we don't have time to waste. It is, as the United Nations Environment Programme theme so succinctly puts it, "Time to Act." Let us renew our commitment collectively to protect our environment and to focus our resources on ways that will reverse the trend of destruction against our air, land, water and commensurately, our island people.

Today marks the first day of week long deliberations. As you meet today, you have a most important role in helping make the necessary decisions and to initiate a number of changes aimed at strengthening the existing Regional Legal Framework through the Apia Convention and the SPREP Convention and its related protocols.

Significant progress has been made to strengthen institutions and develop regional agreements since the first action plan was adopted 18 years ago. In 1982, the Conference on the Human Environment in the South Pacific was held in Rarotonga, Cook Islands. This auspicious body adopted the first Action Plan for Managing the Natural Resources and Environment of the South Pacific region.

And in 1986, the Plenipotentiary Meeting of the High Level Conference on the Protection of the Natural Resources and Environment of the South Pacific Region convened in Noumea, New Caledonia. There the SPREP Convention was adopted as the legal framework of the 1982 Action Plan.

Too often we fail to recognize that the SPREP Convention provides the legislative framework for the Action Plan. It also asks for cooperation essential for the achievement of sustainable development in the Region. Indeed, in order to manage shared problems, regional legal instruments are negotiated to strengthen cooperation among countries. The Convention provides for a strong sense of regional coherence necessary for effective, homogenous representation in the Global Forum.

The Convention includes a series of concrete and substantive provisions for bringing about effective cooperation in matters related to pollution from ships, dumping, land-based sources of pollution, seabed exploration and exploitation. The Convention also includes provisions for atmospheric discharges, storage of toxic and hazardous wastes, testing of nuclear devices, mining and coastal erosion. Also, a number of other issues are identified such as protected areas and wildlife, pollution in case of emergency, environmental impact assessment, scientific and technical cooperation, technical assistance, and liability and compensation for damage resulting from pollution. This comprehensive agreement has the potential to assist governments by ensuring coherence in policies, administrative supervision, technical assistance and coordination among parties, and with regional and global organisations.

The SPREP Convention can also be seen not only as a mere legal instrument but also a technical instrument that provides the frame of reference for the SPREP Action Plan. The Convention is the basic instrument for the development and enforcement of national legislation, the foremost instrument for enhancing cooperative relations at

all levels and an ideal planning and management tool. It is regrettable that at present, the SPREP Convention and its Protocols along with the Apia Convention are not playing the role for which they were created. The Conventions have the potential for being catalysts for the development of activities under the Action Plan. Therefore, I am taking this opportunity to encourage Parties and non-Parties to focus on the SPREP Convention.

Two years ago, in 1998, the Fourth Meeting of Contracting Parties to the Apia and SPREP Conventions, referred to the lack of progress in the implementation of both Conventions, which address issues arising from the Global Conventions. This meeting also urged Parties to seriously consider taking into account the commitment of SPREP to assist countries in particular with the reporting requirements. This is a key element to measure the effectiveness of the Conventions. Distinguished delegates, as we commence the Fifth Meeting of the Parties, the time has passed for merely noting the need for implementation of the Conventions, it is "Time to Act". To make real progress, it is time now to make strong recommendations for the necessary actions to be taken. In saying this, I would also like to point out that at present, there is no model or universal instrument applicable to all parts of the world.

Given the specific characteristics of the Pacific islands region and its strong cultural and additional ties, it is of paramount importance that the region heeds its own legal strategy. No less important is the fact that cooperation is key to meeting the environmental challenges that face our Pacific Community. No Pacific Island Country by itself can meet the costly and wide obligations under the range of Conventions for controlling existing environmental problems and preventing new ones, except through cooperation.

Now, as we convene this meeting, it is important to understand that a lot of time has passed and a

lot of things have happened since the Apia Convention was adopted 12 years ago, and the SPREP Convention 14 years ago. Numerous developments have since occurred in the field of international environmental law. Its increasing technicality needs also to be reflected in these regional instruments.

Do we need a drastic amendment of the Apia Convention or do we need a Protocol that will supercede this convention? We must take into consideration the developments under the framework of the Convention on Biological Diversity such as Biosafety. Do we need to decide that the SPREP Convention be the vehicle to facilitate the implementation of global conventions? If the answer is yes, do we then, need to decide to amend the SPREP Convention and develop additional protocols to better deal with global issues, arising, for example, from the implementation of the Global Programme of Action, the upcoming Persistent Organic Pollutants (POPs) Treaty, the Kyoto Protocol, the Rotterdam Convention? The dynamics of such a decision will give strength to the regional legal framework and may encourage an increasing number of Pacific Island Countries to become Parties.

Distinguished delegates, let me reiterate the fact that these meetings should be viewed with great importance. Let us celebrate at the end of the deliberations with a renewed sense of purpose and energy and a commitment to meet the environmental challenges of this new millennium. I know we have a full schedule ahead of us, but I do hope that you will enjoy the island of Guam.

Si yuos ma'ase put i attention mi ju yan si Yu'os en fan benedisi.

Thank you for your attention and may God bless you.

Annex III: SPREP Remarks

by Mr Tamari'i Tutangata (Director of SPREP)

I am pleased to join Mr Jesus Salas, Administrator of Guam's Environmental Protection Agency in welcoming you all to the joint Official Opening of the Fifth Ordinary and Plenipotentiary Meetings of the Parties to the Apia and Noumea or SPREP Conventions. It is a pleasure to be back again in this beautiful country and to experience once more the unique Chamorro hospitality.

As you know, the Apia and SPREP Conventions for which the South Pacific Regional Environment Programme is the Secretariat for, are two examples of regional approaches to global concerns.

The global concerns which the Apia Convention addresses are the need to produce essential renewable resources, the safeguarding of representative samples of natural ecosystems and the safeguarding of wildlife and its habitat. These concerns, echoed in the Apia Convention, were addressed in the Principles set out in the Declaration adopted by the UN Conference on the Human Environment in Stockholm 1972.

On the other hand the SPREP Convention and its related Protocols addresses the global concern of using the ocean as dumping sites for all kinds of waste, the need to protect the marine environment and the need for emergency responses to pollution especially from ships at sea. The global legal framework the SPREP Convention and its related Protocols take guidance from are Part XII of the Law of the Sea, the London Convention and the negotiations leading to the Oil Pollution Response Convention.

A question that is often asked and I would like to reflect on, is why we bother with regional approaches to global concerns? In other words if a global framework exists to deal with a particular environmental concern, is there a need for an additional regional framework?

The environmental concern may be global in nature but particular regional concerns also need to be taken into account so that the global instrument is directly relevant to the region. So for example in the Apia Convention, while the Parties

are convinced of the need for action inspired by the Stockholm principles, recognition is also given to special importance in the South Pacific of indigenous customs and practices and the need to give due consideration to such matters. Hence in Article VI, a Party may make appropriate provision for customary use of areas and species in accordance with traditional cultural practices.

The same can be said for the existence of the SPREP Convention where the Parties have noted that existing international agreements concerning the marine and coastal environment, in spite of all the progress achieved, do not entirely meet the special requirements of the South Pacific Region.

There is, however another fundamentally important rationale for having regional conventional frameworks to address regional environmental concerns. It is not easy to implement global environmental agendas from central offices in Bonn, Geneva, Montreal and Nairobi where many of the global organisations and secretariats are based. Indeed these bodies encourage regionalism because of the recognition that regional frameworks are an important tool to effectively implement global programmes.

However, it goes without saying that the regional framework which takes into account the special needs of the Pacific region has to be in place and be effective so that we can maximise the full benefits of the global environmental agendas. I do not think it is any secret that, revisions of the Apia and SPREP Conventions are called for.

Recently an AusAID review of SPREP stated, "...members were concerned that the region has neglected the Apia and SPREP Conventions..." and that monitoring and reporting on compliance, observance and implementation needed to be improved. In the review, SPREP was asked to give more attention to the region's own conventions.

The points the review made were valid. The Apia Convention has five Parties whereas the Convention on Biological Diversity (CBD) has 13 Pacific island Parties. While the Apia Convention

was the first convention in the World to call for the establishment of protected areas, the CBD reflects the modern language of the sustainable use of protected areas. Over time, the Pacific region has identified with issues like access to genetic resources, benefit sharing and biosafety. These are not contained in the Apia Convention, but are reflected in the CBD. Similarly, the Dumping Protocol to the SPREP Convention needs to take into account recent developments such as the 1996 amendment to the London Convention.

To make the Apia and SPREP Conventions more relevant to the current needs in the region, changes are called for. This will require more resources and commitment to the Secretariat that has been indirectly achieving the purposes of the Apia and SPREP Conventions through the SPREP Action Plan. Ideally the Apia and SPREP Conventions should be a core function of SPREP.

At this meeting, I would like to urge the Parties to the Apia and SPREP Conventions to revitalise these important regional Conventions so that a solid legal framework will be in operation for the region to better access global opportunities.

I remember those halcyon days when the global community including our region was excited with the developments of Stockholm, Rio and the regional seas creations which spurred the regional conventions we have today. While the international legal environmental agenda has grown exponentially, we have been left with regional frameworks in need of readjustment. Such readjustment is necessary to encapsulate and prioritise the global concerns relevant to our needs and to establish a legal framework we can effectively operate from.

Consistent with previous practice, I would like to invite and welcome non-Parties to attend these meetings as observers and to consider how your respective countries would benefit from joining these regional instruments. I sincerely hope that the outcomes of this meeting will result in significant regional action being undertaken over the next two years and beyond.

Thank you.

Annex IV: Agenda

1. Joint official opening of the Meeting
2. Organisation of the Meeting
 - 2.1 Rules of Procedures
 - 2.2 Election of Officers
 - 2.3 Organisation of Work
3. Adoption of Agenda
4. Presentation of Reports by the Secretariat under Rule 11 of the Rules of Procedure of the Apia Convention and Rule 12 of the Rules of Procedure of the SPREP Convention
5. Country Reports on the Implementation of Obligations under the Apia and SPREP Conventions.
6. Items requested at previous meetings
 - 6.1 At the Meeting of the Contracting Parties to the Apia Convention.
 - 6.1.1 Draft Information Paper on Biosafety, Access to Genetic Resources and Intellectual Property Rights.
 - 6.1.2 Proposed Amendment to the Apia Convention.
 - 6.1.3 Draft Report on Informal Discussions with the Regional Coordinating Unit of the United Nations Environment Programme for the Caribbean (UNEP-CAR/RCU)
 - 6.2 At the Meeting of the Contracting Parties to the SPREP Convention
 - 6.2.1 Draft Information Paper and Proposed Amendment to the Dumping and the Emergency Protocols to the SPREP Convention
 - 6.2.2 Draft Information Paper on Model Legislation on EIA, Biosafety, and Persistent Organic Pollutants (POPs)
 - 6.2.3 Proposed Amendment to the Rules of Procedure for Meetings and Conferences of Contracting Parties to the SPREP Convention
7. Any Item Proposed by a Contracting Party
8. Financial Statements of 1998 and 1999
 - 8.1 For the Apia Convention's Fund
 - 8.2 For the SPREP Convention's Fund
9. Consideration and Adoption of Budget for the Biennium, 2001 and 2002
10. Other Business
11. Date and Venue of the Next Meetings
12. Adoption of the Report
13. Closure of the Meetings

ANNEX V: Working Papers

Agenda Item 1	Joint Official Opening of the Meeting	--
Agenda Item 2	Organisation of the Meeting	--
Agenda Item 3	Adoption of Agenda Annotated Agenda	5AC/5SC/Agenda 5AC/5SC/Annot. Agenda
Agenda Item 4	Presentation of Reports by the Secretariat under Rule 11 of the Rules of Procedure of the Apia Convention and Rule 12 of the Rules of Procedure of the SPREP Convention	5AC/5SC/WP.4
Agenda Item 5	Country Reports on the Implementation of Obligations under the Apia and SPREP Conventions	5AC/5SC/WP.5
Agenda Item 6	Items Requested at Previous Meetings	5AC/5SC/WP.6
Agenda Item 6.1.1	Draft Information paper on Biosafety, Access to Genetic Resources and Intellectual Property Rights	5AC/WP 6.1.1 5AC/WP 6.1.1/Att.1
Agenda Item 6.1.2	Proposed Amendment to the Apia Convention	5AC/WP 6.1.2
Agenda Item 6.1.3	Draft Report on Informal Discussions with the Regional Coordinating Unit of the United Nations Environment Programme for the Caribbean (UNEP – CAR/RCU)	5AC/WP 6.1.3 5AC/WP 6.1.3/Att.1
Agenda Item 6.2.1	Draft Information Paper and Proposed Amendment to the Dumping and Emergency Protocols to the SPREP Convention	5SC/WP 6.2.1 5SC/WP 6.2.1/Att.1
Agenda Item 6.2.2	Draft Information Paper on Model Legislation on EIA, Biosafety and Persistent Organic Pollutants (POPs)	5SC/WP 6.2.2 5SC/WP 6.2.2/Att.1
Agenda Item 6.2.3	Proposed Amendment to the Rules of Procedure for Meetings and Conferences of Contracting Parties to the SPREP Convention	5SC/WP 6.2.3 5SC/WP 6.2.3/Att.1
Agenda Item 7	Any Item Proposed by a Contracting Party	5AC/5SC WP.7
Agenda Item 8	Financial Statements of 1998 and 1999: For the Apia Convention's Fund For the SPREP Convention's Fund	5AC/5SC WP.8 5AC/5SC/WP 8/Att.1 5AC/5SC/WP 8/Att.2
Agenda Item 9	Consideration and Adoption of Budget for the Biennium, 2001 and 2002	5AC/5SC WP.9
Agenda Item 10	Other Business	–
Agenda Item 11	Date and Venue of the Next Meetings	–
Agenda Item 12	Adoption of the Report	–
Agenda Item 13	Closure of the Meetings	–

Annex VI: National Report of Samoa on the Apia Convention for the year 1998-1999

1. Give details of new protected areas established

(i) Marine Protected Areas

A new community marine protected area project was designed (1998/9) and initially implemented (2000) as a partnership between the Government of Samoa, IUCN (the World Conservation Union) and the Districts of Aleipata (11 villages) and Safata (9 villages). The five-year project aims to demonstrate conservation and sustainable use of coastal marine biodiversity through the establishment and management of multi-purpose marine protected areas.

(ii) Government owned parks

- Apia Central Park - coastal area extending from Mulinuu to Taumeasina protecting mangroves areas and man-made/historical landscape and aesthetic aspects of the town and coastline including recreational areas.
- Fuluasou Botanical Garden - allocated/established on a 20 acre site at the Sports Complex Area (Tuanaimato) to promote the planting of native plant species only with special emphasis on trees and shrubs.
- Vaimoso/Vaigaga/Vaitale Reserves - these are recreational reserves established to beautify undeveloped land to restore these government owned lands.

The main purpose behind these newly established parks and reserves is to create a network or system of parks and reserves with different themes or focus. This also helps to prevent and control any further development activities on these areas.

(iii) Fishery Reserves

The total of sixty-three (63) villages participating jointly with the Fisheries Division (Ministry of Agriculture, Forestry, Fisheries and Meteorology) to effectively manage and protect their fisheries resources and to develop their own village Fisheries Management Plan.

2. Give details of new/amended legislation covering protected areas

Draft Environment Bill 1997 to replace Part VIII of the Lands, Surveys and Environment Act 1989. Features of the Environment Bill of particular relevance to biodiversity work include the Environment Impact Assessment, environment fund and environment council to assess activities impacting the environment of Samoa.

Environment (Bio-prospecting) Regulations 1999

These draft regulations control the prospecting of Samoa's biological resources to ensure that they are protected, conserved, sustainably managed and utilised accordingly for the future. They also put emphasis on the equitable sharing of benefits from genetic and biodiversity resources.

3. Give details of amendments to list of amendments to list of indigenous species threatened with extinction

List still remains the same as previously recorded in the 1997 Report to the Apia Convention. All endangered and threatened species are protected under the Animals Ordinance 1960. The following bird species are still considered to be protected since November 1993.

Birds

Crimson crownedfruit dove (*Manutagi*)

Pacific pigeon (*Lupe*)

White throated pigeon (*Fiaui*)

Bats

Samoaan Flying Fox (*Pea vao*)

Tongan Flying Fox (*Pea Faitaulaga*)

The following are absolutely protected:

Black-naped tern (*Gogouli*)

Black Noddy (*Taio*)

Blue-crowned Lory (*Sega vaop*)

Blue -grey Noddy
 Brown Booby (*Fuao*)
 Common Fairy Tern (*Gogo*)
 Friendly Ground Dove (*tuaimao*)
 Grey Duck (*Tolooa*)
 Island Thrush (*Tutumalili*)
 Many-coloured fruit dove (*Manulua*)
 Mao (*Maomao*)
 Masked Booby
 Polynesian Starling (*Mitiula*)
 Red-footed Booby
 Red-headed parrot Finch (*Manu ai pau laau*)
 Red-tailed Tropic Bird (*Tavae ula*)
 Samoan Fantail (*Seu*)
 Samoan Starling (*Fuia*)
 Samoan Triller (*Miti vao*)
 Samoan Whistler (*Vasavas*)
 Samoan White eyed (*Mata Papae*)
 Samoan Woodhen (*Punae*)
 Scarlet robin
 Spectacled Tern
 Tooth-billed pigeon (*Manumea*)
 White-browed Rail (*Vai*)
 White tailed Tropic Bird

4. How many permits were given by the appropriate authority to hunt, kill capture or collect species in the list? What were the reasons?
 No permits were issued for the hunting and killing of species given in the list because there is a ban on such activities.

5. What are your provisions for customary use of areas and species in accordance with the traditional cultural practices?

There are no specific provision governing customary use of species in the national park other than for scientific research. However, species found on customary owned land are largely used for traditional cultural practices such as for traditional medicinal purposes.

6. Outline the co-operation/co-ordination with other contracting parties in implementing the Convention (such as sharing information, training of personnel, research, education, and public awareness programme)

Cooperation is mainly through the SPREP Secretariat. There is no direct cooperation with other contracting parties in terms of implementing the an individual basis.

7. List any other activities undertaken to implement the objectives of the Convention

Information materials have been prepared, published and disseminated to further enhance the knowledge of local people on the importance of national parks and reserves.

Study tours by schools, tourists and the general public is encouraged to promote awareness and understanding of the national park and reserves as well as an opportunity to obtain first hand experience on the biological diversity these areas have.

National Report of Papua New Guinea on the Apia and SPREP Conventions for the period covering the last two years (June 1998 - May 2000)

1. Give details of new protected areas established

No new Protected Areas have been established in the last two years.

2. Give details of new/amended legislation covering protected areas? (Article 2(2))

No new/amended legislation has been made covering protected areas.

3. Give details of amendments to your list of indigenous species threatened with extinction (Article 5(2))

No new amendments in the last two years

4. How many permits were given by the appropriate authority to hunt, kill, capture or collect species in the list? What were the reasons? (Article 5 (3)) .

A number of permits have been issued in the past two years. The important thing to note here is that, these permits were not issued in accordance with Article 5(3) of the APIA Convention but were issued as a required under the domestic legislation which is the Fauna Protection & Control Act.

5. What are your provisions for customary use of areas and species in accordance with traditional cultural practices? (Article 6)

Fauna (Protection and control) Act, Draft Environment Bill, Section does not apply to 'traditional activities'.

6. Out line the co-operation/co-ordination with other Contracting Parties in implementing the Convention (such as information sharing, training of personnel, research, education and public awareness programs). (Article 7).

In implementing the Convention Papua New Guinea has co-operated with Australia (Torres Strait Agreement and AusAid), Solomon Islands (FIVE Agreement), New Zealand, USAID, IUCN and WWF in Fiji.

7. List any other activities undertaken to implement the objectives of the Convention.

None

Implementation of the SPREP Convention

1. What are the main issues and priorities concerning marine pollution for your country? (you can attach relevant sections of annual reports, policy documents etc.)

- Review and strengthening of domestic legislation in-country on marine pollution.
- Onshore receptor facilities for ships wastes.
- Pollution of marine environment by land-based activities especially no bio-degradable materials such as plastics, mine tailings and oil spills.
- Surveillance of pollution from ships.
- Improving land-use management and management of wastes, chemicals, and other pollutants on land that can impact marine environment.
- Contamination of the marine environment by such wastes/materials will affect PNG's fisheries resources both for commercial and subsistence operations.
- Non biodegradable materials affect marine species and may cause nuisance to seafarers as well as lower the aesthetic values of marine environments.

2. What measures generally have you initiated to implement this Convention and Protocols? We do not have a copy of the Convention and Protocols therefore do not know the details of the requirements. However, all measures taken on the protection of marine environment are done in accordance with the existing national environment legislation including Environment Contaminants Act 1978 (as amended in 1994), Environment Planning Act 1978 and Water Resources Act 1982. These and measures taken under the international/bilateral agreements such as the Basel Convention and the Torres Strait Treaty should complement the SPREP Convention.

3. Give details of new/amended legislation that covers marine pollution beyond internal waters including any definition of 'pollution' and the institution responsible.

No legislation at present but a draft Seabed Mining Policy is in place and is currently under the responsibility of the PNG Department of Mining. Also a marine Scientific Research Committee (a sub-committee under the Law of the Sea Convention) has been established as per National Executive Council (NEC) decision which looks at the activities of marine scientific research cruises.

4. What is the estimated volume/type of marine pollution per year in the Convention Area from the following sources, the number of permits/licenses issued and any other measures taken to prevent, reduce and control such pollution.

Difficult to answer as the convention area is not known.

No licenses/permits are issued and no records are kept on the volume/type of marine pollution

Vessels (Article 6)

Land based sources (Article 7)

A number of Executive Plan approvals and water use permits

Mining and coastal erosion (i.e.dredging, land reclamation) (Article 14)

One Mining (Ramu Nickel), One Petroleum (PNG Gas Pipeline)

Sea-bed and subsoil activities (Article 8)

Number of MSR cruisers, 1 Executive License (existing) for exploration on the PACMANUS basin.

Discharges into the atmosphere (Article 9)

Several

Dumping and disposal from vessels, aircraft, man-made structures of waste including Radio-active waste/matter (Article 10)

Check transport

The storage of toxic and hazardous wastes, including radio-active wastes/matter (Article 11)

Toxic and hazardous wastes handled in Environment Plan (EP) approval conditions for projects undergoing the EP process. For other operators, no permitting system in place yet for such substances but those for export is handled through the Base Convention.

Testing of nuclear devices (Article 12)

Not allowed

5. Have you prohibited the storage and disposal of radioactive wastes in the Convention area and the continental shelf beyond the Convention area? If so, what is the legislative provision and what is the penalty? (Article 10)

Yes, Papua New Guinea has prohibited the storage and disposal of radioactive waste in the Convention Area. The legislative requirement is that, "a person shall not discharge, emit or deposit any environmental contaminant into the environment except in accordance with a license held by him. The legal interpretation of Environmental Contaminants includes radio-active wastes. The penalty for the offence is a fine not exceeding K500.00 (PNG currency) for first offenders and a fine not exceeding K5,000.00 for second or subsequent offences with a default penalty of a fine not exceeding K2,000.00.

6. What technical guidelines do you have concerning EIA of development activities likely to impact on the marine environment? (Article 16) Guidelines on the preparation of Environmental Plans.

Guidelines on the preparation of Environment Inception Report (draft awaiting parliamentary approval of the Environment Bill)

7. How many assessments occurred, what were the measures adopted to prevent Pollution and what was the extent of public involvement? Several assessments were made and protection of marine environment included in the conditions of approval. The approval includes condition on the submission of a Waste Management Plan and an Environment Management and Monitoring Program (EMMP) by the project proponents.

8. Outline the co-operation/co-ordination with other Contracting Parties in implementing the Convention and Protocols (such as Agreements for protection/development/management of marine environment, information sharing, research, monitoring and technical assistance, protection against the threat and pollution incidents (Articles 4, 17 and 18)

None

9. How many pollution incidents have there been and what were the laws, regulations, institutions and operational procedures used in each? (Protocol on Pollution Emergencies)

Several pollution incidents have occurred in Papua New Guinea. The legislation relating to pollution incidents are the Merchant Shipping Act, Environmental Contaminants Act and Fisheries Act. The institution responsible are the Transport Department, Department of Environment and Conservation and Fisheries Authority. The Department of Transport to take the leading role with Environment and Conservation providing technical advice. Overseas clean up operation and take legal action where applicable.

10. What are the reporting requirements regarding 'pollution incidents' of:

- (a) government officials
- (b) Masters of your vessels flying your flag
- (c) Masters of all vessels and pilots of all aircraft in the vicinity of your coast. (Article 5)

To report the incidents to appropriate authorities but it is not a legislative requirement. Masters of ships are required to report the incidents to appropriate authorities. Pilots of aircraft are to report the incidents but not required. Any proponents of projects are also required by law to report such incidents to the Department of Environment and Conservation under the Environment Contaminants Act and Environment Planning Act.

Note:

It is important to note here that, Papua New Guinea is doing what it can to implement the requirements of these two Conventions. However, most of the articles in these two regional instruments are implemented under complementary mechanisms such as the Basel Convention on Transboundary Movement of Hazardous Wastes and Their Disposal, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and also domestic legislation.

Papua New Guinea also notes that, we need to mobilise and strengthen countries commitments in implementing the requirements of these regional instruments. It can be done in a where of organising regional meetings, awareness programmes and for countries to cooperate more in the implementing of these instruments.

National Report of Australia on the SPREP Convention

Article 6: Pollution from Vessels

The Parties shall take all appropriate measures to prevent, reduce and control pollution in the Convention Area caused by discharges from vessels, and to ensure the effective application in the Convention Area of the generally accepted international rules and standards established through the competent international organisation or general diplomatic conference relating to the control of pollution from vessels.

TBT: tributyltin

In response to growing concern domestically and internationally over the harmful effects of organotins used as anti-foulants on ship's hulls, Australia will ban the application of tributyltin (TBT) to vessels being repainted in Australian docks from 1 January 2006. This is a part of Australia's Oceans Policy (1998). The International Maritime Organization (IMO) may ban TBT before 1 January 2006, in which case Australia will follow suit (noting defence operational requirements). The Policy also commits Australia to supporting the IMO in promoting an international ban on TBT.

As part of the Policy, an Antifouling Program was initiated to deliver specific sectoral measures on environmental protection and safety, by assisting to implement the ban on TBT and to develop environmentally safe alternatives to TBT. The Program will specifically support research into suitable antifoul alternatives; and hullcleaning systems; monitor the environmental impact of TBT alternatives; and enhance community awareness about the proposed ban and the use of suitable antifouls.

Article 7: Pollution from Land-Based Sources

The Parties shall take all appropriate measures to prevent, reduce and control pollution in the Convention Area caused by coastal disposal or by discharges emanating from rivers, estuaries, coastal establishments, outfall structures, or any other sources in their territory.

Australia is an active supporter of the Global Programme of Action for the Protection of the Marine Environment from land-based Activities.

Similarly, Australia has enclosed the Regional Programme of Action for the South Pacific.

Australia has established several programs targeting pollution reduction and increased stormwater and wastewater recycling to reduce current discharges into the marine environment. These programs are funded by the Natural Heritage Trust and include the Clean Seas Program, *Living Cities*, Urban Stormwater Initiative and Cleaning Our Waterway Industry Partnership Program.

The funding is the major catalyst for consortia to construct infrastructure that is innovative and exemplifies best practice in managing the quality of wastewater and stormwater. Turning a problem into a resource through capture, treatment and re-use of wastewater and urban run off, industry source control, community education and water sensitive urban design are key components of the programs.

With the recognition that traditional end-of point discharge clean ups are not very effective, these programs integrate on-site water conservation with pollution prevention through natural resource management and water recycling.

Article 8: Pollution from Sea-Bed Activities

The Parties shall take all appropriate measures to prevent, reduce and control pollution in the Convention Area resulting directly or indirectly from exploration and exploitation of the seabed and its subsoil.

The International Seabed Authority (ISA), an institution created under the United Nations Convention on the Law of the Sea (UNCLOS), finalised a Deep Sea Mining Code (the Code) on 13 July 2000. The scope and function of the ISA are set out within Part XI and Annex III of UNCLOS, as well as within the Agreement relating to the Implementation of Part XI of the UNCLOS. The Code provides Regulations for the prospecting and exploration of polymetallic nodules on the seabed and ocean floor beyond the limits of national jurisdiction. The ISA comprises 133 member States. Australia and Fiji have seats on the ISA's thirty-six

member Council. Papua New Guinea will take up a Council seat in 2001.

The Code sets out the legal conditions under which States, organizations, private consortia and corporations may obtain exclusive rights to investigate specified seabed areas. According to the UNCLOS, all such activity must be conducted under contract or licence with the ISA, which regulates applicants through a system of contracts, reporting and inspections. A principal aim of this system is to ensure the protection of the marine environment, both in the areas under contract and in other waters that may be affected, including those of nearby coastal States.

Part V of the Code (Regulations 31-34) details provisions for protection and preservation of the marine environment. These Regulations are also reflected in the requirements of sections 5-7 in Annex 4 of the Code, Standard Clauses for an Exploration Contract.

Article 9: Atmospheric Pollution

The Parties shall take all appropriate measures to prevent, reduce and control pollution in the Convention Area resulting from discharges into the atmosphere from activities under their jurisdiction.

The Commonwealth Government considers that control of air pollution is a critical Environmental issue, and that improved air quality is an important factor influencing the health of Australia's population and the sustainability of our lifestyles for future generations.

The Government is implementing an integrated urban air quality program which is designed to address air pollution in a comprehensive way. The program is structured around the delivery of the following key strategies:

- development of national standards relating to air quality;
- implementation of practical national strategies to assist States and Territories to meet these standards;
- improved monitoring to better target management actions;
- air quality research to improve the basis for policy and decision making; and
- community education, on air quality issues.

Some of the key action areas and specific initiatives of the program are detailed below.

Ambient Air Quality Standards

The National Environment Protection Measure for Ambient Air Quality was gazetted in 1998, and establishes world standard criteria for air quality adapted for Australian conditions. The Measure requires uniformly consistent national monitoring and reporting of air quality indicators.

Significant progress has been made towards the development of monitoring protocols to measure air quality against the new standards. Formal reporting by participating jurisdictions against the nationally consistent monitoring protocols will commence in 2001.

Transport Emissions

Australia has concentrated on improving the environmental performance of the transport sector as it is the most significant contributor to urban air pollution.

Three complementary strategies are being pursued: the progressive tightening of vehicle emission standards, the establishment of inspection and maintenance programs, and the regulation of fuel quality. Initiatives to advance these strategies were announced as part of A New Tax System - Measures for a Better Environment.

In 1997 the government set a goal of harmonising Australia with international vehicle emission standards by 2006. Measures for a Better Environment set the timetable for harmonisation and new vehicle design rules were gazetted in December 1999. The initiatives also provided for the development of a National Environment Protection Measure to manage diesel emissions and for the establishment of in-service diesel vehicle emission testing facilities.

Environment Australia's review of fuel requirements for Australian transport was released in March 2000. This review, together with intensive stakeholder consultation, has been used to develop proposals for national fuel quality standards for diesel and petrol. As a result, the Minister announced in March 2000 that leaded petrol would be banned in Australia from January 2002.

Further standards will be gazetted in 2001 to ensure that fuel of the appropriate quality is available for the high technology emission controls - including new generation catalytic systems, particle traps and fuel injection - needed to meet the new vehicle emission standards. Modelling predicts significant reductions (in excess of 20 per cent) in transport-generated pollution emissions over the next 10 years from the package of vehicle emission and clean fuel standards.

Diesel NEPM Work has also progressed on the development of a National Environment Protection Measure for Diesel Emissions. Preparatory projects have been completed that will provide comprehensive baseline information on diesel fleet characteristics and on diesel vehicle emissions performance. A short test with potential for use for in-service vehicle emission testing has been successfully identified, along with a method to assess in service particulate emissions. Under the *Measures for a Better Environment*, the Government will provide A\$40 million over four years (from 2000-01 to 2003-4) to implement diesel vehicle emissions testing facilities, as a means of the implementing the Measure.

Particulate emissions Airborne particles are one of the six priority urban pollutants addressed by the *Ambient Air National Environment Protection Measure* (Air NEPM). On this basis, the Commonwealth has supported a number of projects aimed at understanding and managing particles - focusing on three areas:

- *Understanding/knowledge generation - investigations* that improve our understanding of particles, particularly in terms of their composition, origin, distribution and health effects.
- *Source management - developing* and implementing measures to reduce particle emissions from key sources.
- *Monitoring - understanding* issues and developing monitoring techniques to ensure a nationally consistent approach to measuring and reporting particles, and to guide the implementation and assessment of source control measures.

To guide the Commonwealth's future work on fine particles, Environment Australia is convening a forum of environment and health professionals in October 2000. The forum will comprise presentations on the current status of key issues and

more importantly, will canvass ideas for future directions. The aim is to identify the knowledge gaps associated with development, implementation and monitoring of national particle standards and the best means of addressing those gaps. The forum will provide valuable information for the National Environment Protection Council review of the particles standard, commencing in 2001.

Article 10: Disposal of Wastes

1. *The Parties shall take all appropriate measures to prevent, reduce and control pollution in the Convention Area caused by dumping from vessels, aircraft, or manmade structures at sea, including the effective application of the relevant internationally recognised rules and procedures relating to the control of dumping of wastes and other matter. The Parties agree to prohibit the dumping of radioactive wastes or other radioactive matter in the Convention Area. Without prejudice to whether or not disposal into the seabed and subsoil of wastes or other matter is "dumping", the Parties agree to prohibit the disposal into the seabed and subsoil of the Convention Area of radioactive wastes or other radioactive matter.*

2. *This article shall also apply to the continental shelf of a Party where it extends, in accordance with international law, outward beyond the Convention Area.*

The Protocol to the London Convention

The 1996 Protocol (the Protocol) to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (the London Convention) was adopted by an International Maritime Organisation's Special Meeting of Contracting Parties to the London Convention, 28 October - 8 November 1996.

The Protocol is more rigorous than the London Convention. It incorporates the precautionary approach, promotes polluter pays, and allows only seven prescribed substances to be dumped at sea. It prohibits incineration of waste at sea, the export of wastes or other matter to other countries for dumping or incineration at sea. Contracting Parties are obliged to take effective measures according to their scientific, technical and economic capabilities and to undertake waste prevention audits and to formulate alternative waste strategies. An Action List for the screening of candidate waste must also be developed.

Following the signing of the Protocol in 1998, Australia has amended its domestic legislation (*Environment Protection (Sea Dumping) Act 1981* (the Sea Dumping Act)) to implement the Protocol, and aims to ratify the Protocol by the end of 2000.

Adoption of the Protocol will help Australia achieve the aims of its Oceans Policy, comply with its international obligations under the 1994 Law of the Sea Convention (LOSC) and implement Agenda 21.

Background

The London Convention, which has 77 Contracting Parties, provides an international framework for the effective control of waste dumping at sea. The Protocol aims to prevent, reduce and where practicable eliminate pollution caused by dumping or incineration at sea of waste or other matter. The Protocol will supersede the London Convention.

The Protocol takes into account recent international developments relating to protection of the sea, including the coming into force of the United Nations Convention on the Law of the Sea (UNCLOS) in 1994, and Agenda 21, the blueprint for ecologically sustainable development adopted by the United Nations Conference on Environment and Development at Rio in 1992. Recent thinking on the protection of the marine environment includes matters such as waste reduction, waste management and sustainability issues.

The LOSC gave Australia sovereign rights over its Exclusive Economic Zone and continental shelf resources. These rights are balanced by an obligation to protect, and implement sustainable management of the ocean on the basis of the best available scientific information.

Furthermore, a broad package of measures for implementation under Australia's Oceans Policy, announced in December 1998, aims to ensure the integrity of Australia's ocean ecosystems and the protection of marine biological diversity, and to provide a resource base for internationally competitive and ecological sustainable ocean uses. Ratification of the Protocol is one of the measures that Australia intends to utilise to prevent the adverse impacts of pollution on the marine environment.

In preparing to ratify the Protocol, Australia's main regulatory objective has been to update its sea dumping practices. Having amended domestic legislation, the Sea Dumping Act, Australia is poised to ratify the Protocol.

The key elements of the Protocol are to:

- limit the types of materials that may be considered for dumping into the sea - only seven materials may be considered for dumping into the sea. If a material is not listed in Annex 1 to the Protocol, it may not be dumped into the sea - except in an emergency situation.
- seek to reduce the amount of material dumped at sea by requiring the applicant to provide a comprehensive alternative waste management strategy. The options for waste management imply an order of increasing environmental impact, and include re-use, off-site recycling, destruction or treatment of hazardous constituents, and finally disposal on land, into air and in water.
- reduce uncertainty about what may be considered for dumping into the sea by specifying seven permissible materials (as compared to the Convention, which specifies an exclusions list and therefore, by default, creates a long list of possible).
- adopt an effects-based Action List which reduces the levels of contaminants in dumped material. The Action List, which specifies screening and maximum levels of contaminants in any materials for dumping at sea, forms an integral part of assessing wastes. Australia's Action List uses the best available toxicological data from overseas, with the option of using local background levels of contaminants where these are known.
- ban incineration of wastes at sea, and the export of wastes to other countries for dumping into the sea or incineration at sea.
- ensure a thorough waste assessment, the requirements for which are set out in Annex 2 to the Protocol, before wastes can be dumped at sea.
- incorporate the polluter pays principle, based on the characteristics and quantity of waste proposed for sea dumping.
- include a precautionary approach. In implementing the Protocol, Contracting Parties must take appropriate preventative measures where there is reason to believe that wastes introduced into the marine environment are likely to cause harm even when there is no conclusive evidence

to prove a causal relation between inputs and their effects.

- prohibit the dumping into the sea of any radioactive material.
- reduce the necessity for dumping and to reduce contamination levels in material to be dumped. Under the Protocol, Contracting Parties are obliged to carry out a waste prevention audit, consider waste management options, formulate an impact hypothesis in which the potential effects are assessed, and (if required) carry out a monitoring program to determine whether changes in the receiving environment are within those predicted by the Impact Hypothesis. For example, for dredged material, the goal of a waste prevention audit under the Protocol is to identify and control the sources of contamination.

Article 11: Storage of Toxic and Hazardous Wastes

The Parties shall take all appropriate measures to prevent, reduce and control pollution in the Convention Area resulting from the storage of toxic and hazardous wastes. In particular, the Parties shall prohibit the storage of radioactive wastes or other radioactive matter in the Convention Area.

Responsibilities for meeting the aims of the above Article are largely met through State and Territory regulations (but see below). The Commonwealth has no reason to believe that State and Territory regulations are not meeting the aims of the Article 11 in relation to the storage of toxic and hazardous wastes (i.e. all appropriate measures are being taken to prevent, reduce and control pollution in the Convention Area). We can comment on one aspect which is transport of hazardous waste. Australia controls the movement of hazardous waste (which includes toxic waste) by the NEPM on the Movement of Controlled Waste Between States and Territories. This NEPM is implemented through an Implementation Working Group, with the Commonwealth as an observer. The national environment protection goal of this Measure is to assist in achieving the desired environmental outcomes set out in clause 12 by providing a basis for ensuring that controlled wastes which are to be moved between States and Territories are properly identified, transported, and otherwise handled in ways which are consistent with environmentally sound practices for the management of these wastes. The desired

environmental outcomes of this Measure are to minimise the potential for adverse impacts associated with the movement of controlled waste on the environment and human health.

Further, the *Hazard Waste (Regulation of Exports and Imports) Act 1989* is currently being modified, with the majority of the proposed amendments aimed at tightening existing provisions in the Act relating to compliance procedures. The amendments also include some which are essentially administrative in nature (e.g. to improve procedures for the return of illegally exported waste; exclude from the Act's scope radioactive and marine wastes, which are covered by international control systems or instruments other than the Basel Convention; update the definition of "hazardous wastes", to reflect recent clarifying changes made by the Basel Convention to its lists of wastes) with one relevant amendment being to allow for easier referencing to the commencement date of an Article 11 arrangement which is implemented by a Regulation, as in the case of the Waigani Convention.

Report on Scheduled Waste Management in Australia. The *National Strategy for the Management of Scheduled Waste*, endorsed in 1993 by the Australian and New Zealand Environment and Conservation Council (ANZECC), requires that scheduled waste management plans:

- are based on a risk assessment of environmental and human health effects, and the social and economic impacts;
- specify threshold concentrations, threshold quantities and noticeable quantities of chemicals;
- indicate dates for cessation of the generation of scheduled waste, for cessation of the use of articles containing scheduled waste, and for the disposal of scheduled waste; and
- take into consideration the principles defined in the Intergovernmental Agreement on the Environment (IGAE).

National waste management plans for organochlorine pesticides (OCP), polychlorinated biphenyls (PCB) and hexachlorobenzene (HCB) have been endorsed by ANZECC.

The *Organochlorine Pesticides Waste Management Plan*, released in 1999, offers information regarding specific threshold concentrations, threshold

quantities and notifiable quantities of pesticides. The plan indicates the date of 2003 for the complete implementation of the plan, which includes the objective for cessation of the generation, and use of articles containing, scheduled waste, and for the disposal of scheduled waste. A significant initiative under the organochlorine pesticide management plan is a national programme aimed at removing unwanted and de-registered agricultural and veterinary chemicals, particularly organochlorine pesticides (OCPs), from rural areas and destroyed in a socially and environmentally acceptable manner. Known as ChemCollect, it started in 2000 and will run for three years with the aim of collecting an estimated 1300 tonnes of OCP chemicals held in rural Australia. The Commonwealth and State governments are contributing a maximum of A\$27m dollars towards the program. One of the conditions for funding this program was that industry takes a greater responsibility for the management of unwanted chemicals. To ensure that stocks do not build up again, the agriculture industry has agreed to institute ChemClear - an ongoing program for regular collections of registered farm chemicals which are otherwise non-returnable. ChemClear will begin after ChemCollect has finished in each State. ChemClear is a joint initiative involving Avcare (the National Association for Crop Protection and Animal Health), the Veterinary Manufacturers and Distributors Association (VMDA) and the National Farmers' Federation (NFF).

The *Polychlorinated Biphenyls Waste Management Plan*, released in 1996, sets out the requirements for the removal from service of all equipment containing PCB by the 2009, with some exceptions, and for the appropriate destruction of PCBs. The Commonwealth and States are giving effect to the plan through the enactment of, or are in the process of enacting, legislation. The plan requires each jurisdiction to maintain a register of PCB holdings and the amount destroyed.

The *Hexachlorobenzene Waste Management Plan*, released in 1996, covers scheduled hexachlorobenzene (HCB) wastes generated by activities performed at the Orica (formerly ICI Australia) Botany site in Sydney, New South Wales. The management of these wastes includes the destruction of the wastes by technologies that achieve performance criteria as good as or better than those

listed in the HCB Waste Management Plan. The *Community Participation and Review Committee* (CPRC) was established in accordance with the requirements of the plan to provide a means of direct contact between Orica and the local community.

Domestic destruction treatment facilities capable of treating PCB and OCP wastes are currently in operation in Queensland, Victoria and Western Australia. Trials are currently being held on a treatment technology for destruction of HCB waste.

Storage of radioactive wastes is handled by the Department of Industry, Science and Resources at the Commonwealth level.

Article 12 Testing of Nuclear Devices

The Parties shall take all appropriate measures to prevent, reduce and control pollution in the Convention Area which might result from the testing of nuclear devices.

Australia does not test any nuclear devices.

Article 13 Mining and Coastal Erosion

The Parties shall take all appropriate measures to prevent, reduce and control environmental damage in the Convention Area, in particular coastal erosion caused by coastal engineering, mining activities, sand removal, land reclamation and dredging.

Management of Australia's coastal areas is a responsibility of both the States and the Commonwealth. The Commonwealth has in place a range of programs and policies designed to minimise the environmental impact of, amongst other things, land based sources of marine pollution. Examples include:

- The Clean Seas Program, which aims to protect coastal, marine and estuarine water quality by reducing pollution from the impact of coastal urban wastewater and from other sources such as maritime and industrial activities;
- The Urban Stormwater Initiative, which will encourage integrated catchment management approaches to stormwater based on capital works that incorporate source control measures and, where possible, apply the principles of urban water sensitive design;
- The Industry Partnership Program, which will provide more than \$1.5 million to collaborate

with industry to undertake on-ground works that improve urban coastal waterways' quality, amenity and health by reducing pollution from industrial sources; and

- The Coastal Acid Sulfate Soils Program purpose is to support the demonstration of on-ground techniques for managing land prone to acid sulfate soil problems which can, under certain circumstances, discharge acid to estuaries and near coastal marine environments.

In addition to these initiatives, the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) entered into force from 16 July 2000. The EPBC Act replaces five Commonwealth statutes: *Environment Protection (Impact of Proposals) Act 1974*; *Endangered Species Protection Act 1992*; *National Parks and Wildlife Conservation Act 1975*; *World Heritage Properties Conservation Act 1983*; and *Whale Protection Act 1980*.

Under the Act, actions that are likely to have a significant impact on matters of national environmental significance (NES) are subject to a rigorous assessment and approval process. The matters that are triggers for this approval process, each of them relevant to marine areas, are world heritage properties, Ramsar wetlands, Nationally threatened species and ecological communities, migratory species, Commonwealth marine areas and nuclear actions. An action includes a project, development, undertaking, activity, or series of activities.

The EPBC Act will require, for the first time, that all actions which are likely to have a significant impact on the environment in Commonwealth waters are subject to environmental impact assessment and approval.

The EPBC Act will also improve the protection and management of Commonwealth marine national parks and reserves through:

- the statutory application of the IUCN Protected Area Management Guidelines;
- making management plans legally binding on all Commonwealth agencies; and
- expanding controls on activities in Commonwealth reserves.

Article 14 Specially Protected areas and Protection of Wild Flora and Fauna

The Parties shall, individually or jointly, take all appropriate measures to protect and preserve rare or fragile ecosystems and depleted, threatened or endangered flora and fauna as well as their habitat in the Convention Area. To this end, the Parties shall, as appropriate, establish protected areas, such as parks and reserves, and prohibit or regulate any activity likely to have adverse effects on the species, ecosystems or biological processes that such areas are designed to protect. The establishment of such areas shall not affect the rights of other Parties or third States under international law. In addition, the Parties shall exchange information concerning the administration and management of such areas.

Australia's governments are working together to establish a national system of marine protected areas (MPAs) throughout the country's marine zone.

The National Representative System of Marine Protected Areas aims to protect areas that represent all of Australia's major ecological regions and the communities of plants and animals they contain. The Australian Commonwealth Government is committed under Australia's Oceans Policy to accelerate the development of these marine protected areas.

The Australian Commonwealth Government manages 13 MPAs around Australia in waters from the tropical north to the temperate south. These vary in size and characteristics. For example, the Great Australian Bight Marine Park protects a diverse temperate marine area of 19,769 square kilometres while Mermaid Reef Marine National Nature Reserve, off north-west Western Australia, protects a remote, pristine, tropical reef of 54 square kilometres. The Great Barrier Reef Marine Park will continue to be managed under the Great Barrier Reef Marine Park Act 1975. MPAs managed by the Australian Commonwealth Government of particular interest to SPREP member States include: Coringa-Herald National Nature Reserve; Lihou Reef National Nature Reserve; Elizabeth and Middleton Reefs Marine National Nature Reserve; Great Barrier Reef Marine Park; Macquarie Island Marine Park; Solitary Islands Marine Reserve; Tasmanian Seamounts Marine Reserve; and Lord Howe Island Marine Park.

The Environment Protection and Biodiversity Conservation (EPBC) Act 1999 provides the legal underpinning to the establishment and management of the Australian Commonwealth Government's MPAs. In summary, the EPBC Act provides that:

- A Commonwealth reserve can be proclaimed over areas of land or sea owned or leased by the Commonwealth, or in a Commonwealth marine area.
- Establishes Australian WCN management principles, which identify the purposes of, and guide management planning for, Commonwealth reserves.
- A Commonwealth reserve must be assigned to an IUCN category appropriate to its characteristics. The IUCN categories range from strict nature reserves and wilderness areas, which exclude almost all activities, to protected areas, which allow for the sustainable use of natural ecosystems.
- The Director of National Parks must prepare management plans for Commonwealth reserves, which must be consistent with the Australian IUCN reserve management principles for the IUCN category assigned to a reserve.

"The public will be consulted as part of the planning process and management plans may be disallowed by either House of the Commonwealth Parliament. The Act controls activities in Commonwealth reserves. A Conservation Zone can be proclaimed over a Commonwealth area to protect biodiversity, other natural features, and heritage in the area while it is being assessed for inclusion in a Commonwealth reserve."

Article 15 Cooperation in Combating Pollution in Cases of Emergency

1. *The Parties shall co-operate in taking all necessary measures to deal with pollution emergencies in the Convention Area, whatever the cause of such emergencies, and to prevent, reduce and control pollution or the threat of pollution resulting therefrom. To this end, the Parties shall develop and promote individual contingency plans and joint contingency plans for responding to incidents involving pollution or the threat thereof in the Convention Area.*

2. *When a Party becomes aware of a case in which the Convention Area is in imminent danger of being polluted or has been polluted, it shall immediately notify other countries and territories it deems likely to be affected by such pollution, as well as the Organisation. Furthermore it shall inform as soon as feasi-*

ble, such other countries and territories and the Organisation of any measures it has itself taken to reduce or control pollution or the threat thereof.

Australia has a National Plan to combat pollution of the sea by oil. Its purpose is to maintain a national integrated Government/industry organisational framework capable of effective response to oil pollution incidents in the marine environment and to manage associated funding, equipment and training programs to support National Plan activities.

The plan provides spraying equipment, oil spill dispersants, control and recovery devices and ship-to-ship transfer equipment at various locations around Australia. A comprehensive training program covering oil spill planning and response is conducted by the Australia Maritime Safety Authority (AMSA) for the benefit of Commonwealth, State and industry personnel.

Funding for the Plan is based on the 'polluter pays' principle and to achieve this a levy is placed upon commercial shipping using Australia ports.

Article 16 Environmental Impact Assessment

1. *The parties agree to develop and maintain, with the assistance of competent, global, regional and sub-regional organisations as requested, technical guidelines and legislation giving adequate emphasis to environmental and social factors to facilitate balanced development of their natural resources and planning of their major projects which might affect the marine environment in such a way as to prevent or minimise harmful impacts on the Convention Area.*

2. *Each Party shall, within its capabilities, assess the potential effects of such projects on the marine environment, so that appropriate measures can be taken to prevent any substantial pollution of, or significant and harmful changes within, the Convention Area.*

3. *With respect to the assessment referred to in paragraph 2, each Party shall, where appropriate, invite:*

- (a) *public comment according to its national procedures;*
- (b) *other Parties that may be affected to consult with it and submit comments.*

The results of these assessments shall be communicated to the Organisation, which shall make them available to interested Parties.

The Commonwealth Government has administered Commonwealth legislation governing environmental impact assessment since the introduction of the *Environment Protection (Impact of Proposals) Act* in 1973. The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) entered into force from 16 July 2000. The EPBC Act constitutes fundamental reform of the Commonwealth's environment laws, and replaces five previous Commonwealth environmental statutes.

The Act enables the Commonwealth to join with the States and Territories to provide a national scheme of environment protection and biodiversity conservation both on land and in marine areas. Under the Act, actions that are likely to have a significant impact on matters of national environmental significance (NES) are triggers for rigorous assessment and approval processes (an action includes a project, development, undertaking, activity, or series of activities and Commonwealth marine areas are considered matters of NES).

The Act requires the Commonwealth Environment Department to publish notice of referrals received under the legislation on the internet, and includes public comment periods in which members of the public and other interested stakeholders may provide comment on both referral notices and assessments (where these have been directed). The EPBC Act outlines statutory timeframes for these public comment periods.

In addition to the environmental impact assessment and approval processes contained within the EPBC Act, the Act provides an integrated approach to the conservation of biodiversity. The Act includes requirements to list nationally threatened marine species, undertake preparation of national recovery plans and wildlife conservation plans for listed species, and identification of key threatening processes and the preparation of threat abatement plans for such processes. The Act also establishes a regime for management of protected areas.

In terms of allowing for public comment, the EPBC Act provides that the Commonwealth must publish lists of threatened species, and must undertake a public comment period before adopting plans for these species and threatening processes. Again, the EPBC Act provides for a statutory timeframe in which the public may submit their comments.

Finally, the EPBC Act provides for the establishment of the Australian Whale Sanctuary in waters of Australia's coastal and exclusive economic zones. The Sanctuary formally recognises the high level of protection and management afforded to cetaceans in Commonwealth marine areas and prescribed waters.

Article 17: Scientific and Technical Cooperation

1. *The Parties shall co-operate, either directly or with the assistance of competent global, regional and sub-regional organisations, in scientific research, environmental monitoring, and the exchange of data and other scientific and technical information related to the purposes of the Convention.*

2. *In addition, the Parties shall, for the purposes of this Convention, develop and co-ordinate research and monitoring programmes relating to the Convention Area and co-operate, as far as practicable, in the establishment and implementation of regional, sub-regional and international research programmes.*

Article 18: Technical and other Assistance

The Parties undertake to co-operate, directly and when appropriate through the competent global, regional and sub-regional organisations, in the provision to other Parties of technical and other assistance in fields relating to pollution and sound environmental management of the Convention Area, taking into account the special needs of the island developing countries and territories.

Support for the environment is a key element of Australia's development co-operation with Pacific Island Countries (PICs). Assistance is provided both regionally and bilaterally. Through its regional program, Australia contributes funding to

a number of regional agencies such as SPREP, SPC and FFA, as well as funding specific initiatives relating to sea level and climate monitoring, pest

management, protection of forest genetic resources, elimination of persistent organic pollutants and renewable energy, as well as initiatives aimed at ensuring the sustainable exploitation of the region's fisheries resources. A large number of projects are undertaken bilaterally in support of sustainable environmental management.

Over 100 representatives of some 30 Countries from around the Asia-Pacific region and beyond, including international, regional and non-government organisations and the private sector, partici-

pated in a five-day workshop "The Prevention of Marine Pollution in the Asia-Pacific Region" in Townsville, Australia in May 2000. This Workshop was a follow-up from the Workshop "Working together on Preventing Ship-Based Pollution in the Asia Pacific Region" held in Townsville in April 1998.

Contacts: Further details on the operations of the International Seabed Authority (ISA) are available at the organisation's website at: <http://www.isa.org.jm/en/default.htm>

National Report of Australia on the Apia Convention

Natural Heritage Trust

In 1997 the Natural Heritage Trust was introduced by the Commonwealth Government as its major initiative for environmental management. The Trust aims to accelerate activities in the national interest directed towards achieving the conservation, sustainable use and repair of Australia's natural environment.

The objectives of the Natural Heritage Trust are to:

- provide a framework for strategic capital investment which will be used to stimulate additional investment in the natural environment;
 - achieve complementary environmental protection, including biodiversity
 - conservation, sustainable agriculture and natural resource management outcomes consistent with agreed national strategies; and
 - provide a framework for co-operative partnerships between communities, industry and all levels of government.
- Most of the Natural Heritage Trust funds are directed to five interdependent capital programs:
- Bushcare: the National Vegetation Initiative, which aims to reverse the long-term decline in the extent and quality of Australia's native vegetation cover;
 - Murray-Darling 2001, initiated to rehabilitate the Murray-Darling Basin;
 - the National Reserve System Program, designed to implement a comprehensive reserve system to protect Australia's biodiversity;
 - the National Land and Water Resources Audit, which will provide the first ever national appraisal of the extent of land and water degradation in Australia, and its environmental and economic costs to the nation;
 - the Coasts and Clean Seas Initiative, which tackles the environmental problems facing our coasts and oceans.

Other programs relevant to nature conservation include the:

- Endangered Species Program;
- Farm Forestry Program;

- National Feral Animal Control Strategy;
- National Landcare Program;
- National Rivercare Initiative;
- National Weeds Strategy;
- National Wetlands Program; and
- World Heritage Area management and upkeep.

Protected Areas: A National representative System of Terrestrial Protected Areas (the National Reserve System Program)

The Environment Australia - National Reserve System Program is a major part of the Natural Heritage Trust, and will spend A\$85m dollars over the life of the program to enhance the National Reserve System. The national objectives of the program, to be achieved through working with all levels of government, industry and the community are:

- to establish and manage new ecologically significant protected areas for addition to Australia's terrestrial National Reserve System;
- to provide incentives for indigenous people to participate in the National Reserve System through voluntary declaration of protected areas on their lands, and to support greater involvement of indigenous people in the management of existing statutory protected areas;
- to provide incentives for landholders (both private landholders and leaseholders) to enhance the National Reserve System strategically; and
- to develop and implement best practice standards for the management of the National Reserve System.

The Program encourages cooperation between the State and Territory governments, the community, industry and the Commonwealth to work together to establish a system of core reserves (National Parks and reserves), complemented by protected areas on private and leasehold lands, including lands owned by indigenous Australians, to maintain a comprehensive, adequate and representative system of protected areas across the continent.

Our priority is to establish new protected areas in:

- regions with no reserves or only a small proportion of their total area protected by reserves;
- regions with major bias in the type of ecosystems represented in their protected areas; or
- regions with threats to the survival of their biodiversity from such threatening processes as: urban, agricultural, pastoral and mining expansion; clearing, feral pests and weeds.

An Interim Biogeographic Regionalisation for Australia (IBRA)

A major tool of the National Reserve System is the division of the Australian continent into regions based on natural boundaries, rather than State or Territory borders. The 80 biogeographic regions are defined by the major ecosystems present in each region and reflect patterns in geology, landform, soils, vegetation, fauna and climate. The report is called An Interim Biogeographic Regionalisation for Australia (IBRA). The IBRA is a cooperative approach by all nature conservation agencies to define the ecological patterns of the Australian continent. It has been used to indicate gaps in the system of reserves that have been established.

National guidelines for establishing the National Reserve System

The National Reserve System Program has developed national guidelines, in cooperation with representatives from the State and Territories, for the establishment of a national reserve system. Scientific methods, combined with information on human activities (threatening processes) are used to decide which areas are priorities for adding to the national system. The guidelines include criteria for identifying and selecting terrestrial protected areas.

State and Territory Government involvement

The most common ways to expand the National Reserves System are to purchase private land or acquire public land from other government departments, and declare these areas as national parks or nature reserves under State or Territory law.

Community involvement

Community groups can seek funds to identify and purchase land for addition to the National Reserves

System, or to establish conservation agreements on land they already own. To get Commonwealth government assistance, any area nominated needs to have conservation values that fill a gap in the National Reserves System, and groups must show they have the ability to manage the reserve into the future.

Protection on private land

Companies and individual property owners willing to protect their property with a nature conservation covenant, or enter into long term agreements to manage all or part of their property for biodiversity conservation. Where a property fills a gap in the representation of ecosystems in the National Reserves System, financial assistance may be considered under the National Reserves System Program to establish a protected area. Management agreements are negotiated between the landholders and the relevant State or Territory nature conservation agency and/or the Commonwealth.

Protection on Aboriginal land

Twenty six active projects were approved in 1999-2000. Eight new Indigenous Protected Areas have been declared as a result in the past two years resulting in an addition of in excess of three million hectares of Indigenous owned lands to the National Reserve System. Each of the Indigenous Protected Areas have environmental management plans developed prior to their declaration and each has assigned WCN protected areas categories to their properties. Through the IPA Program improved environmental and heritage management has resulted in Indigenous owned lands involved with the program. Ten co-operative and joint management arrangements between Indigenous groups and State and Territory government agencies are currently being negotiated through the Indigenous Protected Areas Program.

Funding

Each year proposals are sought and considered for Natural Heritage Trust funding under the National Reserve System Program. At 30 June 2000 a total of over 3.576 million hectares has been added to the National Reserve System with the assistance of the NRSP.

Indigenous Use: The National Strategy for the Conservation of Australia's Biological Diversity

This strategy recognises the interests, knowledge and practices of Aboriginal and Torres Strait Islander peoples in the conservation of indigenous species and environments. In particular, the Strategy notes the importance of traditional knowledge and practices for wildlife and protected area management; species recovery plans for endangered and vulnerable species of particular significance to Aboriginal and Torres Strait Islander communities; co-operative management arrangements that recognise traditional land tenure and land management regimes; the harvesting of indigenous plant and animal species, both on and in water, to the well being, identity, cultural heritage of Aboriginal and Torres Strait Islander peoples.

Indigenous Land Management Facilitators

An Indigenous Land Management Facilitator network has been established to encourage Aboriginal and Torres Strait Islander communities to participate in Natural Heritage Trust projects on land under their care, including the 16 per cent of land in Australia currently under Indigenous ownership. The network of 12 Indigenous Land Management Facilitators has been set up to act as a practical two way link between Indigenous land managers and other individuals and organisations involved in promoting sustainable land management and nature conservation.

Threatened and Migratory Species and Ecological Communities

The Environment Protection and Biodiversity Act 1999 came into force on 16 July 2000. It provides for the protection of nationally threatened species, migratory species and ecological communities. A person must not take an action that has, will have or is likely to have a significant impact on a listed threatened or migratory species or a listed ecological community. Such actions require referral to, and approval from, the Commonwealth Government. There are currently over 1400 threatened species, over 200 migratory species and 23 ecological communities listed under the Environment Protection and Biodiversity Conservation Act 1999. There are six Key Threatening Processes listed under the Act. They are: the Incidental Catch (or By-catch) of Seabirds During Oceanic Longline Fishing Operations, the predation by the European

Red Fox, predation by Feral Cats, competition and land degradation by Feral Rabbits, competition and land degradation by Feral Goats; and Dieback caused by the root-rot fungus *Phytophthora cinnamomi*. The Act establishes the Commonwealth Threatened Species Scientific Committee and requires the development of recovery plans for all listed threatened species. The Commonwealth Government also continues to support the Endangered Species and National Feral Animal Control Programs and the implementation of a National Weeds Strategy. The goal of the Endangered Species Program is to protect and conserve Australia's threatened species and ecological communities to that they can survive, flourish and retain their potential for evolutionary development in the wild. The program addresses the issue of species decline and threatened ecological communities by:

- Assessing conservation status and priorities by preparing strategic action plans and conservation overviews;
- Recovering threatened species and ecological communities by implementing recovery plans and providing advice on environmental impact assessments;
- Abating key threatening processes by implementing threat abatement plans; and
- Generating community awareness and involvement.

National action plans or conservation overviews have been completed for birds, bats, seals, cetaceans, frogs, rodents, reptiles, freshwater fishes, dugong, monotremes and marsupials, non-marine invertebrates and non-marine lichens, bryophytes, algae and fungi. Action plans or conservation overviews are in preparation for butterflies, marine fish, marine macro and micro algae, and marine invertebrates. Recovery plans outline the actions needed for an endangered or vulnerable species to recover so that its long-term survival in nature can be ensured. They identify the costs, responsibilities, time frames, goals and criteria for assessing success. Twenty-nine recovery plans are currently adopted under the Environment Protection and Biodiversity Conservation Act 1999. The Endangered Species Program continues to sponsor the development of recovery plans for nationally listed threatened species and ecological communities.

Threat Abatement Plans have been completed for five of the six key threatening processes listed under the Environment Protection and Biodiversity Conservation Act 1999. A Threat Abatement plan for Dieback caused by the root-rot fungus *Phytophthora cinnamomi* has been released for public comment.

The Threat Abatement Plans for the four vertebrate pests set out to:

- Implement a control program in specific areas of high conservation priority;
- Encourage the development and use of innovative and humane control methods for the species management;
- Educate land managers and relevant organisations to improve their knowledge of the species impact and ensure skilled and effective participation in control activities; and
- Collect and disseminate information to improve our understanding of the ecology of the feral species in Australia, their impacts and methods to control them.

Each plan is required to be reviewed within five years. The five-year life of each Plan is seen as consolidating and coordinating the long-term process of managing the impact of each species, with the main priority during this period being to provide support to on-ground control programs necessary to ensure recovery of endangered species. Under the Australian Natural Heritage Trust, the National Feral Animal Control Program has provided funding to implement the objectives and related actions that are outlined in each Threat Abatement Plan. A number of projects, funded from the Program endeavour to increase our knowledge of impacts and how best to manage them. In addition, a number of projects have also dealt with increasing the availability of tools to deal with the problems being faced. Many of these projects have provided good opportunity for collaboration between the Commonwealth, State and Territory Governments and also with New Zealand, and there may be scope to have further collaborative work in the future.

The National Weeds Program is an initiative under the Natural Heritage Trust aimed at reducing the detrimental impact of nationally significant weeds on the sustainability of Australia's natural

ecosystems and productive capacity. Weeds are among the most serious threats to conserving Australia's biodiversity. Weeds impact on Australia's natural ecosystems in many ways and in particular, are known to threaten endangered species and contribute overall to the continuing degradation of Australia's natural resources. The objectives of the Program are, through working with all levels of government, industry and the community to:

- Develop integrated strategic approaches to reduce the impact of weeds of national significance;
- Prevent the introduction of new pest plants through revised quarantine assessment procedures; and
- Assess the potential of existing pest plants to become weeds of national significance.

In accordance with the objectives outlined above, funding is targeted towards the support of activities that are designed to:

- Minimise the impacts of weeds on nationally listed threatened species or sites of national environmental significance;
- Promote the management of environmental weeds of national significance, especially where a species can be demonstrated to be impacting on areas that are sites of national environmental significance; and
- Demonstrate that different levels of government are cooperating with the community and affected land managers are dealing, with the problem and where there is a long term commitment.

The Endangered Species Program continues to support community networks including the Threatened Species and Threatened Bird Networks. Sixty three per cent (63%) of projects funded by the program were undertaken by community groups predominantly through the Threatened Species Network Community Grants element of the program. The majority of ESP funding in 99/00 went to projects that involved on-ground conservation activities. Actions supported included priority weed and pest abatement works; survey and monitoring; fencing; reintroductions of species to the wild; re-establishing, restoring and protecting habitat. In 99/00 the Endangered Species Program had 137 active projects conducting on ground conservation activities covering 231 nationally listed species and 6 nationally listed ecological communities - this represents 16 per cent and 26 per cent respectively

of the current national list of threatened species (1442) and ecological communities.

Contacts: For more information on the Interim Biogeographic Regionalisation for Australia project (IPAP) phone no: (612) 6250 0326.

National Reserve System Program (IBRA, Scientific Guidelines, Protected Areas):
<http://www.biodiversity.environment.gov.au/protecte/nrs/nrsindex.htm>

Related programs and funding under the Natural Heritage Trust: <http://www.nht.gov.au>

Marine Protected Areas
<http://www.environment.gov.au/marine/or2000/Mma/mpa.html>

The Wildlife Australia homepage, can be found at the following internet address:
<http://www.environment.gov.au/bg~wildlife/index.html>

National Report of the Cook Islands on the Apia Convention

1. Introduction

The Cook Islands ratified the Convention on Conservation of Nature in the South Pacific, hereinafter referred to by its short title the Apia Convention, on 24 June 1987. In the thirteen years since its ratification, Government in partnership with the various stakeholders in the community has, pending availability of resources, implemented the provisions of the Apia Convention in an incremental but progressive manner.

The Apia Convention has highlighted the necessity in undertaking actions that will ensure maintenance and sustainability of natural resources.

This Report covers the period from June 1998 to September 2000.

2. New Protected Areas

Further to the Cook Islands National Report to the Fourth Ordinary Meeting of the Contracting Parties to the Apia Convention in 1998, a number of positive changes have occurred with respect to protected areas in the Cook Islands.

2.1. Takitumu Conservation Area

The Takitumu Conservation Area (TCA) was established in 1996 by the landowners of the Area and the South Pacific Regional Environment Programme (SPREP).

By way of background information, a bird recovery programme with particular emphasis on the conservation of the *kakerori* or the Rarotongan Flycatcher was undertaken by the Cook Islands Conservation Service from mid-1989 through to the early 1990's. With the assistance of the South Pacific Biodiversity Conservation Programme (SPBCP) and in line with the concept of community based conservation areas, Government deemed it appropriate that management and operation of the bird recovery programme be transferred to the landowners. TCA is now being successfully managed and operated by and in full co operation and consultation with the landowners.

The TCA is a formal conservation area designed to protect birds and biodiversity with the *kakerori* being targeted as the key species for protection. In its annual census, TCA noted an increase in the *kakekori* population from 29 individuals in 1989 to 163 and 200 birds in 1998 and 2000 respectively.

Staff of the TCA have in the past, visited a number of outer islands in the Cook Islands including various community groups on the main island of Rarotonga, to share their experience. The TCA wants to encourage them to consider the TCA experience so as to promote sustainable management of natural resources by developing new conservation/protected areas.

In order to generate funds to become less reliant on outside funding and economically viable the TCA introduced a cost recovery programme. The programme includes visitors fees, videos, various pamphlets and booklets and school resource kits for distribution locally and overseas.

2.2 Marine Reserve and Ra'ui Areas

Marine conservation approaches vary throughout the Cook Islands. On Rarotonga, traditional management systems (Ra'ui), were introduced to limit or prohibit access to a particular resource for a designated period as a measure to allow harvested resources to rejuvenate has proven popular on the main island of Rarotonga. The ra'ui system was once routinely adopted and fell into disuse over the past decades. The present ra'ui system on the island of Rarotonga has been revived by traditional and community leaders and is applied to particular marine areas identified by them to allow marine species to rejuvenate as the reef ecosystem was perceived to be under threat by over harvesting. The ra'ui system is unique in that it is not legislated for, rather it relies on community or peer pressure for enforcement.

On other islands of the group marine management approaches are legislated (for example Aitutaki Trochus Management Guidelines, Attachment 1) or are customary. Although they

serve a similar purpose as ra'ui on Rarotonga they are more diverse and complicated because they employ a number of restrictions in the reserve area. For example, although not exhaustive, they use quotas, permits/licenses, gear restrictions (ban on SCUBA equipment, use of dynamites, length of gill nets), limits on the size of organisms caught and area restrictions.

2.2.1. Rarotonga

The total lagoon and reef area on the island of Rarotonga is 8.2 km². The total ra'ui area is 3.74 km². The ra'ui area, on Rarotonga comprises 46 per cent of the total lagoon and reef habitat.

July 1996 - June 1998

As of June 1998 there were five ra'ui areas (introduced in February 1998) on Rarotonga, the number of ra'ui areas has increased to nine (Attachment 2).

- **Rutaki ra'ui** was established for nine-months which was lifted in 1999.
- **Aroko-Nukupure ra'ui** was opened for a day's harvesting (February 2000) after a two-year period. It was subsequently closed for a five-year period. However, with the permission of the traditional leaders, the ra'ui may be briefly lifted for varying duration during that period to allow the harvesting of marine resources such as trochus,

patito (sea slugs), *matu roro* (soft black sea cucumbers) and *ature* (mackerel scad) .

- The most unique feature of this ra'ui is the tidal salt marsh habitat consisting mainly of *kiukiu* (salt water Paspalum grass) and *Mauku tatau tai* (Sedge). Although rare on Rarotonga the area has unique nursery features for a number of fish and crab species.
- The lagoon has one of the few remaining populations of a native Date Mussel species. Several migratory and resident birds use the area for foraging, including the Wandering Tattler and the Reef Heron. Rare migrants such as Bar Tail Godwits and Sanderlings also use the area. The ra'ui area is 3, 700 m².
- **Pouara ra'ui** was opened for a day for harvesting of all seafood in February 2000 and has now been closed for about two years. The ra'ui area is 490 m².
- **Tikioki ra'ui** was opened in February 2000 after a two-year period. Two ra'ui areas have now been established. The initial ra'ui area is reduced from 4,700 m² to 1,500 m². This new ra'ui area – Tikioki ra'ui has been made permanent, i.e. it is closed to any form of harvesting. It is a unique marine habitat on Rarotonga for fish and invertebrates. The habitat includes a stretch of reef from the beach to the reef flat. The ra'ui area also has high marine diversity relative to other ra'ui areas on Rarotonga.

Ra'ui area	Area (m ²)	Comments
Parliament/ Turamatuaitui ra'ui	2, 000	Commenced March 2000 for a two-year period. No take status of all seafood.
Rua'au trochus ra'ui	6, 400	Commenced March 2000, this is a trochus reserve zone, the community is allowed to harvest all other seafood.
Aroa ra'ui	1, 720	Commenced April 2000 for a two-year period. No take zone for all seafood.
Vaimaanga ra'ui	6, 600	Commenced March 2000 for a nine-month period and will be lifted in November 2000.
Akapou'ao ra'ui	3, 560	Commenced February-March 2000 for a five-year period. No take status of all seafood.
Tikioki ra'ui	1, 570	This ra'ui area will be in place forever "ra'ui motukore".
Puaikura trochus ra'ui	15, 700	Following the commencement of the Rua'au ra'ui in March 2000, the vaka ¹ Puaikura ² decided to place trochus on a ra'ui system of management. Fishing for all other seafood is allowed.

- **Akapou'ao ra'ui** was established adjacent to the permanent Tikioki ra'ui area and has been in place for five years. The community and traditional leaders decided that the ra'ui will be reviewed at the end of the ra'ui period (February 2005) to determine the status of the marine species. The ra'ui area is 3,560 m².

- **Nikao ra'ui** was opened for two weeks in February 2000 after a two-year period. Harvesting of all seafood was allowed during this period, however, certain restrictions (net fishing and night fishing i.e., from dusk till dawn) were introduced to protect vulnerable species. The Ministry of Marine Resources (MMR) determined that the sustainable harvest of trochus (introduced in 1983) from the ra'ui area was three tonnes. The trochus shells will be exported to a market overseas with all proceeds contributing towards community projects. MMR has advised that a "no take status" for a two-year period be applied to the Nikao ra'ui to allow further regeneration of species and further monitoring. The ra'ui area is 2,300 m².

July 1998 – September 2000

Assessing the impacts of ra'ui (i.e. noted increase in certain marine species) in the original ra'ui areas, traditional and community leaders on Rarotonga felt that it was necessary to establish new marine ra'ui areas to allow vulnerable species the opportunity to enhance.

The new ra'ui areas is discussed in the following table format.

Baseline and monitoring surveys.

A baseline study for invertebrates was carried out for four ra'ui areas on Rarotonga – Nikao, Pouara, Aroko and Tikioki before the areas were closed.

A follow-up survey was undertaken ten months after the baseline study. Ten months thereafter, a second follow-up survey was undertaken. The impacts of the introduction of the ra'ui is described by Raumea. K. et.al 2000. (*2nd Monitoring Survey of the Rarotonga Ra'ui, January 2000.*):

- the invertebrate resources at the ra'ui reef sites were identified as a key indicator species for monitoring;
- the results suggest that the diversity of the invertebrate species at the reef has increased in all of the ra'ui sites. This suggests that perhaps as a

result of the ra'ui some species previously being over-harvested or uncommon are now enhanced.

The second monitoring survey summarises the following results for the four raui.

• Nikao ra'ui

The results indicate the Nikao ra'ui area to be an ideal site for reef invertebrates. Eighteen species were recorded in the area compared to 14 species during the baseline surveys. Almost half of the species reported had the greatest density compared to the other ra'ui areas. Notable densities include the kina or pink sea-urchin and the trochus. Two invertebrates dominated the Nikao reef and account for 70 per cent and 13 per cent of the total population of invertebrates, or a population size of 200,000 and 38,000 respectively. The *kina* or pink sea-urchin, trochus, *matu rori* or soft black sea-cucumber, *avake* or short spine urchin and *paua* or rugose giant-clam, all show dramatic increases in population size. Whereas initially, the *avake* or short spine urchin and *ungakoa* or large worm shells only numbered several hundred, the present population is 4,000 and 8,000 respectively. With regards to trochus and *vana* or long spine urchin, the population may now be approaching its upper limits. A sustainable quota of two tonnes harvest of the trochus resource was estimated.

Surveys of coral cover were also carried out at Nikao coral patch reefs using underwater video digital footage. The results of the coral survey are reported separately.

• Pouara ra'ui

The area of Pouara ra'ui is mostly reef flat and relatively small compared to other ra'ui areas. Fifteen species were reported in the third survey, compared to 11 initially. It was noted that large increases in the *kina* or pink sea-urchin, trochus, *matu rori* or soft black sea-cucumber, *rori matie*, or green fish, *rori puakatoroor* red surf fish and *paua* or rugose giant-clam have occurred. The *kina* or pink sea-urchin make up for half of the total invertebrates at this area with a population of 66,000.. The *rori pua*, or flower sea-cucumber, *rori toto* or sandy sea-cucumber, and trochus cumulatively account for one quarter of the biomass of invertebrates.

- Aroko ra'ui

Aroko ra'ui lies adjacent to a major river outlet and reef passage and is located in the vicinity of small islets. Probably as a result of these features the benthic reef habitat is more heterogeneous compared to the other ra'ui areas. This is reflected in the composition of the total invertebrate population. Whereas other areas are dominated by the *kina* or pink sea-urchin, it differs at Aroko. The largest proportion is accounted by the *rori pua* or flower sea-cucumber 21 per cent or 23,000. The *kina* accounts for 19 per cent of the proportion, trochus 15 per cent and *rori toto*, 14 per cent. Five of the invertebrate species at Aroko had the highest densities recorded at the ra'ui sites. Over the duration of the ra'ui, increases of the *kina*, *rori matie*, *rori toto* or sandy sea-cucumber, trochus, *avake*, *etu* or blue starfish, *ungakoa* or large worm shell and *vana* or long spine urchin occurred. *Rori pua* or flower sea-cucumber has declined significantly, however, this may be attributed to sampling inaccuracies.

- Tikioki ra'ui

Tikioki ra'ui is located at a relatively large and deep lagoon area of Rarotonga. The reef area does appear to support the same abundance of invertebrate species as Nikao ra'ui area. This may reflect its windward location and therefore the reef is affected by high wave energy. Also, the reef flat is less prominent as other ra'ui areas such as Nikao ra'ui. It was noted that the *matu rori* and *ungakoa* has evidently increased in population size, whereas the *vana* and *rori puakatoro* or red surf-fish has declined. The major components of the invertebrate population comprised of *kina* (36 per cent), *matu rori* (15 per cent), *rori toto* (17 per cent) and *rori puakato* (14 per cent).

The Tikioki ra'ui is one of the best lagoon type ecosystems as it poses a large, deep lagoon and encompasses a large stretch of patch reef. The fish survey results found that there were more fish inside the ra'ui area relative to the areas outside. More specifically, the fish were aggregated around a large coral patch-reef found within the area. The species used to distinguish this distribution pattern was the *pipi* (*Kyphosus cinerascens*), a common food fish. Aggregations of this fish reached up to an average of 60 fish within a 10 metre radius compared to 0.25 fish at sites outside the ra'ui area. In addition, more fish species were observed at ra'ui sites com-

pared to outside. Between 27 to 31 species were seen within the radius inside the ra'ui compared to 14 to 21 species outside. Surveys of coral cover were also carried out at Tikioki coral patch reefs using underwater video digital footage. The results of the coral survey are being reported separately. Local and common species names in the above summary are listed as Attachment 3.

3. Outer Islands

As noted earlier, other conservation measures through the establishment of a number of marine reserve areas have been undertaken in the outer islands. These are described in Attachment 4. (MMR staff *pers. comm.*).

4. Legislation

The Rarotonga Local Government Act 1997 provides the *Konitara Vaka* with the power to recommend to the Minister appointed by the Prime Minister responsible for the Act – the Minister for Internal Affairs – that laws be promulgated, amended or revoked to protect, preserve and enhance customs and changes to environment, including the control or prohibition of fishing, shell fishing, or the use of any fishing net or other fishing implement or method in any part of the lagoon within the *Vaka*. To date no such laws have been promulgated.

The *Cook Islands Natural Heritage Trust Act 1999* establishes a Cook Islands Natural Heritage Trust with the necessary resources and powers to investigate, identify, research, study, classify, record, issue, preserve and arrange publications, exhibitions, displays and generally educate the public on the science of, and traditional practices and knowledge relating to, the flora and fauna of the Cook Islands.

The *Rarotonga Environment Amendment Act 1998* provides for the protection of wetlands. Section 7 of the Amendment Act provides that no excavation, dredging, clearing, paving, grading, ploughing, dumping, reclamation, removal of trees or other activity of any kind which may alter the natural configuration of the wetlands shall be undertaken on any wetlands. Every person who commits an offence shall be liable on conviction to a fine not exceeding NZ\$5,000.

5. Indigenous Species

A list of indigenous species considered endangered on particular islands is attached as Attachment 5.

6. Permits

No permits were given to hunt, kill, capture or collect species in the list.

7. Customary use

Refer to earlier sections regarding customary use of marine resources.

8. Education and awareness

The Takitumu Conservation Area has been extremely active in promoting nature conservation through various means, including although not exclusive, public lectures, school visits, publishing scientific papers, writing articles for the local newspapers and by participating in radio talk back shows.

The Ministry of Marine Resources works closely with traditional leaders and the community to increase awareness of the ra'ui areas. Pamphlets out-

lining the purposes of the ra'ui have been published by MMR.

The senior students of the national college, Tereora College have once a year over the past three years undertaken surveys of the Nikao ra'ui area as part of their biology curriculum. The purpose of the project is two-fold, firstly, to educate college students about the ra'ui and secondly to enlist their assistance in surveying the abundance and distribution of marine species on the reef flat. The results are assessed relative to that produced by MMR.

Several non-government organisations such as the Cook Islands Natural Heritage Project, World Wide Fund for Nature (Cook Islands) and Taku Ipukarea Society have, through various means, contributed to the promotion of nature conservation.

Attachment 1: Guidelines for undertaking trochus harvest at Aitutaki

General Guidelines

1. The Aitutaki Island Council gives at least six weeks notice of any intention for the opening of the trochus harvest season to the Ministry of Marine Resources (MMR).
2. Five weeks prior to the harvest the Ministry of Marine Resources begins to perform any stock assessment that is necessary to determine, as accurately as possible, the optimum total quota for the harvest.
3. The Ministry of Marine Resources normally recommends a harvest when adult trochus achieve an overall density between 500 to 600 trochus per hectare or five to six adult trochus per 100 square metres.
4. Two weeks prior to the harvest, the Ministry of Marine Resources advises the Island Council of an interim total quota for the forthcoming harvest, based on previous experience and the preliminary indications of the ongoing stock assessment. This interim quota should be recognised as a provisional, estimate figure, subject to final revision shortly after the start of the harvest.
5. The Council sets a date for the opening of the trochus harvest season after seeking advice from the Ministry of Marine Resources. The date of the opening of the trochus harvesting season normally is no earlier than 12 months after the close of the previous harvesting season and is not normally more than 24 months later than the close of the previous season.
6. The Council is also responsible for publicising the harvest date amongst the local community and people with particular interest in the trochus harvest.
7. Aitutaki trochus are normally harvested on an Individual Transferable Quota (ITQ) system, meaning each and every resident individual whether capable or not of harvesting trochus re-

ceives an equal share. This is calculated by dividing the Total Allowable Catch by the resident population during the time of each harvest. If an individual wishes not to harvest trochus his/her quota is transferred/sold to other interested individual quota holders.

8. It is the responsibility of the Council to measure the amount of trochus landed to the credit of each and every ITQ owner and the amount of trochus s/he lands (up to the limit of her/his ITQ). If any ITQ owner lands an amount of trochus in excess of her/his quota, the financial proceedings may either be credited to the Council or disbursed equally amongst all ITQ owners.

Stock Assessment Procedures

1. Six weeks prior to the declared opening of the intended trochus harvest season, approximately four man hours would be spent in each of the designated survey stations on the barrier reef, by at least four surveyors marking and measuring trochus shells.
2. Concentrating on those areas known to be common trochus habitat, the team would skip from site to site to obtain as widespread a coverage as possible. The idea is to mix the marked shells as broadly as possible within the larger population and avoid large “clumps” which might bias the results when harvesting.
3. Based on previous experience of the Aitutaki trochus resource, and on subjective appraisal of the state of the resources obtained during the shell-marking and measuring, MMR would advise the council of a provisional total allowable catch.
4. During the harvest, fisheries officers and Members of the island council would be on hand to observe each shell landed at each of the designated landing points, and to count the number of marked and unmarked 80–110mm shells landed.

At the end of each day of harvest, all the figures would be compiled and an assessment of the total stock of 80-110mm shells would be made using the Petersen mark-recapture formula.

5. Not more than two days into the harvest, the Ministry of Marine Resources would notify the council what the latest mark-recapture results showed the stock of 80-110mm shells to be (with 95 per cent confidence limits) to enable the council to decide on the final quota.

Rules pertaining to the Aitutaki trochus resources

1. No person shall take, kill, sell or expose for sale or export any trochus less than 80mm measured across the widest part of the base of the shell.

2. No person shall take, kill, sell or expose for sale or export any trochus greater than 110mm measured across the widest part of the base of the shell.

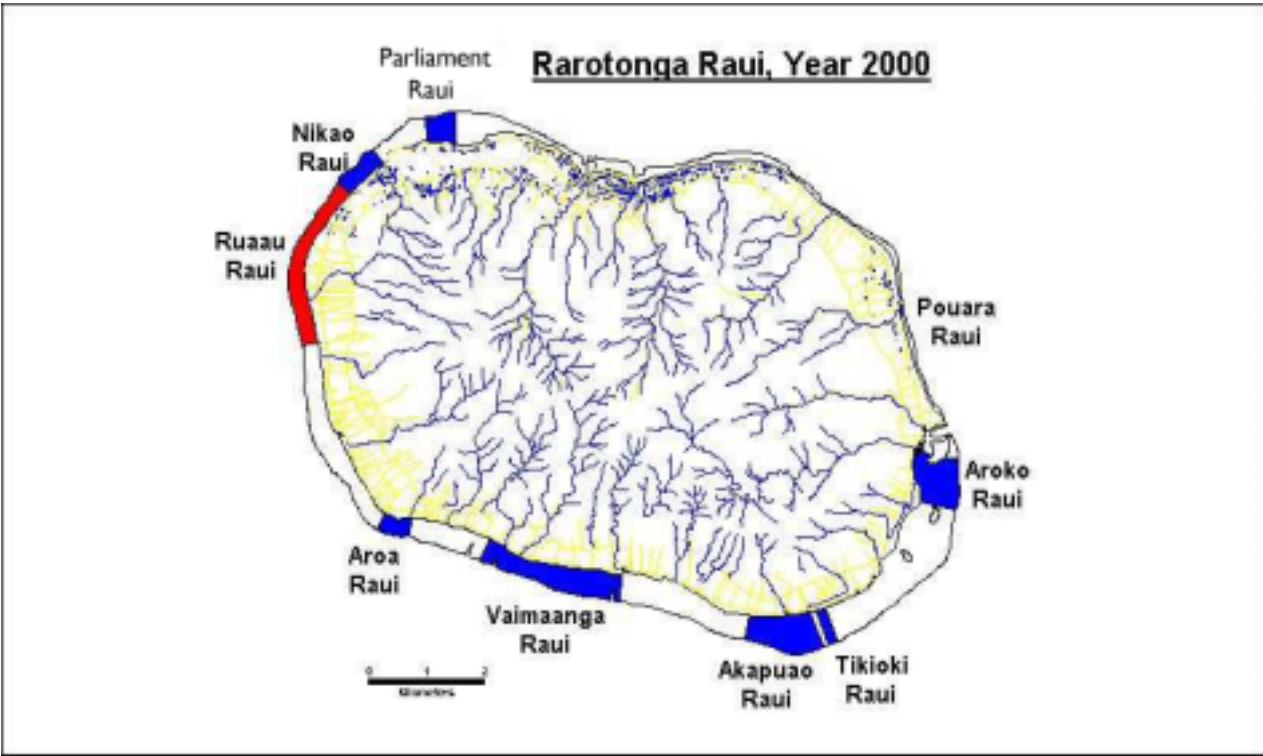
3. No person shall take, molest, kill or remove any trochus shell from any area designated as a trochus reserve (Ra'ui).

4. No person shall take, molest, kill or export any trochus shell, whether alive or dead, at any time except during a period declared by the Council to be a trochus harvest season.

5. No person shall land any trochus shell that is not alive.

6. No person shall land any trochus shell except at a collection point designated by the Council, unless shells that are landed at some other point are brought to the collection point whilst still alive.

Attachment 2: Map of Rarotonga illustrating *Ra’ui*



Attachment 3: Local and common names of invertebrate species in the Ra'uis. Some invertebrates of social or biological significance were recorded. These species were categorised according to local taxonomic description, which may combine different species, by the same name.

Local Name	Common Name	Scientific Name
<i>Ariri</i>	Rough turban-snail	<i>Turbo setosus</i>
<i>Atuke</i>	Brown Pencil-urchin	<i>Heterocentrotus m ammillatus</i>
<i>Avake</i>	Short spine-urchin	<i>Tripneustes gratilla</i>
	Belligerent Rock-shell or Trumpet shell	<i>Thais armigera</i>
<i>Etu</i>	Blue starfish	<i>Linckia laevigata</i>
<i>Karikao</i>	Rose Mouthed Turban-shell	<i>Astrea rhodostoma</i>
<i>Kina</i>	Pink sea-urchin	<i>Echinometra m atahaei</i>
<i>Mangeongo</i>	Mollusc	Muricidae family, Drupa genus – most common species is the Mulberry drupe <i>Drupa morum</i> and <i>Drupa ricinus ricinus</i>
<i>Matu rori</i>	Soft black sea-cucumber	<i>Holothuria leucospilota</i>
<i>Paua</i>	Rugose Giant-clam	<i>Tridacna maxima</i>
<i>Popoto</i>	Mollusc	Conidae family – most common species are <i>Conus ebraeus</i> , <i>Conus eburneus</i> and <i>Conus chaldaeus</i>
<i>Poreo</i>	Cowrie spp.	Cypraeidae family <i>Cypraea tigris</i> most common species
<i>Rori matie</i>	Green fish	<i>Stichopus chloronotus</i>
<i>Rori pua</i>	Flower sea-cucumber	<i>Holothuria cinerascens</i>
<i>Rori puakatoro</i>	Red Surf-fish	<i>Actinopyga mauritiana</i>
<i>Rori toto</i>	Sandy sea-cucumber	<i>Holothuria atra</i>
<i>Trochus</i>	Trochus	<i>Trochus niloticus</i> (introduced)
<i>Ungakoa</i>	Large Worm shell	<i>Dendropoma maxima</i>
<i>Vana</i>	Long spine urchin	<i>Echinothrix diadema</i>