



PROCEEDINGS OF THE THIRTY-FIRST SESSION

hosted by the
Government of the Republic of Nauru in
Suva, Fiji Islands

25 September – 2 October 2002





SOUTH PACIFIC APPLIED GEOSCIENCE COMMISSION

PROCEEDINGS OF THE THIRTY-FIRST SESSION

hosted by the
Government of the Republic of Nauru in
Suva, Fiji Islands

25 September – 2 October 2002

December 2002

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Editor's Note: *In this transition period from an old to a new corporate structure, the text of the SOPAC Work Programme 2003 is not published in this Proceedings volume. It shall be released early 2003, on the customary limited circulation to our member countries along with the approved budget for 2003. Other parties interested in viewing the SOPAC Work Programme and Budget for 2003 can apply to the SOPAC Secretariat.*

Furthermore, based on feedback (or lack thereof) to this withdrawal of the Work Programme narrative from this Proceedings volume, we may opt to make this withdrawal permanent and increase the circulation of the smaller, stand-alone edition of the SOPAC Work Programme and Budget document.

CONTENTS

INTRODUCTION TO SOPAC	4
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OPENING ADDRESSES

Opening Address by the Honourable Remy Namaduk, Minister Assisting the President of the Republic of the Nauru	7
Opening Address by the SOPAC Director	9

SUMMARY RECORD OF THE THIRTY-FIRST ANNUAL SESSION	13
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APPENDICES

1 List of Participants	59
2 Agenda	69
3 Designation of National Representatives	70
4 Statements by Delegations	
Part I: Member Countries	71
Part II: CROP Organisations	82
Part III: Supporting Governments & International Agencies	87
Part IV: National Institutions	92
5 STAR Reports	
STAR Chair's Report to Council	97
STAR Working Group Reports	100
6 Summary Record of EVI Side Meeting	106
7 List of Conference Room Documents	109
8 List of Acronyms	111

INTRODUCTION TO SOPAC

Objectives

The South Pacific Applied Geoscience Commission (SOPAC) is an independent, inter-governmental, regional organisation mandated by several Pacific nations to:

- develop resource policy, and advise on the management and development of onshore and offshore mineral and aggregate resources;
- meet the needs for water resources, waste management, health and sanitation through the provision of resource policy and management advice, appropriate information and training;
- support the information requirements and enhance the skills required for management and operation of the energy sector in member countries;
- assist decision makers and planners to develop coastal zones and extract resources while protecting them from degradation;
- predict the effects of hazards on the health, wealth and development potential of member countries;
- assist decision makers and planners to understand ocean processes, develop ocean areas and extract resources while protecting oceans from over-exploitation and pollution;
- provide geoscientific and related education needs through the provision of a variety of training and education opportunities at all levels of geoscience and resource management;
- meet the demands for electronic information by member country governments and regional organisations to manage resources and risk;
- support National authorities in disaster management activities through advice information; and
- provide readily-available and current information in geoscience and related fields to member countries and others.

Member Countries

Member countries are currently Australia, Cook Islands, Federated States of Micronesia, Fiji Islands, Guam, Kiribati, Marshall Islands, Nauru, New Zealand, Niue, Papua New Guinea, Samoa, Solomon Islands, Kingdom of Tonga, Tuvalu and Vanuatu. American Samoa, New Caledonia and Tahiti Nui are Associate Members.

Background

The Commission comprises the Governing Council (the member country representatives), the Secretariat (based in Suva) and the Technical Advisory Group (TAG). TAG comprises advisors who are nominated by member countries and by supporting Governments and organisations, or are invited by the Secretariat.

The Commission's Work Programme is formulated from member country requests, and is carried out by its Secretariat based in Suva, Fiji Islands.

SOPAC was established in 1972 as CCOP/SOPAC (the Committee for Coordination of Joint Prospecting for Mineral Resources in South Pacific Offshore Areas) under the sponsorship of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). In 1984, CCOP/SOPAC changed its legal status to become an independent, regional inter-governmental body, changing its name to SOPAC (South Pacific Applied Geoscience Commission) in 1989.

Funding

SOPAC is funded by a combination of statutory and voluntary contributions by its member countries and grants from donor governments and international agencies. An annual budget of around F\$10 million supports the implementation of the Work Programme and the operation of the Secretariat.

Supporting countries include Australia, Fiji and New Zealand as members, Canada, France, Republic of Korea, Japan, Norway, the People's Republic of China, Taiwan, United States and the United Kingdom. The European Union, Commonwealth Secretariat and UNDP are the principal multilateral supporting agencies. SOPAC has formal and informal links with many other supporting agencies and institutions. Member countries provide considerable support during survey work, and ship time in the region is regularly contributed by other countries such as the France, Japan and Germany.

SOPAC Annual Session

The SOPAC Annual Session is a meeting of the Commission, and has four components:

- (a) a Plenary Session covers the procedural aspects of the meeting and the presentation of reports from member countries, donor Governments and organisations, and the Secretariat. This session is a meeting of the Council at which other delegates are invited as observers, contributing to the discussion of non-technical matters concerning SOPAC such as cooperation and funding.
- (b) a meeting of the Technical Advisory Group (TAG) to consider the SOPAC Work Programme. All TAG members participate as equals during this meeting.
- (c) a meeting of the Science Technology and Resources Network (STAR) which is an open forum for reporting geoscientific research in the Pacific and for exchanging information and ideas between scientists from SOPAC Member Countries and the international geoscientific community.
- (d) a Governing Council meeting to discuss the administrative and financial business of SOPAC, which may be open to observers who could speak when invited.

See the Table on the next page for a summary of past SOPAC sessions.

Summary of SOPAC Annual Sessions

Session	Date	Venue	Chairman	Vice-Chairman	TAG Chairman	Rapporteur(s)
Preparatory	Jul 1971	Manila, Philippines	R.W. Willett, NZ	—	—	—
FIRST	Nov 1972	Suva, FJ	D. Green, FJ	S. Tu'a Taumoepeau, TG	R. Willett, NZ	—
SECOND	Aug-Sep 1973	Nuku'alofa, TG	S. Tongilava, TG	R. Richmond, FJ	R. Willett, NZ	—
THIRD	Sep 1974	Apia, WS	T. Enari, WS	P. Mueller, WS	J.W. Brodie, NZ	—
FOURTH	Sep 1975	Honiara, SI	R.B. Thompson, SI	G. Sawtell, CK	J.W. Brodie, NZ	—
FIFTH	Nov 1976	Rarotonga, CK	G. Sawtell, CK	S. Tongilava, TG	D. Kear, NZ	—
SIXTH	Oct 1977	Port Moresby, PN	N. Agonia, PN	R. Richmond, FJ	J.W. Brodie, NZ	J. Wright, UK
SEVENTH	Oct 1978	Wellington, NZ	D. Kear, NZ	S. Kingan, CK	J. Wright, UK	G. Shepherd, TS
EIGHT	Sep-Oct 1979	Suva, FJ	R. Richmond, FJ	A. Macfarlane, VA	M. Terman, US	J. Wright, UK
NINTH	Oct 1980	Tarawa, KI	T. Olang, KI	A. Macfarlane, VA	J. Wright, UK	J. Eade, NZ
TENTH	Oct 1981	Port Vila, VA	A. Macfarlane, VA	S. Tongilava, TG	J. Wright, UK	J. Eade, NZ
ELEVENTH	Nov 1982	Wellington, NZ	H. Thompson, NZ	S. Tongilava, TG	N. Exon, AU	J. Eade, NZ
TWELFTH	Oct 1983	Nuku'alofa, TG	S. Tongilava, TG	L. Ioane, WS	N. Exon, AU	D. Howell, US; J. Eade, NZ
THIRTEENTH	Oct-Nov 1984	Apia, Western Samoa	K. Eteuati, WS	S. Danitofea, SI	H.G. Greene, US	N. Exon, AU
FOURTEENTH	Sep 1985	Honiara, SI	J. Saliga, SI	S. Kingan, CK	H.G. Greene, US	D. Mallick, UK
FIFTEENTH	Sep 1986	Rarotonga, CK	S. Kingan, CK	G. Anderson, PN	J.V. Eade, NZ	D. Mallick, UK
SIXTEENTH	Oct 1987	Lae, Papua New Guinea	W. Searson, PN	S. Sopoanga, TU	D.J. Mallick, UK	J. Eade, TS; M. Fisk, UN
SEVENTEENTH	Oct 1988	Suva, FJ	S. Sopoanga, TU	R. Rutland, AU	C. Helsley, US	J. Eade, TS
EIGHTEENTH	Oct 1989	Canberra, AU	R.W. Rutland, AU	K. Kolone (Interim)	R.N. Richmond, TS	J. Harper, TS
NINETEENTH	Oct 1990	Tarawa, KI	T. Tokataake, KI	C. Mortimer, VA	R.N. Richmond, TS	H. Creech, TS
TWENTIETH	Sep-Oct 1991	Port Vila, VA	C. Mortimer, VA	S. Tongilava, TG	B. Page, UK	A. Sherwood, TS
TWENTY-FIRST	Sep-Oct 1992	Nuku'alofa, TG	S. Tongilava, TG	A. Simpson, FJ	H.G. Greene, US	A. Sherwood/J. Eade, TS
TWENTY-SECOND	Oct 1993	Suva, FJ	A. Simpson, FJ	M. Kaminaga, MI	R.N. Richmond, TS	A. Sherwood, TS
TWENTY-THIRD	Sep 1994	Majuro, MI	J. Kabua, MI	Nat. Rep. Australia	D. Pickrill, NZ	R. Howorth, TS
TWENTY-FOURTH	Sep-Oct 1995	Suva, Fiji	D. Ritchie, AU	C. Brown, CK	D. Pickrill, Canada	R. Howorth/L. Bukarau, TS
TWENTY-FIFTH	Oct 1996	Rarotonga, CK	R. Newnham, CK	G. Ayin, FSM	A. Macfarlane, UK	L. Bukarau/R. Howorth, TS
TWENTY-SIXTH	Sep-Oct 1997	Nadi, Fiji Islands	B. Rao, FJ	G. Ayin, FSM	D. Tappin, UK	L. Bukarau/R. Howorth, TS
TWENTY-SEVENTH	Sep-Oct 1998	Suva, Fiji Islands	S. Anefal, FSM	Nat. Rep. Guam	D. Tappin, UK	L. Bukarau/P. Fairbairn, TS
TWENTY-EIGHTH	Oct 1999	Nadi, Fiji Islands	T. Barrett, NZ	K. Ruaia, Kiribati	T. Barrett, NZ	L. Bukarau/P. Fairbairn, TS
TWENTY-NINTH	Sep-Oct 2000	Tarawa, Kiribati	K. Ruaia, Kiribati	M. Kaminaga, RMI	K. Ruaia, Kiribati	L. Bukarau/P. Fairbairn, TS
THIRTIETH	October 2001	Majuro, Marshall Islands	M. Maddison, RMI	A. Itsimaera, Nauru	M. Kaminaga, RMI	L. Bukarau/C. Pratt, TS
THIRTY-FIRST	Sep-Oct 2002	Suva, Fiji Islands	A. Itsimaera, Nauru	S. Talagi, Niue	A. Itsimaera, Nauru	L. Bukarau, TS

Abbreviations used: AU - Australia; CK - Cook Islands; FJ - Fiji Islands; KI - Kiribati; MI - Marshall Islands; NZ - New Zealand; PN - Papua New Guinea; RMI - Republic of the Marshall Islands; WS - Samoa; SI - Solomon Islands; TG - Tonga; TS - SOPAC Secretariat; TU - Tuvalu; VA - Vanuatu; UK - United Kingdom; UN - United Nations; US - United States



Participants at the Official Opening of the 31st SOPAC Session at the Forum Secretariat, Suva, Fiji Islands.

OPENING ADDRESSES

ADDRESS BY HE Mr Remy Namaduk

Honourable Minister Assisting the President of Nauru
at the Official Opening of the SOPAC 31st Annual Session

Director of SOPAC, Mr. Alf Simpson, Distinguished Delegates from Member Countries and Observers, Representatives of the Regional and International Partner Agencies, Ladies and Gentlemen

1. It is a pleasure on behalf of my Government to be here with you today at the Opening of this 31st Annual Session of the Governing Council Meeting of the South Pacific Applied Geoscience Commission (SOPAC). As host, the Government of the Republic of Nauru regrets it was unable to have you visit Nauru, but I feel confident that this alternative venue arrangement will be more than satisfactory.

2. However before I go any further I would like to first of all recognize and thank the outgoing Chair, Marshall Islands for the wisdom and guidance provided during his Chairmanship of the 30th SOPAC Governing Council. I hope that under my Chairmanship for this 31st Annual Session, Nauru shall perform equally as well.

3. Many of you will be aware that during the past year Nauru also has had the privilege to be Chair of the Pacific Islands Forum. One of our duties in this regard was to Chair the Pacific Islands Forum Group at the United Nations in New York. A key task of that group was to oversee the presentation of the Pacific Island States case into the preparatory process for the World Summit on Sustainable Development recently concluded in Johannesburg, South Africa.

4. A good deal of rhetoric has been heard in regard to the success, or lack of success, of the World Summit. But one thing is for sure, the Pacific Island States succeeded in leading the lobby to include ocean and islands on the agenda. Both these figure prominently in the Johannesburg Action Plan. The point of raising this is to recognize that one of SOPAC's three new key programme areas is *Ocean and Islands*. Furthermore, SOPAC's support provided to the country delegations clearly demonstrates the commitment of the Secretariat and the membership to advocacy of the Commission and its work, and indeed the fruits of

this advocacy over the past year.

5. For those who are less optimistic about the outcome of the World Summit in for example the area of targets, let me challenge you that the inability to set targets at the global level is indeed an excellent reason to now set them at the regional level. This Council should rise to this challenge in the energy and water sectors and set targets for the region, both key sectors in SOPAC's second new programme, *Community Lifelines*. Water targets could be at least consistent with those in the Millennium Development Goals. The water issue is a crunch issue especially for small island states and it is pleasing to learn that a Communiqué and Action Plan had been developed during the Sigatoka High Level Regional Water Meeting and approved by our Leaders during the Pacific Islands Forum for the next global stage on Water Forum to be set in Kyoto next year.

6. Another crunch issue is the energy sector which has been a major issue during the climate change negotiations at the United Nations Framework on Climate Change. The "clean development mechanism" for example could be utilized as a window of opportunity for Pacific Island States to consider for setting energy targets at an increase of 15 % renewable by 2012. With the increase in price for oil and the uncertainty of the future economies of Pacific Islands, renewable energy should be studied more thoroughly especially when there is abundant solar and ocean as significant contributions to support sustainable development in the region.

7. The history book on Nauru provides no better example of the need to focus on the long-term vision captured in the phrase sustainable development. The balance between the now accepted three pillars: environmental, economic and social is the key. Focusing on one pillar at the expense of the other two sets a course, which at best is likely to court with disaster and at worst, be totally disastrous. In other words, we must address *Community Risk*, SOPAC's third new programme.

8. Almost 100 years ago, the establishment on Nauru, then known as Pleasant Island, of the phosphate mining industry for short-term economic gains without serious regard for environment and social consequences was to be regretted. We have struggled to cope with the product of this reality of unsustainable development since our independence in 1968. Now we are at the threshold of looking at the rehabilitation and development issue for sustainability and improvement in the quality of life for our children's future well-being.

9. In looking to the future we recognize that SOPAC has a key role in providing a regional modality to address national needs in pursuit of sustainable development. Hence the reason Nauru joined SOPAC in 1998 and I am pleased to add as one of your newest members. Indeed I think we are still the youngest members of Council, but I believe the privilege will cease at this session as new members are eager and waiting in the wings.

10. I note that the STAR presentations have just been concluded yesterday with the well chosen theme: "Geoscience and Sustainable Development in Pacific Island States, 2002-2012". As Small Island states we shall be looking to the scientific community to address the vulnerability issues that have been a major concern to us in the region. For example, part of Nauru's concerns, apart from the rehabilitation issue, is to address the coastal erosion, power shortage and drought problems that we have been experiencing lately. Other islands have had recent devastating experiences with earthquakes, flooding, land slides and tsunamis. While still other low lying atolls are concerned with sea level rise and related climate change issues. These are real problem issues that affect sustainable development for small island states and needs to be addressed by our scientific and technical experts in the region.

11. SOPAC can achieve this challenge but would need the guidance of the Council to prioritize and be proactive in the quest for sustainable development through concerted series of actions. The Council would need to

address what is important for them to include in its work programme but at the same time SOPAC would also need to understand the needs of the member countries. There are national experts within the region that have the qualifications and experience to be part of the work programme and they should be utilized often for the sake of capacity building in order to achieve sustainability.

12. As a relatively new Council member, Nauru is particularly pleased to observe that in SOPAC, the Council has taken its ownership of the Commission seriously. The development of the new Corporate Plan is of course the key document in this ownership process. We look forward to forging ahead with the role-out of corporate planning exercise and giving the Secretariat our full support.

13. Distinguished delegates and Representatives of Regional and International Agencies, on behalf of Nauru, I wish you all a successful and fruitful meeting in the next few days and I thank you most sincerely for your presence at this gathering. I am confident that through your deliberations and inputs, this meeting shall provide the necessary vehicle that will contribute to the sustainable development of the future well-being of our people in the Pacific.

14. Finally, I observe that the meeting agenda is a full one with many important issues to decide upon in addition to the required reporting. The papers, I further note, are quite voluminous and hefty, but I believe more focused and user-friendly. Nonetheless I do hope you will be able to set aside a little time for relaxation. In this vein, I would like to invite you all to join me this evening for an island buffet reception, Nauru- style of course, at which I look forward to introducing you to a little of Nauru's culture and entertainment.

15. With these few words, I now have great pleasure in declaring open this 31st Annual Session of the SOPAC Governing Council Meeting.

Thank you and Mwa tubor kor.

OPENING SPEECH BY MR ALFRED SIMPSON

Director of SOPAC Secretariat at the Official Opening of the SOPAC 31st Annual Session

This is the 31st Annual Session of the South Pacific Applied Geoscience Commission (SOPAC) in its various guises, from the time it started as a UN project in 1972 through to the intergovernmental organisation it is today. 1972 through to 2002 means that this year we are in effect celebrating SOPAC's 30th birthday. If we were celebrating a wedding anniversary then according to tradition gifts of Pearls would be the order of the day – and I'm sure they would gladly be received by the Secretariat.

Unless the Cook Islands delegation has come bearing gifts we'll just have to make do with the many pearls of wisdom which I'm sure you will all contribute during discussions over the next few days.

Mr Chair, every year it appears that we keep raising the bar in regard to the challenges we have to face. Last year in Majuro we had the cloud of political instability, questionable governance and regional insecurity, hanging over the region. This was fuelled, not exclusively but largely by problems in Fiji and the Solomon Islands. The region searches for answers.

However, in the global context this was a mere hiccup compared to the turmoil & turbulence that have arisen over the past 12 or so months. It is true that wherever you are life will never be the same again. Troubles in Afghanistan, the Middle East, Zimbabwe and, of course, the terrorist attacks on the United States, have caused us to become consumed by the issue of security. The world searches for a solution.

Security goes beyond the mere defence of our national boundaries. It is not just an issue that should only concern the Super-Powers but something affecting us all, even the small island states of the Pacific. For us small islands, it is more than about keeping out the dark forces of global terrorism and evil.

At present we seek solutions based only on offence, a response based on defiance instead of alliance. Maybe we are doomed to fail because we seek to impose a cure to the pandemic of violence rather than prevent festering trouble spots or often-innocuous problems from developing in the first place.

And so it behoves us in the Pacific to observe

and learn the lessons – quickly. To do this we need to analyse and simplify the issues rather than turn it into fodder for academic debate. Because what might at first sight seem like an insignificant community concern, unintended could lead to a matter affecting national security. Let us not fool ourselves; the list of security issues or potential causes leading to insecurity in the region is growing and becoming more challenging by the day.

There is the security of our boundaries and national jurisdictions to address. Security of land tenure, traditional rights and on the flip side civil unrest caused by problems related to resource insecurity. There is security of life and communities against natural and anthropogenic disasters and the matter of food & human security resulting from such disasters. There is the security of future generations or sustainable development to be planned for. And so the list continues.

We've seen land unsustainably developed, forest and marine resources over-exploited, all of which we've been prepared to accept as long as someone gets their thirty pieces of silver.

In the so-called peaceful Pacific there has been a proliferation of crime and corruption countered only by token resistance. We have increasing poverty, unemployment, spiralling population growth and emerging health problems and yet the root causes remain unaddressed. All this provides the ingredients for instability, unrest and insecurity.

I sometimes think it's far easier to blame someone else for our problems. Somewhat like the Captain of the Titanic berating the iceberg for his own misfortune. Often it is indeed someone else's fault. For example, we can blame someone else for global warming and potential sea level rise. As with past nuclear testing, it is indeed someone else who apparently threatens our environment with the transshipment of potentially toxic contaminants. It is also claimed that our number one world-class resource – fish is being ripped off by Distant Water Fishing Nations (DWFNs).

This list of externally imposed risks is not exhaustive; they are important but shouldn't we set our house in order first before we battle them? Indeed the problems that I have

raised are largely homegrown and through the eyes of SOPAC I'd like us to focus on a few basic issues – some that I think are more realistic indicators of the real state of the region and the countries. They may be mundane, not politically sexy and in some imaginary long-term plan, will surely be taken care of in the course of time. But I feel that the attempts to address these issues to date are more akin to rearranging the deck chairs on the ill-fated Titanic.

This year marks the 20th year since the first signature and ratification of UNCLOS and yet for a maritime region our compliance with the same borders on the pathetic.

We talk of claiming what is ours yet of the 49 shared boundaries & the 45 200nm (nautical miles) EEZ boundaries only 6 treaties have been signed, 3 signed & ratified and only another 6 negotiations are current. Six countries have the potential to claim an extension to their continental shelves and none have done so or have the capacity to do so on their own.

On average, countries of the region have a marine environment making up about 98% of their national jurisdictions but coordinated Ocean Policy at the national levels is not prevalent in any of them. Sustainable management of marine resources must be the number one priority for most and yet we don't even have the capacity for any serious marine scientific research, even worse we do not even have a physical oceanographer to share between us. National plans for development continue to be driven by terrestrial resources and activities, even when ocean holds the brightest prospects for the future.

When talking about capacity, in the priority area of water resources management a recent regional needs assessment identified only 13 professionals qualified to degree level working in this area [Source: WMO/NIWA].

Of all the Water Utilities in the Pacific only one reported unaccounted for water losses of less than 35%. Some had losses of more than 70% [Source: PWA]. Only 10% of the Pacific population has access to sewerage systems for wastewater disposal. Of these urban systems only one has been audited and found to be continuously operating effectively. [Source: Pacific Wastewater Consultation] Is it any wonder that water & sanitation concerns were top of the list in Johannesburg?

Waste management is minimal or not effective in most countries. The greatest threat to the marine environment is from land-based

source of pollution and the greatest of these is sewage. What insurance do we carry against the destruction of our reefs and coastal environment?

The Pacific is a region judged to have the highest concentration of natural hazards in the world. It is claimed that despite the resilience of traditional island societies the vulnerability of their cities is extremely high, threatening even entire national economies.

Presently in the Pacific, \$2 in every \$3 is earned in the urban environment. In Fiji, Solomon Islands, Vanuatu, Samoa & Tonga there are 1.6 million people, 300,000 buildings with an asset value of AUD 41 billion, (\$40,700 million) [Source: B. Lal & K. Fortune 2000]. By the year 2020 it is estimated that 50% of the population in the Pacific will live in cities [Source: SOPAC Sustainable Development Strategy]. Are we heading for uncontrollable urbanisation arising out of failure to distribute the benefits of development equitably to our villages and outer islands? Shouldn't these statistics raise warning flags?

I could talk about energy (30% of the population has access to electricity), about unaffordable communications (it cost 12% of per capita GDP in one country for a 10-hour dial-up access), about the imbalance between population growth and resource availability but time does not permit me to add to this already rather sad list. [Source: SOPAC Sustainable Development Strategy] As it is, I have listed enough evident to present a rather gloomy picture of the real situation in regard to our long-term security.

Perhaps more distressing is the regions attitude towards addressing some of these issues.

Exploitation of both terrestrial & marine resources proceeds without any understanding of its sustainability. To assume that a fair price for compensation will take care of environmental concerns is indeed a crime against future generations and every norm of sustainable development.

National development models proceed without full appreciation or understanding of a total risk management approach. To focus almost solely on just economic reform and trade with little integration of social and environmental inputs invites trouble and in the fragile and vulnerable Pacific it courts disaster. The Pacific can reap the benefits of trade and globalisation but only if it can first assure decent quality of life, security and opportunities to its citizens.

Cost cutting, down or right-sizing and increasing efficiencies are promoted as panaceas in the reform process. However, if one is in the wrong vehicle and heading in the wrong direction, then no amount of panel beating will ensure success. Global and national rhetoric emanating from Summits remain as such when there is no attempt to change the implementing mechanisms and the way we govern. Water & sanitation and the Ocean may emerge, as priorities out of Johannesburg but if governments don't make the strategic and necessary changes then little will happen.

Charles Darwin was quoted as saying; *"If the misery of our poor be caused not by the laws of nature, but by our institutions, great is our sin"*

A review of the fragmented way in which almost every government deals with marine and maritime issues, and with water resources illustrates that the problem is not with the numbers on the payroll, or the budget allocation but with how out-dated and non-strategic systems that do not take a holistic approach.

SOPAC, also had this fragmented approach but has recently undergone great changes, developed a new corporate plan and strategic approaches to meet the challenges. Integrated programmes are taken as mandatory and this has resulted in re-structuring within the organisation and will hopefully ensuring better coordination with other partners and CROP agencies.

Mr Chair, whether we now have the right vehicle, and pointing in the right direction, will be one of the main items before the Governing Council during this session. The main concern for me is not whether the Secretariat and its programmes are on the right track – I know we are.

My concern is whether we will have clients or member countries that will be able to respond in like manner to the new way of doing business? If not, we will not be able to address many of the issues I have raised earlier. We will not be demand-driven, we won't be able to make a difference in our member countries or help the region move down the road of sustainable development, towards ultimately improved long-term security.

Mr Chair, the business as usual approach is untenable. I challenge this Governing body to recognize the need for strategic change.

SOPAC, and particularly the region need more people to lead the cause for change. In this regard I congratulate the Prime Minister of Fiji for his timely speech to the UN General Assembly.

But we need more people to champion our basic needs and issues at every level. I look to representatives on this governing body to take up the challenge in the way we manage the future of our member countries and the Pacific Region.

SUMMARY RECORD OF THE THIRTY-FIRST ANNUAL SESSION

1. OPENING

1. The Thirty-first session of the South Pacific Applied Geoscience Commission (SOPAC), was held in Suva, Fiji Islands, from 25th September to 2nd October 2002. Its Council Sessions including the joint Session with its Technical Advisory Group (TAG) was held at the Forum Secretariat; and the preceding two-day scientific meeting of its Science, Technology and Resources Network (STAR) was held at the University of the South Pacific.

2. The meeting was called to order by HE Mack Kaminaga, representative of the Marshall Islands, Outgoing Chair of SOPAC Governing Council.

3. The opening prayer was offered by Mr Pene Agadio, Deacon of Meneng District, Republic of Nauru.

4. The Honourable Remy Namaduk, Minister Assisting the President of Nauru, gave the Opening Address on behalf of the Government and people of Nauru.

5. The Honourable Minister highlighted to the meeting that his Government had also had the privilege of being Chair of the Pacific Islands Forum in the past year, and that in this capacity the Nauru Ambassador was Chair to the Pacific Islands Forum Group at the United Nations in New York and as such led the presentation of the Pacific Islands states case into the preparatory process for the World Summit on Sustainable Development recently concluded in Johannesburg, South Africa. He acknowledged the good success enjoyed by the Pacific Island states in leading the lobby to include ocean and islands on the agenda, both of which feature prominently in the Johannesburg Action Plan. For those who were less optimistic about the outcome of the World Summit in the area of targets, the Honourable Minister challenged the SOPAC Governing Council and all its partners in development that the inability to set targets at the global level was indeed excellent reason to now set them at the regional level. He urged the SOPAC Governing Council to rise to this challenge in the crunch issues of the energy and water sectors and set targets for the region. He gave the poignant case of his own nation Nauru as being a prime example in the Pa-

cific of 'unsustainable development' and how they now live with the mammoth task of rehabilitation since their independence. He confirmed that Pacific Island states are looking to the scientific community for assistance in addressing many of the developmental problems facing them, like vulnerability, coastal erosion, power shortage and droughts.

6. The Honourable Minister's speech is produced in full in this volume.

7. On behalf of the SOPAC Governing Council, HE Mack Kaminaga thanked the Minister for his opening message.

8. The Director of SOPAC, Alf Simpson, addressed the SOPAC Governing Council and its partners in development. In the address he drew attention to the lessons that the region needed to learn regarding bottlenecks to secure progress and development. If the solutions being sought were based only on "offence, or a response based on defiance instead of alliance then the cures to Pacific ills are doomed to fail because we seek to impose a cure to the pandemic of violence rather than to prevent festering trouble spots or often innocuous problems from developing in the first place. The Pacific needs to observe and learn the lessons - quickly, because what might at first sight seem like an insignificant community concern, unattended could lead to a matter affecting national security." He went on "through the eyes of SOPAC" to look at some of the homegrown basic issues that were dealt with in the past in a fragmented and unstrategic way. The new way of doing business with the strategic and integrated programming approach was now the "right vehicle" "pointing in the right direction". He voiced his hope that SOPAC's clients and member countries would also see the strategic approach as the way forward to address many of the region's problems. "SOPAC, and particularly the region need more people to lead the cause for change and champion our basic needs and issues at every level".

9. The Director's speech is also produced in full in this volume.

10. Delegates from the following member countries were in attendance: Australia, Cook Islands, Federated States of Micronesia, Fiji,

Kiribati, Marshall Islands, Nauru, New Zealand, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. New Caledonia attended as an associate member. Potential associate member, American Samoa also attended. A full list of participants is appended as Appendix 1.

11. The European Union (EU), France (IRD), Japan (JAMSTEC & JICA), Korea (KIGAM & KORDI), Taiwan/ROC, the United Kingdom (DFID & BGS), the United States of America, the University of Hawaii, IOC/UNESCO, WMO, WWF, the University of Queensland, attended as observers and supporters of SOPAC.

12. The following CROP organisations were represented: Pacific Islands Forum Secretariat (PIFS), Secretariat of the Pacific Community (SPC), South Pacific Regional Environment Programme (SPREP) and the University of the South Pacific (USP).

13. Other institutions and representatives of the private sector and civil society were also represented. These are also fully documented in the List of Participants in Appendix 1.

2. ELECTIONS

14. The Outgoing Chair HE Mack Kaminaga gave a short final address expressly to record deep gratitude to his fellow Governing Council members and the Secretariat for their support and assistance during the Marshall Islands' tenure as Chair of the SOPAC Governing Council.

2.1 Chair and Vice-Chair of SOPAC

15. Ms Angie Itsimaera, Secretary for Foreign Affairs and National Representative of Nauru to SOPAC, was elected the new Chair of the SOPAC Governing Council.

16. Mrs Sisilia Talagi, National Representative of Niue to SOPAC, was appointed Vice-Chair of SOPAC in accordance with the Rules of Procedure.

2.2 Chair of STAR and TAG

17. The Governing Council accepted STAR's nomination of Professor John Collen of Victoria University of Wellington to continue as Chair of STAR and of Mr Faatoia Malele of Samoa to continue as Vice Chair.

18. The Chair of Council would chair the joint meeting of Council and TAG and share her Chair duties with Mrs Sisilia Talagi, National Representative of Niue to SOPAC.

2.3 Appointment of Rapporteurs

19. Ms Lala Bukarau was appointed Rapporteur.

3. AGENDA AND WORKING PROCEDURES

3.1 Adoption of Agenda

20. The Governing Council adopted the provisional agenda as presented in AS30/3.1 (*Provisional Agenda*). The approved agenda is attached in Appendix 2.

21. They also accepted the draft working schedule (AS31/3.1/Info1), working procedures (AS31/3.1/Info2), and noted the list of conference room documents (AS31/3.1/Info3).

3.2 Appointment of Drafting Committee

22. An open-ended drafting committee was appointed comprising Australia, Cook Islands, Fiji, Federated States of Micronesia and Samoa as the core group to oversee the production of a Summary Record of Proceedings. According to the Rules of Procedure, Niue was appointed Chair of the Drafting Committee.

3.3 Appointment of Sub-Committees

23. No sub-committees were appointed.

4. REPRESENTATION

4.1 Designation of National Representatives (AS31/4.1)

24. The Chair invited responses from all member country delegates to confirm the information given in paper AS31/4.1 (Designation of SOPAC National Representatives) that was circulated. The amended full list is attached as Appendix 3.

25. Samoa raised the fact that they were the only country on the list that had the post of National Representative of Samoa to SOPAC

stated as a position and not an assigned name. The Secretariat responded that this was the way in which Samoa preferred to be addressed in the past and that they were free to designate a person or maintain the status quo.

4.2 Membership Issues

26. The Director of SOPAC stated that the Governing Council had been informed about two countries seeking membership this year namely, American Samoa applying for associate membership and Palau submitting an intention to become a full member of SOPAC.

27. The Chair recognised the official correspondence received from the Governor of American Samoa and invited the delegate to address the meeting. American Samoa greeted Council on behalf of his Government and intimated that the American Samoan Power Authority would be the designated national representative to the SOPAC Governing Council. Council unanimously welcomed American Samoa as an Associate Member.

28. In light of the absence of the Palau delegation, Council agreed to the Chair's suggestion to note Palau's intent to apply for membership.

5. DIRECTOR'S ANNUAL REPORT (PART 1A)

5.1 Introduction (AS31/5.1)

29. The Director referred to paper AS31/5.1 and mentioned that Council should note the significant changes from previous years mainly within the Secretariat. He drew Council's attention to the Executive Management Team (EMT) that would take a greater role in assisting with the management of the Secretariat.

30. He highlighted a number of changes that had occurred under the guidance of the Suva-based Council members and thanked the Outgoing Chair for his proactive role in representing Council at workshops and other occasions, such as the launch of the new risk management tool 'Comprehensive Hazards and Risk Management' or CHARM.

6. STATEMENTS

31. Council agreed to the Chair's suggested procedure to hand in written statements to the Secretariat to be tabled in full in the 31st

Session Proceedings. Most member-country delegations made short interventions highlighting the positive contributions of the SOPAC Secretariat work programme to their own national development.

32. Statements from other delegates expressed their support for; and continued commitment to work in partnership with SOPAC to achieve common goals in the SOPAC region.

6.1 Statements from Member Countries

33. These statements are tabled in full in Appendix 4.

6.2 Statements by CROP Organisations

34. These statements are tabled in full in Appendix 4.

6.3 Statements from Supporting Governments and International Agencies

35. These statements are tabled in full in Appendix 4.

6.4 Statements from National Institutions

36. These statements are tabled in full in Appendix 4.

7. DIRECTOR'S ANNUAL REPORT (Part 1b)

7.1 Issues Arising from 30th Annual Session

37. The Director introduced paper AS 31/7.1 and requested Council consider items in the paper as issues raised at the previous Session for action by the Secretariat.

38. Council noted the paper and the progress of action by the Secretariat.

7.2 Summary Report of 2002 Donor Support

39. The Director highlighted key points of the report circulated to Council and indicated the levels of support provided to SOPAC activities by key donors including Australia, New Zealand, Fiji, Canada, Peoples Republic of China, Commonwealth Secretariat, European Union,

France, Ireland, Italy, Norway, Japan, Taiwan/ROC, United Kingdom (DFID), UN agencies – UNDP, UNEP, IOC/UNESCO, ESCAP, UNDESA, WHO, USAID – OFDA, Asian Development Bank, World Bank, the International Institute of Infrastructural, Hydraulic and Environmental Engineering and member-country support from the Cook Islands, Kiribati, Nauru, Vanuatu and Fiji.

40. Australia stated that their approach to funding regional organisations would change from the new year. Although it is expected that the total amount will be similar the funding will be managed differently and will now be along the lines of programme strategies and the project outcomes associated with these.

41. Council acknowledged with pleasure the support from donors.

7.3 Financial Report 2001

42. The Secretariat tabled the audited 2001 Financial Report (AS31/7.3.1). In doing this, the Secretariat brought Council's attention to the explanatory notes it had provided about the report. Council accepted the 2001 Audited Financial Report noting in the management letter the single matter of the need to address member-country membership contributions in arrears.

43. The Secretariat presented the Report on the 2001 Budget Variance and Virement of Funds (AS31/7.3.2). The Secretariat highlighted the net savings of F\$205,872 and also brought to Council's attention the explanations for the significant variations to the different budget lines.

44. Samoa noted that the savings achieved in the Regular Budget offset the over-expenditures and enquired as to the future implications of the trend where the savings were to be used to offset the excesses in expenditure. Samoa also noted that a number of cases of excesses in expenditure were due to costs being under budgeted. Samoa suggested that the Secretariat take extra care during the budgeting process so as to smooth out the variations as reported in AS31/7.3.2. The Secretariat noted Samoa's suggestion and agreed that this line of action would be taken on board.

45. The Secretariat tabled the Report on Assets and Inventory written off for the year ended 31 December 2001 with the explanation that the amount of F\$31,581 was recovered from the assets written off.

46. The Council adopted the Financial Report for 2001.

7.4 Report on 2002 Accounts to 30 June

47. The Secretariat introduced the Report on 2002 Accounts to 30 June (AS31/7.4.1) and explained to Council that these accounts were used to assist with the revision of the 2002 Budget.

48. New Caledonia enquired as to whether the Secretariat had received its voluntary contributions as there had been a problem with the bank details and that the accounts to June 2002 had indicated that their contribution was outstanding. The Secretariat responded that the funds have since then been received.

49. Australia suggested that in future the Secretariat provide explanatory notes setting out an analysis of trends and issues in order to provide context to the unaudited six-monthly accounts. The Secretariat noted Australia's suggestion and agreed that this analysis would be sent out with documentation from the next session.

50. Council noted the unaudited Accounts to 30 June 2002.

51. The Secretariat presented the paper on Member Country Contributions (AS31/7.4.2). An updated status report on member country contributions as at 27 September 2002 was also distributed to Council. The Secretariat brought to Council's attention that the issue of outstanding member country contributions was the only point highlighted in the Auditor's Management Letter. Council agreed to consider this matter further in the Budget and Policy Session in the latter part of the meeting.

7.5 Summary of New Project Proposals

52. The Deputy Director introduced paper AS31/7.5 pointing out the new project proposals and that the large EU-funded project was the subject of its own agenda item (7.6).

53. Samoa sought clarification on whether projects listed were all truly regional in nature or country-specific. Samoa also wanted more details on the label "selected FICs" in Proposal 113 and further tabled their priority areas for work to be disaster and water management.

54. Australia also sought clarification as to whether this was a summary of all SOPAC project proposals, or only non “fee for service” projects requested by member countries. If they cover all proposals, Australia requested that the two types be identified as such on the summary.

55. The Secretariat acknowledged that although the database was initially set up as a catalogue of regional project proposals, however some of the projects listed were actually country-specific. On the “selected FICs” query for project proposal 113; the Secretariat informed Council that an opportunity presented itself through the Forum Secretariat, to prepare a proposal for some funds to address a request by the new Pacific ACP members who were not eligible for European Union EDF8 projects but were waiting for EDF9 to be activated. Council was informed that the full project proposal was rejected, but some resources were pending approval for a pilot project.

56. The Secretariat responded to Niue’s request for further information on specific proposals by assuring Council that the project proposal database was open and could be provided to any member country wishing to examine it.

57. Kiribati also sought clarification on whether they were included the proposal on the Maritime Boundaries Project. The Secretariat replied that a detailed presentation on the inception phase and planned activities of the Maritime Boundaries Project would be provided under agenda item 9.1.

58. Council noted the paper and the guidance provided by some member countries.

7.6 European Union Funding

59. The Deputy Director introduced the Project: Reducing Vulnerability of Pacific Island States: an Island Systems Management Approach (AS31/7.6.1) and highlighted progress to date, acknowledging the great flexibility afforded to the Secretariat by new Grant Agreement arrangements, whereby once a budget was approved, up to 80% of the funds for a given year could be released to the Secretariat, as is the case now.

60. Papua New Guinea sought clarification on whether the interview process for the recruitment of the new EU-Project staff was com-

pleted and asked when the new staff were expected to be in place. The representative also queried as to how interest earned on funds received in advance would be spent.

61. The Secretariat informed Council that a building was in progress to provide the extra room required for accommodating new staff members, however, the recruitment process had been stalled due to the difficulties in contacting referees in Europe. At a further query by Papua New Guinea, the Secretariat confirmed that the applicants had been advised of the delay in recruitment. It is expected that recruitment will be completed during the fourth quarter of this year.

62. Papua New Guinea stressed the importance of completing the recruitment process as soon as possible as many people who had tendered applications for the positions were making enquiries on when the matter was going to be brought to closure.

63. Niue enquired whether there was some flexibility in using the income from the interest on the short-term investment in the work areas of EDF8 funding in the new ACP countries. The Secretariat and the Pacific Islands Forum Secretariat (PIFS), as the Regional Authorising Officer (RAO) for the European Union, confirmed that this was not possible. PIFS elaborated that although there was no flexibility in the use of the funds allocated under EDF8, that under EDF 9 funding for new work would be available to the new ACP countries.

64. Council noted progress with the initial stages of the SOPAC/EU Project together with the project inception, mini-work plan and revised budget for July-December 2002.

65. Council agreed that interest earned from funds received in advance be used for country counterpart capacity building and urged the RAO and EU to support this request.

66. The Secretariat next tabled paper AS31/7.6.2 highlighting the progress to date of the development of the European Union EDF9 regional programme. Council agreed that the SOPAC Secretariat continue to work within the CROP Working Groups to determine the extent of SOPAC’s interventions in the three focal areas.

67. Council also agreed that the SOPAC Secretariat work with the Forum Secretariat as RAO and the EU to establish an extension of the SOPAC EDF8 Project to the new Pacific ACP members who are members of SOPAC.

68. Council noted the Director's further point of clarification for the benefit of the new Pacific ACP members. He pointed out that extension of the present EDF8 project would be funded from the "non-focal activity" allocation in the EDF9. The quantum of funds allocated would depend on the priority afforded to requests made by the countries themselves. He advised the new Pacific ACP members to accord "top priority" status to their project requests to have the edge over the applications for extension of other current EDF8 projects.

7.7 Implementation of the 2002 Business Plan for 2002-2004 Corporate Plan

69. The Secretariat briefed the Governing Council on the implementation of the 2002 Business Plan. The performance on the Business Plans would be presented annually to keep the Governing Council informed on the progress of the Corporate Plan. The Secretariat recommended that Council note the progress on the implementation of the Business Plan.

70. Australia stated that it was happy to note the progress on the Business Plan and supported the recommendation. The reporting process helped member countries assess the performance of the Secretariat in the implementation of the Corporate Plan 2002-2004. However, Australia noted that AS 31/7.7 reported Strategy 1.2 (Work Programme Strategies – WPSs) of the 2002 Business Plan as 'COMPLETE' while the WPSs are presented as 'DRAFT' under AS31/7.8.

71. The Secretariat confirmed Australia's observation and stated that the status on Strategy 1.2 under AS31/7.7 would be altered to read 'WORK IN PROGRESS'.

72. Papua New Guinea stated that when AS31/7.8 is considered, any changes in the structure or wording of the WPSs should be clearly recorded to avoid confusion.

73. The Secretariat clarified that the concerns expressed by both Australia and Papua New Guinea would be taken on board.

7.8 Proposed New Organisation Structure

74. The Deputy Director introduced agenda item 7.8 stressing to Council that this was perhaps the most substantive agenda item, stressing that while it should not detract from other items, the policy implications of the

Organisational Structure are of great importance and that Council must consider the direction that the Secretariat will follow for the foreseeable future.

75. The Deputy Director reminded Council that the Proposed New Organisational Structure had been developed as a key element in the implementation of the Corporate Plan, agreed to in Majuro (2001). Council had instructed the Secretariat to ensure that the work to develop the new structure would have zero impact upon the Secretariat's Regular Budget (RB).

76. The Deputy Director asked Council to note that this structure had been developed within the constraints set by the endorsement of the Corporate Plan, and as such the inclusion of three Key Result Areas and their areas of focus were defined elements of this New Organisational Structure. The three Programme Areas:

Ocean and Islands;
Community Risk; and
Community Lifelines.

77. The Deputy Director outlined the process by which it was agreed to follow a logical framework approach as being most suitable to the strategic management and organisational needs of the Secretariat. He also noted that there had been a consultative process of development that included a Consultation Workshop held in June 2002, to which the Suva-based Council Representatives and Stakeholders were invited.

78. The Deputy Director drew Council's attention to the Programme Area Frameworks included in Attachment 1 of the AS31/7.8. He introduced the key elements of these Frameworks and described the logical hierarchy that had been developed. He also explained that the lower levels (activities and tasks) had not been completed, as these would change as work programmes develop over time.

79. The Deputy Director also drew attention to the existence of a Fourth Programme Area, Corporate Support Services and asked Council to note that this was not a Key Result Area, but provided the necessary support to the Secretariat. He noted to Council that existing policies that underpin the work of the Corporate Support Services may require review and improvement under the Proposed New Organisational Structure.

80. The Deputy Director asked Council to consider the proposed new Overall Organisa-

tional Framework, and described the role of the Directorate, the Executive Management Team (EMT) and the proposed hierarchy of organisation. The EMT comprises the Programme Managers and provides management advice and support to the Directorate, with functions defined through a Terms of Reference.

81. The Deputy Director introduced the Draft Programme Strategy Papers, and stressed to Council that these were draft documents. He suggested that the likely cost implications of introducing the proposed new structure would be in the vicinity of \$50,000. He asked Council to note that the only impact on the Regular Budget would be that of the costs relating to the Corporate Support Services Manager, estimated to be about \$13,000.

82. The Deputy Director called for the Council to consider the progress to date and asked that 1st January 2003 be agreed as a deadline for the New Organisational Structure to be operational. He asked Council when considering the recommendations put forward under the agenda item to agree on a process that would enable this deadline to be met.

83. The Chair asked Council to consider the proposed recommendations and opened the floor for comments and discussion.

84. Samoa questioned the rationale of these positions being funded from the Extra Budget (XB) in light of their being key positions in the new organisational structure and asked why they should not be funded from the Regular Budget to ensure security of tenure.

85. The Secretariat explained that the rationale was endorsed by Council in Majuro. The Secretariat suggested that it may be possible for these positions to be considered under the Regular Budget in the future, however the implications of this would inevitably be that either:

- The Regular Budget is re-structured so that funds were made available for these new positions; or
- The Regular Budget is increased, through increased Member Country Contributions.

86. Papua New Guinea appreciated the Secretariat's explanation of these budget implications, but shared the concern of Samoa over the relative security of these key positions. He asked whether current donor organisations and agencies would consider ensuring Extra Budget contributions to guarantee the secu-

rity of these positions in the long term, or whether their inclusion in the Regular Budget should be a matter for urgent consideration by the Council.

87. The Secretariat reiterated the security provided by Regular Budget funding, and drew parallel with the introduction of ten unit heads under the restructuring programme agreed in 1997. It was noted that under this previous structure most of the ten positions were under Extra Budget.

88. The Secretariat noted the concerns of Samoa and Papua New Guinea but asked that the Council might consider the approval of the overall structure first, before focussing upon such details.

89. Australia in supporting the Secretariat called for the adoption of a logical sequence including:

- Deciding what each Programme will actually do;
- set priority directions and agree on future activities;
- define indicators to monitor performance;
- define the budget for each Programme; and
- then consider what structure the organisation required to do this.

90. Australia welcomed the work already completed by the Secretariat, but indicated that the Strategy Papers were in need of further consideration and development prior to staffing decisions being feasible. However it was noted that following the Programme Areas defined by the Corporate Plan, managerial positions in these areas were a necessary addition.

91. Australia recommended deferring further discussion of the New Organisational Structure until further development of the Strategy Papers is conducted, and until it is clear as to the role and responsibilities of the new Programme Managers.

92. Papua New Guinea asked whether Australia could circulate any specific comments or amendments during this session, rather than wait until the next Annual Session before further discussion of these issues. He indicated that they had no disagreement in principle with the Proposed New Organisational Structure and found it clearer than the existing unit structure, however, he empha-

sised again the critical nature of ensuring financial security for the implementation of the new structure.

93. The Federated States of Micronesia expressed its support for the Proposed New Structure, but welcomed any suggested improvements that Australia may have.

94. The Cook Islands expressed concern at the level of detail being considered during these deliberations, and suggested that such issues should perhaps have been discussed prior to this Council Session. However it was noted that the comments expressed by Australia warranted further consideration and it was proposed that Council endorse the establishment of a working group with a mandated timetable to further develop this New Organisational Structure and accompanying strategies while taking into account the member-country interventions.

95. Papua New Guinea stated that while they agreed with the original recommendations that they would accept modified recommendations as well.

96. Australia clarified in the suggested new recommendations refer only to the higher levels of the proposed New Organisational Structure.

97. The Secretariat confirmed that this was the case, and explained that the new Structure would provide the framework for the new Work Programme and Budget.

98. Niue noted that the proposed documentation is work in progress. It accepted and called for Council to approve the new recommendations so that the implementation momentum is not lost.

99. The Secretariat reiterated the need to approve a time-table for completion of this development process, and stressed the concern over possible stalling of this process, urging Council to agree to the recommendations.

100. American Samoa noted that the strategies and frameworks were in draft format, but expressed agreement with the documentation as presented. It was noted that as drafts, the strategies may change in the future. American Samoa expressed preference for secured funding for the new positions.

101. Fiji accepted the New Organisational Structure and stressed that it was critical, not to lose momentum in the development and implementation process. It called for Council's agreement within this Session.

102. The Secretariat stressed the importance of agreeing to a defined timeframe for development and finalisation, and suggested that Council adopt a process similar to that proposed for the finalisation of the Corporate Plan following the 2001 Annual Session in Majuro.

103. Council:

- (i) approved the new overall organisation structure with (i) three operational programmes; Ocean and Islands, Community Lifelines, and Community Risk, (ii) a Corporate Support Services Programme and (iii) a Directorate supported by an Executive Management Team.
- (ii) agreed to further develop and finalise by 31st December 2002 the programme strategy plans and frameworks for the three operational programmes: Ocean and Islands, Community Lifelines and Community Risk, and a framework for the Corporate Services Support Programme. Council further agreed that its Suva-based missions and the Secretariat [in consultation with STAR and TAG advisers] complete and circulate to Council members a re-draft by the end of October, responses to be received by 15th November, and a final draft distributed by 1st December for final endorsement "out of session" by 31st December.
- (iii) agreed to the establishment of four Programme Managers positions for each of the new programmes, with job descriptions and job sizes to be determined during the process described in (ii) above.
- (iv) agreed that the Secretariat report back on progress with implementation to the next Council meeting, including the new proposed full-staffing arrangements.

7.9 SOPAC-SPC Collaboration

104. The Director introduced paper AS31/7.9 in response to Council's instruction that the Secretariat provide an update on ongoing collaborative projects with SPC.

105. Council noted the paper and the continuing good relations between SPC and SOPAC.

8. MISCELLANEOUS REPORTS

8.1 2001 Annual Report Summary to Council

106. The Director presented the 2001 Annual

Report Summary, which was mailed out to the members of the Governing Council prior to the meeting.

107. Council accepted the 2001 Annual Report Summary and agreed to use it in promoting the work of SOPAC.

8.2 CROP Summary Record and Report

108. The Director presented the Summary Record of the meeting of the Council of Regional Organisations of the Pacific (Attachment 1, AS31/8.2), held at the SPC headquarters in Noumea, and attended by all the Heads of the CROP organisations. He described it as a 'very intensive and fruitful' meeting, where a lot of issues were heard and discussed. He walked Council through the CROP 14th Meeting Record of the Summary Decisions, highlighting areas of direct relevance to the SOPAC Work Programme.

110. He highlighted the resolution of a particular concern expressed at last year's SOPAC Council Meeting regarding the role of CROP Working Groups. There was concern that the CROP Working Groups were making policy decisions that were the sovereign right of independent states. CROP resolved that these working groups were formed to provide advice at the regional level and had no policy decision-making powers.

111. The Director informed the meeting of the existence of the new CROP Handbook recently published by the SPC on behalf of CROP, and copies were freely available from the CROP organisations, especially the publisher.

112. The 15th CROP meeting will be hosted in Honiara by the Forum Fisheries Agency.

113. Council noted the CROP Summary Record. The Secretariat would take note of the recommendations and matters arising from CROP that may have implications for the SOPAC Work Programme.

8.3 Second SPC/SOPAC/SPREP Colloquium

114. The Director introduced the paper AS31/8.3 highlighting that this informal grouping of the heads of SPC, SOPAC, and SPREP was aimed at better coordination of the many common activities among the three organisations. It was particularly important to note the agreement between the three organisations of SOPAC's lead role in regional energy initiatives.

115. Council noted the report.

8.4 STAR Chair Report

116. The STAR Chair addressed the joint Council/TAG session, and presented his report (AS31/8.4) on the 2002 STAR Session that was held at the University of the South Pacific during 25-26 September [Appendix 5 in this volume]. He informed Council that the theme of the STAR Session this year was "Geoscience and Sustainable Development in Pacific Island States, 2002-2012" and during the meeting 47 scientific papers were presented orally and also a number of the poster papers were on display. Abstracts of all papers are published in SOPAC Miscellaneous Report 487.

117. The STAR Chair also presented to the joint Council/TAG Session a couple of personal impressions that provided food for thought on the worth of STAR and good science to good governance in SOPAC member states and the region as a whole. Firstly, he observed the clearly applied nature of most of the research, and how over the recent years these results were more clearly articulated in the STAR presentations. He also attested to the fact that STAR discussions were becoming "increasingly directed at the provision of quality technical advice to the member governments of SOPAC."

118. The STAR Chair went on to say that for "the results of science to be used to the full for society, we have to work at finding all possible mechanisms that allow the flow of information in a **"usable"** form." He pointed out that the STAR, SOPAC, Council interaction that brought together policy makers, planners, managers and scientists was unique in his own experience, and he felt it was "something well worth nurturing."

119. Council expressed its deep appreciation for the report and guidance delivered by the STAR Chair. A lively discussion followed the delivery of the STAR Chair's report that focussed mainly on the critical role of good science in good governance, an issue that needed to be recognised and championed in the Pacific.

120. Fiji commended the quality presentations made at the STAR sessions. Speaking as a former government minister, he acknowledged the gap between developed and developing countries and the great value of the information presented at the STAR Session

to decision makers. He also highlighted the need for leaders to attend STAR so as to use the valuable resource that was the technical information on remote sensing, tectonics and geology for policy development. He thought that there was value in closing the gap between STAR and decision-making at the highest level and suggested a possible future session organised through the STAR Chair.

121. In taking note, the STAR Chair considered the suggestion very valuable and one he would look into for next year's meeting.

122. The Director added to the observations made by Fiji and referred to his opening statement where he identified the gap between science and policy as a bottleneck to progress and development. The challenge to implementation of initiatives like WSSD was a fundamental understanding of science and technology which he felt needed to be addressed urgently. He suggested that it might be appropriate for STAR to convene a symposium in the Pacific every couple of years, that brought together all the CROP organisations, and other scientists and policy makers to resolve some barriers to addressing sustainable development in the context of issues particular to the Pacific.

123. Papua New Guinea particularly thanked the Chair of STAR for the proposals made for hazard research in Papua New Guinea and hoped that the results from the study would be of value to all member countries. He also enquired whether there had been any discussion of potential research on underwater volcanic activity in his country; highlighting the importance of appreciating traditional and oral history in helping to save lives. The latter advice was prompted by the recent Papua New Guinea experience of leaping to the highest state of alert and totally evacuating people in and around Rabaul when old people in the area observed the same abnormal behaviour of animals along with the water seeping out of the sand which they observed before a volcanic eruption in 1937. This was while the 'experts' had advised a state of alert two grades below 'total evacuation'. Papua New Guinea while acknowledging the suggestion and importance of scientific presentations, hoped that it would not take a disaster such as in the case of Papua New Guinea for decision-makers to take note at national and regional level.

124. Fiji supported Papua New Guinea on the use of traditional or local early-warning systems to supplement science. He was, however, not sure why it was not officially documented as a supplement to science and technology

probably because of the "superstition" label accorded to this type of practice in many quarters.

125. Cook Islands endorsed comments expressed earlier by fellow Council members on mechanisms for bridging the gap between science and decision-making, and not waiting for things to get out of hand before using the information that was already accessible at SOPAC. He also endorsed the comments made by the Director.

126. Niue prompted Council to acknowledge the presence of scientists and expressed appreciation for their presence and commitment in attending Council meetings to keep us refreshed with scientific ideas, as they attended at their own expense. The representative agreed that there was a need to incorporate science into policy; and concurred with the view that traditional knowledge had its place in the bank of knowledge that was already available in Pacific communities. She posed the question on where-to-next, with regard to the scientific knowledge presented at STAR? Whether there was a need for STAR senior members to advise Council as a whole on what in the proven-result areas to take forward; or whether that was left to individual countries to pursue with individual presenters.

127. Australia thanked STAR and in acknowledging the ensuing comments on the integration of science and policy, encouraged the Secretariat to heed the advice of the STAR group and review the STAR recommendations when prioritising the Work Programme strategies, paying particular attention to member-country needs.

128. American Samoa requested access to presentations made at the STAR Session, preferably in the form of a CD, and suggested that Council members as heads of departments fill the technology gap between scientists and policy makers in country. He also supported Fiji's recommendation for the inclusion of presenters of traditional knowledge in early-warning systems, to scientific sessions, acknowledging that they do work.

129. The Deputy Director indicated that this organisation was unique, in his view, in that it has direct access to a high level of expertise at the global level to deal with its business: the science and technology that underpins the work which Council decides that the organisation was to do. To his knowledge, it was the only organisation that had direct access to the state-of-the-art science and technology through the STAR meetings, as is the

case now with the presence of the Chair of STAR to advise Council. The Secretariat was trying to capture the question of 'where to next?' within the new strategic directions and framework of the new programme in the organisation. He suggested that the Chair of STAR, in conjunction with the Cook Islands and Fiji craft the recommendation to capture the "where-to-next?" in terms of ensuring the link is forged between science and decision-making at every opportunity that was available in the future.

130. The Deputy Director pointed out several planned meetings that afford an opportunity to strengthen the links between science and policy makers. These meetings include: the International Community Risk meeting in May 2003, Adaptation to Climate Change meeting, in Nadi early next year, and with FOC agreement, in the lead up to the Forum Economic Ministers Meeting, a meeting to address the adaptation of science and technology to link to environment and economic ministers. There was also the Ocean Forum which was already on the calendar, and the preparations leading up to Barbados +10. This would also be an issue that the Secretariat would take to new CROP Sustainable Development working group meeting scheduled for the week following the Council meeting. The Secretariat will ensure that the consideration of the use of traditional knowledge, as it impacts early warning systems would be placed on the agendas of the Ocean Forum and the International Community Risk meetings.

131. The Chair of STAR responded to comments made by Niue and American Samoa expressing the desire to access the presentations made at STAR. He confirmed that a number of speakers had provided electronic copies of their full papers and he was encouraging the other speakers to do the same. The Chair of STAR stated that the value to Council of STAR was its complete independence, but the downside of that independence was that STAR was a fluid and informal organisation making it hard to have the capacity to organise things in advance. He invited Council to go directly to the speaker if they became interested in any STAR presentation as he knew of their willingness to supply the information and to tailor it to the specific needs of the member countries. The issue of making the wealth of information presented at STAR readily accessible was something the Chair was looking at for the future. The Director committed the Secretariat to providing all member countries with STAR presentations on a CD-Rom.

132. In response to the comment by the Cook Islands on the large volume of data that was available and its use, the Chair of STAR made a plea to the Joint Council/TAG Session the frustration of scientists when they are asked to comment on a problem situation, when they had no idea about the non-problem situation. He strongly emphasised the importance of obtaining baseline data on non-problem areas, "let us find out what the normal situation is and then when something goes wrong we are better placed to deal with it." Some of the longest record of baseline data comes right back to the earliest work of SOPAC, for example, coastal surveys conducted as part of the early training courses.

133. Council agreed that it was vital to develop and strengthen the linkage between the scientists and the policy makers to ensure that scientific and technical information was factored into the decision-making process. Council further agreed that this link needed strengthening at both national and regional level in order to utilise every opportunity for the results of SOPAC's programmes to contribute to sustainable development in the region. In order to further this decision – Council asked its TAG advisers in conjunction with the Secretariat to use every opportunity, especially at upcoming meetings to have an item on linking science and policy on the agenda.

134. The technical adviser from the British Geological Survey expressed appreciation to Council for the supportive comments from the member countries. He felt that the choice of venue for STAR was opportune as USP students were able to sit in and listen, with a good presence by the SOPAC Earth Science and Marine Geology Certificate Course students.

135. IOC recognised the difference in capability of the Secretariat when compared to what it was fifteen years before with regard to the translation of science into policy. With the strengthening of the Secretariat in recent years, it now has the capacity to develop its Work Programme in conjunction with reviewing the recommendations of STAR. He said that even if the Secretariat did not have all the answers it could easily get in touch with the presenters and acquire the information on the science needed for policy making. He mentioned the 2004 GOOS Meeting as another opportunity for the linking of science and policy making to add to the ones mentioned earlier by the Secretariat. There was a possibility of having a half to one-day seminar of STAR in association with that meeting.

136. Papua New Guinea expressed concerns about the weak link between science and decision makers and was of the view that the efforts of the SOPAC National Representative alone was not enough to bridge this gap. He strongly urged the involvement of scientists and the Secretariat in facilitating the flow of information toward the higher policy level, and further urged the involvement of all stakeholders at every step to ensure the smooth translation of critical technical information into policy and decision making.

137. The delegate from the Forum Secretariat informed Council that traditional or indigenous knowledge is pursued at a different angle throughout the region by the Forum and SPC. The concern at the moment was that traditional knowledge cannot be protected under current intellectual property rights arrangements. A regional system is being pursued to be in place to protect traditional knowledge in the region before someone else patents it to benefit from it for themselves. While it was important for the holistic approach to include the use of indigenous knowledge in helping predict storms and the like, Council should be aware of this other aspect that exists in the region.

138. The delegate commented that the perceived “disconnect” between scientific research and policy was an issue that made him uneasy. He prompted the Director of SOPAC to do some plain talking on what the problem was, as it was clear from all the member-country interventions that it was a problem in the region. He asked the question, “Why is it a problem? What’s the problem with translating available science and results from, for example, resource assessments into policy and getting that policy advice accepted by the leadership?”

139. Papua New Guinea offered an explanation that the simple answer in his country was competing priorities at the national level. Papua New Guinea was adamant that unless all stakeholders are fully engaged, there will be a lack of understanding and appreciation of what science is bringing forward. He stressed that lack of knowledge was what was crippling national development. All relevant agencies at national level must participate so that ‘intelligence’ that was critical to decision making was not lost to the nation, and the representative was strongly encouraging this because the Papua New Guinea experience of Sissano and the tsunami of 1998, recent vol-

canic eruptions and the current water level in the Fly River were excellent illustration of his concerns.

140. Fiji supported Papua New Guinea’s point on the need to incorporate scientific information in the determination of national priorities.

141. The Chair concluded the discussion by suggesting that a mechanism be developed for ensuring scientific and technological advice pertaining to enhancing national decision-making processes could be communicated directly to the Leaders.

8.5 SOPAC Ministerial Level Meeting “Pacific Consultation on Water in small island Countries”

142. The Secretariat presented a “Report on SOPAC Ministerial Level Meeting – Pacific Consultation on Water in small island Countries” (AS31/8.5) outlining the consultation process to the Joint Council/TAG Session as well as the current status of national endorsements. To date, 11 of the 18 small island countries in attendance at Sigatoka have signed the Declaration with 5 countries at this SOPAC Session committing to sign in the near future.

143. Australia, while commending and being particularly supportive of the Secretariat’s approach to freshwater management issues wanted a rewording for recommendation (v) to reflect that the SOPAC Secretariat engagement in preparations for the World Water Forum in Kyoto fit within its Work Programme and Budget.

144. The Director advised that the Secretariat together with ADB and other partners had already succeeded in placing the issue of water and sanitation for small island developing states (SIDS) high on the agenda for the 3rd WWF to be held in Kyoto in March 2003.

145. Fiji commended SOPAC on the initiative and the support accorded to Fiji for attendance at the Sigatoka high-level consultation and ESCAP Energy and Water meeting that was held immediately following the high-level consultation. Fiji was most grateful for the assistance that gave rise to the setting up of a National Water Committee, which although in its infancy, was progressing very well towards establishing a national water strategy, thereby implementing some of the activities contained in the Regional Action Plan.

146. Kiribati endorsed Fiji's and the Director's remarks, confirming that the Republic of Kiribati was one of the countries that would be confirming its full support through the ministerial signature in the next week. He saw no particular need for any further amendments to the recommendations as they were presented in the paper, given that the majority of small island states in the Pacific had confirmed with ministerial signatures their full support for the outcomes of the Pacific high-level consultations on water.

147. Council endorsed the following amended recommendations from paper AS31/8.5:

- i) recognised the transparency and accountability of the Pacific regional consultation process and the consultation meeting;
- ii) noted with pleasure the endorsement of the Regional Action Plan on Sustainable Water Management and Communiqué;
- iii) encouraged and advocated the Member Countries' national governments to endorse the Ministerial Declaration, already signed by Cook Islands, Niue, Samoa, American Samoa and East Timor;
- iv) recognised the link to the WSSD Type II Initiative on Water;
- v) supported the Secretariat's engagement in future preparations for the 3rd World Water Forum in Kyoto, Japan in March 2003, to the extent that such engagement reflected programme strategies and work programme priorities; and
- vi) encouraged the Secretariat and other regional stakeholders, including the donor and development community to support and use the Regional Action Plan to provide a coordinated approach to implementation activities in the water.

8.6 Pacific High Level Consultation Investing in Adaptation

148. The Director introduced paper AS31/8.6 and thanked SPREP for convening this Forum. This meeting heralded an important shift towards involving key decision-makers from other parts of government beyond environment especially those that control directions and resources of government. SOPAC highlighted a few key issues from the Communiqué – the importance to recognise

that climate change was not just an environmental issue; and the importance of risk management and a no-regrets approach to adaptation. To illustrate this, he referred to the example of dealing with water leakage.

149. Australia highlighted the importance of the meeting and involvement of finance with environmental decision-makers to address the issue of climate change. Australia has committed 4 million dollars for project implementation to address adaptation over the next several years. To ensure the funds are utilised effectively Australia is intending to carry out a study to determine an appropriate funding mechanism for implementation of adaptation activities. The Terms of Reference for this study has been circulated to meeting participants and comments were expected to be in by the end of next week. Australia would then be working with SPREP in conjunction with SOPAC and USP to ensure the effectiveness of this work.

150. SPREP indicated that once the Terms of Reference were finalised then USP, SOPAC and SPREP would meet to decide a timeframe for the implementation of the study.

151. Papua New Guinea expressed appreciation for the particular text in the Communiqué paragraph 3(c) on financing and looked forward to implementation of the Communiqué.

152. Council endorsed the outcomes of the Pacific High Level Consultation: Investing in Adaptation and agreed that the Secretariat within its Work Programme activities, engage fully, and as appropriate, in regional initiatives to address adaptation to the adverse impacts of climate change, climate variability and extreme weather events.

8.7 SOPAC Sustainable Development Strategy

153. The Secretariat introduced paper AS31/8.7 on the SOPAC Sustainable Development Strategy by giving a short presentation. The presentation traced the rationale of the initiative from the Strategic Direction 1 of the Corporate Plan that committed SOPAC to "Support Sustainable Development in the Pacific Island Countries". The Secretariat clarified the definition used in the strategy and explained that perceiving sustainable development as a goal that would sort itself out in the long term was one of the major weaknesses of the concept. To contribute to sustainable de-

velopment, it is imperative to focus on the short term and medium term and establish strategies and goals that can be implemented and monitored within manageable timeframes. The Secretariat also reassured Council that the concept of Quality of Growth used in the definition captured the need to harness key elements of development to provide a mechanism to secure opportunities for future generations.

154. Samoa congratulated the Secretariat for the lead it had taken to develop the Sustainable Development Strategy, and felt that the benefits from such an initiative could have been maximised if it had been undertaken as a joint exercise among the CROP agencies. A joint effort would have avoided possible overlaps and duplication of work by CROP agencies. Samoa also recommended that the Secretariat should go further and focus on the unique competitive advantages of the Secretariat and its work programme in the strategy.

155. The Director indicated that there already exists a CROP Working Group on Sustainable Development that is to meet shortly after this Session to follow up on the outcomes of the World Summit on Sustainable Development (WSSD) in Johannesburg. The Secretariat further clarified that the Secretariat's competitive advantages are reflected in the Programme Areas defined by and are captured in greater detail in the Work Programme Strategies. Besides, the Guiding Principles in the Strategy provided guidance for developing the Goals of the Work Programmes.

156. The Forum Secretariat confirmed that a CROP process existed for a follow up on WSSD process. However, the Forum Secretariat felt that the Guiding Principles related not only to SOPAC and instead overlapped with the mandate of other CROP agencies and development organisations. It was further suggested that only Guiding Principle 1 reflected SOPAC's unique technical competencies, and asked the Secretariat to consider whether only this should form the core of the SOPAC Sustainable Development Strategy, while the other guiding principles should perhaps be considered in collaboration with other CROP organisations.

157. The Secretariat highlighted that Guiding Principles 1 and 3 were indeed specific to the Secretariat's technical competencies, but the Secretariat also contributed to the cross-cutting areas such as governance, gender and capacity-building through its intervention. The

Secretariat additionally highlighted the example of governance being a broad concept where SOPAC had a unique role in contributing to issues such as mining governance or non-living resource management, without however operating in isolation.

158. Papua New Guinea commended the Secretariat for taking this initiative but was concerned about potential duplication of work effort and stressed the importance of CROP organisations working together as they all worked for the same countries in contributing to sustainable development

159. Sustainable Project Management (SPM), a private sector stakeholder that participated in the strategy initiative commended the Secretariat on the initiative and reminded Council of the process, in particular the Workshop in June 2002, organised by the Secretariat to develop the document. SPM also looked forward to the implementation of this strategy and highlighted the role of partnerships in its implementation, stressing their interest in establishing a partnership with the Secretariat.

160. American Samoa asked the Secretariat whether high-level consultation with CROP organisations was conducted during the development of this strategy and queried whether there existed universal acceptance of the sustainable development definition used in this paper. It sought clarification on whether the needs of the current generation were adequately represented in the definition.

161. Australia acknowledged the research efforts of the Secretariat but expressed that it shared concerns regarding what the Sustainable Development Strategy actually meant in terms of SOPAC's core work and the possibility of duplication of work.

162. Kiribati shared the views of Australia and also expressed that in small atoll countries with looming long-term vulnerabilities the present needs to be stressed as much as the future.

163. The Director noted that this paper was developed with extensive consultation among the CROP organisations and other development partners. It was prepared in order to generate discussion and get members to consider and recognise some of the development issues in the lead up to WSSD. While the document was developed within a strict timeframe, it still elicited the participation at various stages from SPREP, SPC, the Forum Secretariat, World Wildlife Fund, major donor organisations and other development partners. It was

stressed that the Sustainable Development Strategic Paper was one element of Strategic Direction 1 from the Corporate Plan while the Work Programme Strategies would provide the additional dimensions.

164. Papua New Guinea commended the strategy as an excellent venture that focuses on the bigger picture of development, whose benefits would be lost if the strategy were withdrawn. Besides, it felt that it would be unfair to penalise SOPAC for displaying the initiative. It was stressed that the concerns were more about getting CROP organisations to work together for the greater good of the Pacific Island Countries.

165. The Secretariat again provided clarifications on the definition of sustainable development and the elements of Quality of Life and Quality of Growth. The Council was reminded of the participatory and consultative process adopted in developing the definition and guiding principles.

166. Cook Islands commended the work already completed but expressed the concern that the document probably represented a level of influence over and above what the organisation was capable of delivering. It was additionally recommended that the Work Programme Strategies be finalised with a strong focus on SOPAC's competitive advantages.

167. Niue commended the Secretariat for taking the lead and also suggested that the Secretariat consider the recommendations of the Council while finalising the Work Programme Strategies.

168. Fiji queried whether the discussions were focussing on minor details and noted that the Guiding Principles were in fact appropriate for all CROP organisations.

169. Federated States of Micronesia recognised and supported the document in its current form, and conveyed the keen interest in the document displayed by the Federal Government in Palakhr. Federated States of Micronesia also pointed out the importance of scientific information in promoting good governance and informed decision making in countries.

170. The Secretariat stressed that the realisation of Guiding Principle 1 would lead to more effective use of scientific information in developing national policies and legislation.

171. The Chair suggested that the document be presented to the CROP Sustainable Development

Working Group for consideration as the template for a regional strategy on Sustainable Development for the CROP agencies.

172. Council commended the Secretariat for its initiative to develop a SOPAC Sustainable Development Strategy as a timely activity during the year of the WSSD. Council agreed the Secretariat further develop the Sustainable Development Strategy in conjunction with the Work Programme Strategies. Council also suggested that the document be forwarded to the CROP working group for consideration as the basis for a regional strategy.

8.8 World Summit on Sustainable Development (WSSD)

173. The Secretariat introduced Agenda Item AS31/8.8 and advised that there were two papers for consideration:

- Paper produced for World Summit in Johannesburg
- Supplementary paper AS3.1/8.8 Supplement 1

174. Samoa acknowledged the presentation made by the Secretariat and highlighted the close cooperation evident at WSSD between PIC delegations and representatives of CROP. The Pacific were well prepared and strategically placed in terms of representation to put forward their views as a group. Samoa acknowledged its appreciation to SOPAC and other CROP organisations present at WSSD, including USP, for the advice and technical backstopping provided to PIC delegations. Samoa was satisfied with the outcomes of WSSD and looks forward to the further development of Pacific initiatives, many of which would involve SOPAC.

175. Australia commended SOPAC's involvement in the WSSD process and the subsequent report which demonstrated the importance of SOPAC's involvement. Australia also expressed concern on SOPAC's full engagement in Barbados +10 process which could be resource intensive and would take several key people away from their core tasks for an extended period. Australia highlighted that unlike WSSD, the Barbados+10 review covers many issues that are well removed from SOPAC's key role. Australia is interested in seeing how this engagement would fit in with SOPAC work programmes and strategies and expressed concern that this involvement may disadvantage work programmes in member countries.

176. The Secretariat replied acknowledging donor support for the participation of the Deputy Director and leadership of the working group by PIFS and SPREP in the WSSD process. The Secretariat noted that the CROP mechanism worked extremely well with a common focus. This augurs well for the Pacific's preparations towards Barbados+10 and the implementation of WSSD process.

177. One of the key issues to be addressed at Barbados+10 is vulnerability. SOPAC has taken a lead in the development of an Environmental Vulnerability Index. This process has been initiated with the support of member countries and Forum leaders. As has been the case for WSSD it is not expected that SOPAC's Work Programme should suffer. SOPAC among other CROP organisations has its distinct role as technical advisor to member countries and the benefits from its active involvement have been shown through the many positive outcomes of WSSD to the region as a whole. The effectiveness of CROP involvement has been dependent on the cooperation from partners and funding support.

178. Australia thanked the Secretariat for clarification and did not discourage its participation. Australia again reiterated that SOPAC's engagement only be to the extent that it is relevant to the strategic programmes and ensure positive benefits and outcomes for member countries.

179. Niue noted the papers presented and expressed their support for the Secretariat's full engagement. Niue further stated that the regional report from WSSD should be made available at this meeting.

180. Chair advised that SOPAC should take on the role and the Secretariat will decide how its played out and take on board Australia's reservations.

181. Papua New Guinea noted the supplementary paper and mentioned the important work of the EVI and the need to secure further support by the end of the year. Papua New Guinea is keen to see this project completed so that it may utilise the EVI tool in the identification of key environmental vulnerability issues and determine appropriate responses. Papua New Guinea expects that other member country are just as keen to see that the project is completed.

182. The Secretariat queried the Forum Secretariat on the name of the working group on Sustainable Development and the date for the next meeting. The Forum Secretariat replied

that the working group is called the "Sustainable Development Working Group" and the first meeting is on Thursday 3 October 2002.

183. Council noted the Secretariat's full engagement in the World Summit on Sustainable Development process and agreed the Secretariat remain fully engaged with follow-up activities.

184. Council agreed to the Secretariat's engagement in the preparations for the Barbados+10 review in 2004, to the extent that it is consistent with the priorities identified in programme strategies.

8.9 Gender Policy

185. The Secretariat introduced the draft SOPAC gender policy to the Council, and indicated that it would follow a process similar to that adopted by Council for the SOPAC poverty Paper in Tarawa, in 2000. The policy paper will be submitted for endorsement at the annual session next year.

186. The gender policy is a key element in the realisation of the SOPAC strategic direction of contributing to sustainable development in its member countries. Gender consideration has emerged as a key development priority and it is increasingly being recognised in donor priorities. Achieving gender balance is not merely about the empowerment of women; it is also about encouraging participation at all levels.

187. This initiative to develop a gender policy for SOPAC is a follow up on the decision by CROP organisations in 1998 to develop and implement gender policies within each organization. SOPAC's commitment to gender was made clear through Strategic Direction 1 (Support Sustainable Development in Pacific Island Countries) and 2 (Institute Good Corporate Governance) in the Corporate Plan (2002-2004). While it is implicit in the first it is a key output of the second. The focus of the gender policy has been to analyse SOPAC's role, and then identify how it can be applied specifically in the context of its work programme interventions. The presentation ended with a recommendation to Council to endorse the process to develop a policy through wider consultations.

188. Tonga enquired what the impact of this gender policy would be on the role of regional organisations of the Pacific including SOPAC.

189. Secretariat clarified that the initiative

to develop a gender policy was the outcome of CROP. SOPAC had gone a step ahead to identify and focus on those areas where there were visible benefits from adopting a participatory approach.

190. Forum Secretariat confirmed that the gender strategy was endorsed by CROP members in 1998 and the commitment among regional organisations to implement a gender policy. Further, the Forum Secretariat also emphasised the need for the policy to operate at internal or organisational level as well as externally at work programme implementation level.

191. Papua New Guinea thanked the Secretariat for the effort put in both at the organisational and CROP levels to develop and promote gender strategies. Papua New Guinea also added that these regional initiatives should link with efforts at the national level to incorporate similar considerations in development planning, policymaking and project implementation.

192. Sustainable Project Management (SPM) informed the Council that it was involved in the process of developing the gender policy through its participation at the sustainable development workshop in June 2002. While policy development is the necessary first step, true commitment to gender balance could be demonstrated only through the implementation of the policy. SPM would look forward to seeing SOPAC develop appropriate tools for the implementation of its gender policy over the next 12 months.

193. The Secretariat assured Council that the organisation would secure adequate training for its staff for the implementation of the policy with the assistance of the Gender Issues Adviser at the Forum Secretariat. The organisation would also invest efforts to adopt a more accountable process within the organisation through the development of indicators to measure the efficacy of the policy and ensure effective implementation.

194. The Director advised Council that approval was sought for policies such as gender, poverty and sustainable development with the desire that these policy frameworks would ultimately contribute to improved decision-making processes. Rather than simply following international development thinking such as millennium development targets (MDGs), the Secretariat had made an effort to understand these issues in the Pacific context and then examined how SOPAC could realistically contribute to them.

195. Australia commended the initiative and emphasised the need to develop the policy further relating gender issues to SOPAC's programme implementation and the internal corporate environment.

196. Council noted the draft gender policy and endorsed the development of such a policy in full as a proactive step in promoting SOPAC within the region and enhancing its competitive advantage as a regional centre of excellence.

197. Council agreed there is benefit in the further development of this work, in the form of a SOPAC gender issues paper, similar in form and function to the SOPAC poverty alleviation paper, published in 2001.

9. DIRECTOR'S ANNUAL REPORT (Part 2)

198. The Deputy Director introduced the new programmes and advised Council that this was the point in the joint TAG/Council meeting wherein discussions of the technical elements of the past year's and future work programme would be carried out. He explained that approval of the work programme and budget for 2003 was a separate issue that would be considered by Council in Agenda Item 11.5. He described the rationale for the "Buddy System" as being a consultative process between a designated senior technical professional of the Secretariat and individual delegations on matters pertaining to the work programme, both to validate activities and determine their national priorities for future work programming.

9.1 Oceans and Islands Programme

199. The Secretariat introduced the order of the presentation of the Ocean and Islands Programme to the meeting and advised that it would comprise three parts:

- Reflection and reporting on the achievements in 2002.
- Tabling of five papers, for TAG/Council consideration and decisions.
- Presentation of the proposed Ocean and Islands work programme for 2003 and relevant recommendations of STAR.

200. They advised that the outcomes of the deliberations of Agenda Item 7.8 had been noted and looked forward to the further development and finalisation of the draft Pro-

gramme framework and strategy by December 2002.

201. For reporting on the 2002 Work Programme the Secretariat referred the meeting to specific sections of Part 2 of the Director's Annual report, for detailed reports on coastal, mineral resources, ocean and human resource development activities. They advised the meeting that for the purpose of the presentation key highlights would be reported under the key components (Resource Use Solutions, Monitoring Ecosystem Change, Capacity Building, Advocacy and Awareness, Governance and Strategic Management) of the proposed programme framework.

202. Under the component Resource Use Solutions the Secretariat explained that nine major activities had been completed: six using SOPAC's swath mapping system in the coastal areas of 5 member countries and two marine scientific research cruises linked to the SOPAC/Japan Co-operative Deepsea Minerals Programme (SOPAC/Japan Co-operative Programme). Noting that more detailed presentations on some of these activities had been made at the recent STAR Session, they highlighted the following:

- Surveys completed in the States of Chuuk and Yap of Federated States of Micronesia, which provide comprehensive seafloor data and information for more efficient and safer management of commercial seaports and harbour facilities.
- Detailed mapping of the WWII wreck Mississinewa in Ulithi, Federated States of Micronesia, the result of an urgent request by Federated States of Micronesia following two oil spill incidents from the wreck in 2001. Reminded the meeting of the instruction given by the respective Councils of SPREP and SOPAC to develop a regional strategy to address issues relating to WWII wrecks in the region.
- A demand driven request by the Department of Fisheries in Fiji, for environmental monitoring and seafloor mapping of the Kiuva Lagoon and reef system. The Secretariat advised that the results of monitoring and seafloor data would improve understanding of the system and result in more prudent development decisions for a seaweed farming initiative in the area, which will provide income-generating opportunities for rural communities. They also advised of the active participation of the Mineral Resources and Fisheries Departments

of Fiji and the Marine Studies Programme of USP were actively involved in the project.

- Mapping in Majuro, Marshall Islands, to identify and assess potential offshore prospects of sand resources, as aggregate for construction purposes, and to determine the potential environmental impacts of the recovery of these. The Secretariat informed the meeting of recent assistance provided to Kiribati to select appropriate dredging technology, which would enable the recovery of sand resources identified in previous aggregate assessment surveys.
- Successful drilling of polymetallic massive sulphides and ferro-manganese cobalt-rich crusts during marine scientific research cruises conducted within the EEZs of Fiji and the Marshall Islands, respectively, under the SOPAC/Japan Co-operative Programme.

203. Other activities carried out to provide Resource Use Solutions were also highlighted but not elaborated upon. They included: the mapping and modelling of Vaiusu Bay, Samoa, to assess a proposed fisheries port facility and old dredge workings; mapping to assess proposed modifications to the Muaiwalu Berth, Fiji; mapping to collect baseline data for proposed reclamation of land in Lami, Fiji; and, the assessment of coastal erosion in Tongatapu and Atata Islands, Tonga.

204. With respect to the Regional Maritime Boundaries Project (RMBP), the Secretariat informed the meeting of the status of the AusAid funded Inception Phase of the Project. They outlined the completed and ongoing activities as including: the transfer of existing data and information from the FFA to SOPAC; a regional consultation in April 2002 to confirm stakeholder priorities and commitment; validation of the data and information, collected under the FFA – based Project; and, seeking development assistance partners for the implementation of the project through proposals to AusAid, UN-DOALOS and a concept document to the Asian Development Bank. They advised that subject to confirmation of funding support the implementation phase of the Project would commence in early 2003.

205. Under the component Monitoring Ecosystem Change, the Secretariat presented examples of five activities carried out in 2002 and noted that more detailed presentations addressing various methods of monitoring and observation of ocean and island systems were presented in STAR.

206. Kiuva Lagoon and reef system in Fiji was held up as an example of the value of monitoring various physical parameters such as salinity, temperature, currents and wave conditions in order to understand and manage the impact of these on seaweed productivity. The Secretariat provided a brief description of its inputs to the third phase of the South Pacific Sea Level and Climate Monitoring Project (SPSLCMP-III), being to install and maintain tide gauges, with eight countries visited since implementation of the current project phase.

207. Other activities highlighted but not elaborated upon included the provision of advice for appropriate long-term monitoring technologies for real-time monitoring of oceanographic and atmospheric parameters in Manihiki Lagoon, Cook Islands; current metering to develop a circulation model of Vaiusu Bay, Samoa; and beach profiling, levelling and remote sensing techniques to assess historical change in the coastal area of Tongatapu and Atata Island, Tonga.

208. The Secretariat then presented the activities contributing to the Data and Knowledge Management component. They advised that a modified Marine Scientific Research Coordination database is being tested and would be fully implemented in 2003 and that a paper would be presented to Council concerning the SOPAC Petroleum DataBank. Furthermore they noted the Programme had continued maintenance activities on the following other established databases including: SOPAC Petroleum DataBank; Regional Deep-sea Minerals; Physical Oceanographic Data; Shallow Water Bathymetry; and, Beach Profiles.

209. With regard to capacity building the Secretariat highlighted the completion of the third year of the Certificate in Earth Science and Marine Geology Course in 2002 and advised that 15 students from eight SOPAC member countries had successfully completed the course and would graduate from the University of the South Pacific in December 2002, with a Certificate in Earth Science and Marine Geology.

210. The following activities, although not elaborated upon, were also reported as having contributed to capacity building: in-country workshops for the SPSLCMP III; the attendance of Fiji, Papua New Guinea, Solomon Islands and Tonga at a course on Article 76 of the United Nations Convention on the Law of the Sea Workshop, offered by the Southampton Oceanographic Centre in the United King-

dom; onboard and post-cruise participation of Fiji and Marshall Island Nationals for the SOPAC/Japan Co-operative Programme cruises carried out in December 2001 and in July 2002, respectively; staff attachments at the Secretariat and a GIS workshop for the Manihiki Lagoon System Management, Cook Islands; and, on-the-job training of professionals from Fiji's Mineral Resources Department and the Department of Fisheries, during the Kiuva Lagoon and reef system, Fiji survey.

211. On the Advocacy and Awareness component the following activities were briefly highlighted: Regional Consultation for the RMBP; Brief on Pacific Ocean and Law of the Sea Priorities and Issues, for the third meeting of the *United Nations Informal Consultative Process on Oceans and the Law of the Sea* (UNICPOLOS) and, the United Nations Secretary General's Report on Oceans to the 57th General Assembly; Stakeholder consultations on management of Manihiki Lagoon, Cook Islands; promotion of the Pacific Islands Regional Ocean Policy in national, regional and global fora; Paper to the SPC Aquaculture Workshop on demonstrating the synergies between applications of geoscience products for living marine resources management; Regional workshop on *Potential Applications of Ocean Observations for the Pacific* in October 2002, for improved forecasting, planning and management decisions of both ocean and islands systems; participation in public and government consultations on environmental impact assessment.

212. The Secretariat reported on the paper presented by the SOPAC Director to the Fiji Tourism Convention in late 2001, which discussed the important and essential role of geoscience for sustainable tourism development, and made further comment that this applied to all types of infrastructural and economic development in island and coastal systems.

213. For the Governance component, the Secretariat highlighted its proactive role within the CROP-Marine Sector Working Group in the drafting of the *Pacific Islands Regional Ocean Policy*. The Policy, which is an essential building block for good governance of our Ocean, provides a platform to develop a strategic, integrated framework for action of the Pacific Ocean and its living and non-living resources. Other activities cited included the regional guidelines for marine scientific research and, the Manihiki Lagoon System Management Plan, based on map products and a comprehensive GIS.

214. With respect to the Strategic Management component of the programme, the Secretariat provided a brief description of its role and involvement in the development of the Sustainable Development Strategy and the draft Ocean and Islands Programme Strategy. The Secretariat continued to outline the project concepts and proposals that had been submitted to various development assistance partners such as Australia, Commonwealth Secretariat, Government of Japan and UNDOALOS; and very recently with the Asian Development Bank.

215. The Chair then opened the floor for comments on the reporting of Ocean and Islands work programme activities for 2002.

216. New Caledonia informed the Secretariat that the limit of their EEZ represented on the SOPAC/FFA map of PIC EEZ is incorrect and that a bilateral agreement has been signed between Australia and France. This was duly noted by the Secretariat.

217. Fiji requested an update on the status of the SOPAC Petroleum Databank proposal to Council at its 30th Session concerning the urgent requirement to remaster data into contemporary format and media, and on the status of marine scientific research data held at the Secretariat and the ability to access these. Fiji expressed concern that if the initiative to secure these data is not made now they may be lost forever.

218. The Secretariat informed the meeting that the SOPAC Petroleum Databank issue would be covered specifically under Council paper AS31/9.1.5. On the issue of marine scientific research data the Secretariat advised that implementation of the modified database would provide better cruise coordination in the future. It will also ensure security of data and information of future marine scientific research cruises, and allow for gaps in SOPAC data holdings from past cruises, to be identified and follow-up data requests to be made. The Secretariat also commented that based on previous advice some of these data may indeed already be unavailable due to budgetary constraints to archive it in some researching States that have carried out extensive research campaigns in the SOPAC region.

219. Kiribati registered their appreciation for the work carried out by the Secretariat on aggregates and are looking for continued support from the Secretariat to identify additional offshore prospects in future work programming. Kiribati also expressed their desire to partici-

pate further in the SOPAC/Japan Co-operative Programme.

220. USP informed the meeting that a science/tourism double major undergraduate degree course is being developed at USP, with EU funds and that this would provide a tremendous opportunity for students to be trained in geoscience, marine sciences and tourism.

221. The SPSLCMP III Project Coordinator briefed the meeting on the five-year, AusAID funded SPSLCMP III and highlighted that as a truly regional initiative the project had a number of partners such as SOPAC involved in its implementation. He informed the meeting that SOPAC was implementing the installation and maintenance of field equipment such as CGPS and tide gauges in-countries (with eight of eleven already installed) and that the project intends to store all information and data at the Secretariat, and both these project activities and others such as capacity building nested well within the ocean and islands programme. He emphasised that the outputs of the project have long-term economic implications, as they would improve our understanding and ability to forecast climate change and variability, and sea-level trends and, provide a crucial opportunity to link science with policy. He informed the meeting that the project had allocated funds for four post-graduate degrees, which are now available.

222. The Director highlighted that the Secretariat has tried to develop a template for MSR requests to ensure consistency in the region. Although Council had endorsed the draft template, he advised the meeting that only few countries had implemented this. As requests for approvals and follow-ups for data acquisition are a sovereign right the process of securing MSR data was a national responsibility and that SOPAC assistance is reliant upon member country specific instruction to do so. He advised that to date, only Papua New Guinea had a MSR group and Kiribati was to follow soon as well.

223. The Director also elaborated on the importance of geoscience in tourism especially as countries move toward increasing economic development. As a result, many key process issues such as EIAs, cost-benefit analyses are being overlooked. He emphasised that proper scientific and economic analysis of development proposals is an imperative to sustainable economic development.

224. Cook Islands expressed its appreciation to the Secretariat for its quick and measured

response to a disease incident in Manihiki Lagoon in November 2001. It informed the meeting that the extensive mapping and monitoring programme, had provided products which enable planning and decision making at all levels in the community, including Government, the local Council and the individual farmers, and that it was Government's intention to undertake initiatives to set up similar management systems for other atolls and lagoons. Monitoring has obvious benefits for farmers and managers of the resource, as they are able to make considered, informed decisions using data in real-time, and bilateral funds from NZODA had been allocated to procuring a long-term monitoring buoy for this purpose. He emphasised the need to adopt an integrated approach to addressing issues and highlighted the need to work together as a team.

225. The Deputy Director highlighted to Council the significance of the comments made by the Cook Islands delegate with regard to the importance of SOPAC's swath mapping capability and resultant data products that are critical for the management of ocean and islands systems. He advised that for prudent development throughout the region more of this type of work would be required and reflected on the immense efforts required to carry out these highly technical activities.

226. Fiji expressed their appreciation for the work carried out by the Secretariat. Fiji also noted the value of capacity development within countries as being as important as the need for ensuring regional capacity within organisations like SOPAC, and suggested the need to ensure that resources are secured to match the demand for this aspect of the programme.

227. Kiribati indicated their desire to begin farming pearls and advised that they were encouraged by the Cook Islands comments with respect to their lagoon management plan and system and requested assistance to ensure prudent development of their pearl industry from the outset.

228. Tonga requested an update on the status of the Maritime Boundary Delimitation project since the regional consultative meeting convened in April 2002.

229. The Secretariat responded citing the outcomes from the workshop and the revised priorities of the project design document. They stated that work had commenced with respect to validating data collected by FFA in previous

project phases from 1991 to 2000 and advised that, subject to confirmation of funds, the implementation phase of the project would be started in January 2003 and surveying and other priority activities could then commence. Furthermore, the Secretariat informed the meeting that discussions have been held with various development assistance partners, with interest being received from Australia, Asian Development Bank, and the United Nations Division on Oceans and Law of the Sea with regard to the Continental Shelf Trust Fund.

230. The TAG adviser from IOC suggested that on the basis of the comments made by the Director with regard to current constraints on the effectiveness of coordinating marine scientific research within the region, Council should consider the reinstatement of the position of marine scientific research coordinator, a position that is currently vacant. He advised that an appropriately qualified incumbent to the position would allow timely delivery of services relating, among other responsibilities, to pre-cruise identification, review of the validity of scientific application and recommending additional work that the coastal State may request of the research organisation, comment on and identify training requirements.

231. The Secretariat added to the Director's comments regarding marine scientific research and informed the meeting that at the regional workshop convened in Papua New Guinea in February 2001, draft Regional MSR guidelines had been produced and have been circulated to member countries. The Secretariat now awaits commentary and instruction from individual members, on the role of the Secretariat in their MSR process. The Secretariat recognised the importance of the function of research vessel coordination and suggested that a recommendation to the Governing Council should be presented.

232. The Deputy Director identified the intervention by IOC as important and suggested that IOC and SOPAC draft a recommendation for R/V coordination, as some countries might have the capacity to do this on their own whereas others might require SOPAC's assistance.

233. The Joint Council/TAG recommended that the Secretariat explore all possibilities of restoring the functions of Research Vessel Coordination.

234. The TAG adviser from JAMSTEC supported this recommendation.

235. Kiribati highlighted the importance of encouraging MSR within their EEZ and informed the meeting of their recent initiative to establish a MSR committee and requested SOPAC's assistance in running a workshop to address MSR issues.

236. Papua New Guinea advised that they had made substantial progress with respect to coordinating MSR activities within their EEZ and offered to host the workshop, but requested the need for funding support.

237. The Chair invited the Secretariat to introduce the Council papers to the meeting.

9.1.1 SOPAC-Japan Cooperative Deep-Sea Minerals Programme

238. The Secretariat introduced AS31/9.1.1, which outlined the proposal forwarded to the Government of Japan requesting a continuation of the eighteen year long SOPAC-Japan Cooperative Deep-Sea Minerals Programme, from 2003 to 2005. Advised that the selected SOPAC countries in the proposal are Fiji, Federated States of Micronesia, Kiribati and Niue.

239. Niue expressed their sincere appreciation to the Secretariat for preparing the proposal for the continuation of the SOPAC/Japan Co-operative Programme from 2003 to 2005, and were pleased that they had been selected as one of the four recipient countries to receive assistance under the initiative, highlighting that, to date, very little MSR had been undertaken within their EEZ.

240. Tonga expressed their desire to be included in this programme in the common areas near Fiji, where there is the potential for extension of their continental shelf.

241. Fiji acknowledged the invaluable work that has been undertaken and completed, to date, by the SOPAC/Japan Co-operative Programme within Fiji's EEZ, and gave strong support to the continuation of the initiative. Fiji sought an update on the status of the deep-sea minerals database and its possible conversion to a user-friendly format.

242. The Secretariat noted Fiji's comments and indicated their intention to review the database to improve accessibility to it and ensure its security.

243. The Director suggested that Council may wish to request that the Chair of the Forum

include the proposal as a priority for the Region in their high level consultations with Japan, which are due to be held in October 2002. In response to the intervention from Tonga, he advised that to determine potential extension of their continental shelf requires different surveying tools technology to those intended for the SOPAC/Japan Co-operative Programme.

244. Joint Council/TAG:

- Expressed its deep appreciation for the invaluable contributions made over the past 18 years by the SOPAC-Japan Cooperative Deep-sea Minerals Programme in the area of deep-sea minerals research within the SOPAC region;
- Strongly urged Japan to agree to continue the 18-year cooperative programme for a further three years; and,
- Supported the proposal for a 3-year Phase II of Stage 2 of the programme planned for the period 2003 to 2005 and requested the Director to convey that wish to the Secretary General of the Forum, in preparation for the Chair of the Forum's visit to Japan.

9.1.2 Pacific Islands Regional Ocean Policy and Proposed Ocean Forum in 2003

245. The Secretariat introduced the paper AS31/9.1.2. Advised the Joint Council/TAG that the Forum Leaders had endorsed the Pacific Islands Regional Ocean Policy at their meeting in August 2002. Informed the meeting of the proposed plan to convene a Regional Ocean Forum in 2003 to develop an appropriate Framework for Action for the Sustainable Development and Use of Pacific Islands Ocean Resources.

246. Joint Council/TAG noted the endorsement by the Leaders of the Pacific Islands Regional Ocean Policy and supported the proposed initiative to convene a Pacific Islands Regional Ocean Forum in 2003 and encouraged the Secretariat to be proactive and participate within CROP in seeking and providing support, to convene this important regional meeting.

9.1.3 Intergovernmental Global Ocean Observing System Meeting

247. The Secretariat introduced the paper AS31/9.1.3 and outlined the proposal to convene an Intergovernmental Global Ocean Ob-

serving System Meeting in the SOPAC Region in 2003. Indicated the opportunity to advocate the need for assistance to establish and develop the Pacific Global Ocean Observing System Alliance (Pacific-GOOS), to raise the awareness of the benefits of long-term, routine ocean observations for improved understanding and prudent management of its ocean, islands and coastal ecosystems.

248. Joint Council/TAG supported this initiative and encouraged the Secretariat to actively participate in the hosting of the I-GOOS Meeting in the region in 2004.

9.1.4 Managing Environmental Vulnerability in Pacific Island Countries: Addressing day-to-day land and coastal resource management practices

249. The Secretariat introduced the paper AS31/9.1.4 on the issue of increasing environmental vulnerability of Pacific Island Country communities in day-to-day activities in land and coastal areas.

250. Joint Council/TAG noted the Forum decision on this issue of increasing environmental vulnerability of Pacific Island Country Communities in day-to-day activities in land and coastal areas and requested the Secretariat to respond to the recommendations endorsed by the Pre-Forum FOC and the Leaders Communiqué that specifically relate to the SOPAC work programme.

9.1.5 Upgrade of Offshore Digital Seismic Reflection Data Holdings at the SOPAC Petroleum Databank

251. The Secretariat introduced the paper AS31/9.1.5, which raised the urgent requirement to remaster \$50 million worth of seismic tapes held in the SOPAC Petroleum DataBank at Geoscience Australia, to ensure continued use by the petroleum exploration industry and other users.

252. Fiji highlighted that this particular project has been on the SOPAC agenda for a long time and needed to be addressed with certain urgency due to the ramifications of losing these invaluable datasets. He noted that these recommendations were discussed in detail at the last Annual Session.

253. The TAG adviser from BGS reiterated comments made in the Secretariat's introduction of the paper pertaining to the importance of the data and the uses not only for encour-

aging further exploration work but also for the value of these datasets in addressing the issue of potential extension of the continental shelf for Fiji, Solomon Islands, Vanuatu and Tonga. The Adviser suggested that the estimated cost of AUD\$ 100 000 to remaster the data was insignificant when considering the comparative cost of re-acquisition. Furthermore, commented that as Australia was carrying out remastering of its own data now, this was an opportunity for SOPAC countries and should be vigorously pursued. He noted that when he had tried to obtain multi-channel seismic data from the databank he had been unsuccessful.

254. Vanuatu also expressed their support for securing the data and suggested the option of potential funding from applicants for licences.

255. New Caledonia informed Council of their concerns and the value of remastering old data. Advised that with the advent of new techniques the reprocessing of data acquired in the 1960s within New Caledonia's EEZ had significantly improved the quality of the data.

256. KIGAM informed Council that they had reprocessed some of petroleum data held at the SOPAC Petroleum DataBank and that preliminary results of these would be forwarded to the Secretariat.

257. Joint Council/TAG agreed to the urgency that is required to transcribe the invaluable geophysical datasets and instructed the Secretariat to explore with Australia where the data are held and the transcription will take place, all possible means, to secure the necessary funds for transcription to ensure that these data are not lost.

258. The Secretariat presented the 2003 Ocean and Islands Programme of work to Council and referred the meeting to pages 16 to 29 of Part 3 of the Director's Annual Report and emphasised that the logical framework presented for consideration is an experiment and will be reviewed with refinements to be made by the end of December 2002.

259. They outlined the Programme Goal •*To contribute to scientific knowledge-based governance and management of natural resources, and ocean and island ecosystems* and the two unique components of the Programme that demonstrate SOPAC's comparative technical advantage.

260. The Secretariat described the component *Resource Use Solutions* as seeking to provide state-of-the-art technologies, field-based scientific assessments, mapping and surveying

to address critical issues of development, unsustainable exploitation of marine and mineral resources, land degradation, coastal erosion, declining coastal water quality, habitat degradation and salt-water intrusion; and the component *Monitoring Ecosystem Change* as establishing long-term, routine monitoring and observing systems of physical and chemical parameters, which provides timely and accessible information for the improved understanding of our ocean and island ecosystems. This would strengthen decision-making on issues such as land and marine-based pollution, vulnerability to natural hazards, climate change, climate variability and sea-level rise, which impose severe constraints to sustainable development.

261. The Secretariat informed the meeting that SOPAC uses the definition of ecosystem as articulated in the Convention on Biological Diversity:

262. "A dynamic complex of plant, animal and micro-organism, Communities and their non-living environment interacting as a functional Unit."

263. The Secretariat stated that it was the non-living environment of this dynamic system that SOPAC seeks to address within the framework of monitoring ecosystem change and that based on current thinking it blends into SOPAC's mandate.

264. The following outputs under the two unique components of the programme were also presented:

Resource Use Solutions Outputs

- Coastal erosion solutions
- Minerals assessments
- Aggregate assessments
- Infrastructure developments assessed
- Maritime and land boundaries
- Maps for ecosystem management
- Petroleum assessments
- Environmental impact assessments

Monitoring Ecosystem Change Outputs

- Regional integrated observing system
- Monitoring ocean and islands ecosystems
- Data and products from observing systems

265. The Secretariat explained that, in the proposed 2003 work programme for the Ocean and Islands Programme presented as a logical framework, there are tasks identified that have outputs that contribute to more than one component, and this demonstrates the overlapping, integrated nature of some work activities.

266. The Chair opened the floor for comments firstly on the component *resource use solutions*.

267. Fiji expressed concern in terms of the capacity of SOPAC to deliver on some of the key outputs in the proposed work programme due to the current issues of constraints on SOPAC resources. They requested assistance from SOPAC in the area of minerals on issues of governance and policy, and highlighted the importance of mineral development to Fiji and several other national economies.

268. The Secretariat responded that the matter was not one of available capacity to carry out work in any of the specific programmes nor was the scope of the work programme in question. Rather the issue was related to whether the Secretariat was able to carry out the total work listed in the proposed work programme. The Secretariat, as is usual practice, develops a larger work programme and works towards completing as much as possible.

269. The Director re-emphasised that where the Secretariat works for countries in areas where the country lacks the capacity to do the work themselves.

270. The Secretariat highlighted that although the Economic Geologist position was vacant due to resource constraints it is hoped that through the process of prioritising and developing the future work programme activities the appropriate resources will be secured.

271. The TAG adviser from BGS suggested to Council that there was an opportunity to address resource shortage problems with data interpretations and reporting, by taking advantage of potentially free expertise within TAG. It would therefore require Council to consider making some data available to selected individuals. He recommended that this offer be considered.

272. Kiribati referred Council to page 18 of Part 3 of the Director's Annual Report and to the map outlining the status of Maritime Boundaries in the Region, distributed to Council in-session, and queried whether the Secretariat held most of its data and how they could access it.

273. The Secretariat responded that the three-year RMBP will commence early 2003, subject to confirmation of funding. They pointed out that the project would not be able to attend to all survey activities for all stakeholders immediately thus the need for

prioritisation in the workplan. However, it was emphasised that the key objective was to achieve outputs within the three years. The Secretariat also pointed out that if there is an urgent need in a country for work to be done in this area, SOPAC should be notified. They further advised that individual countries datasets are available to them, from the Secretariat, upon request.

274. Niue agreed with the Director's earlier comments pertaining to the lack of in-country capacity to carry out many of the technical services required from SOPAC. Niue informed the meeting that they had determined their maritime boundaries coordinates and are ready to commence negotiating shared boundaries with their neighbours. Niue referred the Secretariat to Output OI 1.8 under the component *resource use solutions* and sought clarification on whether the Secretariat's intent was to review Environmental Impact Assessments (EIA) in SOPAC countries, when requested to.

275. Tonga responded to Niue by stating that they still had to verify their basepoint coordinates before any negotiations for an agreement could be reached with its neighbours.

276. Cook Islands expressed a keen interest for the maritime delimitations project to be implemented as soon as possible.

277. The STAR Chair highlighted to Council the recommendations from the Coastal and Habitats Working Group (see Appendix 5), that all coastal developments should be accompanied by a professionally commissioned EIA and the Secretariat evaluate these, as required in consultation with available STAR experts, who had offered their services at the working group meeting.

278. In closing discussion on the component *resource use solutions*, the Chair invited comment from the meeting on the component *monitoring ecosystem change*.

279. Fiji enquired about the possible use of high-resolution imagery in coastal and ocean management and its availability.

280. The Secretariat responded by informing Council of the various rapidly evolving remote sensing technologies and satellite images and it would need to look into how to easily access this new type of image information required by Fiji and the Cook Islands for ocean management.

281. American Samoa queried whether there were any projects in existence that take photos of coastal areas and the availability of aerial photographs. They further expressed an interest in satellite imagery of the ocean and islands system and queried the accuracy of the imagery.

282. The TAG adviser from BGS raised STAR comments concerning the management of Oceans and Islands Coastal data management system, highlighting that SOPAC has GIS capability to provide quality data for managers and policy makers. He emphasised that under Agenda Item 8.4 Council had stressed the problem of communicating technical advice to managers and policy makers and suggested the use of GIS as one option to address this problem.

283. The TAG adviser from BGS also informed Council of private enterprises intentions to carry out marine mineral exploration in several SOPAC member countries, including Fiji, Papua New Guinea and Tonga, and highlighted the potential for conflicts with marine scientific research organisations. He suggested that SOPAC should be aware of this and provide a coordinating role.

284. The Secretariat responded to Niue's query on environmental impact assessment stating that subject to resource capacity within the Secretariat it would happily consider reviewing aspects of EIA that fall within the purview and expertise of SOPAC.

285. The TAG Adviser from HURL raised one of the outcomes of the STAR Coastal and Habitats working group report relating to environmental assessment, which suggests that small island developing states should adopt as policy a standard operating practice requiring a professional study for any development being undertaken in the coastal zone. He suggested that SOPAC serve as an independent reviewer of any such EIA and that, where possible, TAG advisers could be asked to assist.

286. The Deputy Director asked the meeting whether they were ready to approve with the proposed 2003 Work Programme for the Ocean and Islands Programme that was before them, for their consideration and suggested that the joint TAG/Council Session support the work programme together with the recommendations of the relevant STAR working groups and the Council Papers presented to them.

287. He advised countries that their country statements would be important, as they would

reflect their national priorities and identify their needs for 2003 and beyond.

288. The Director encouraged Council to provide feedback on the programme structure of the three key programme areas before closure of the Council meeting. He requested that commentary be provided on the relevance of the individual goal statements of each of the programmes, the appropriateness of the components and their accompanying purpose statements, and the outputs that had been identified. He advised that this would be a proactive step, which would provide the Secretariat with focus and direction when it progresses the recommendations of Agenda AS31/7.8.

289. In closing Agenda Item 9.1, the Joint Council/TAG supported the draft 2003 Work Programme of the Ocean and Islands Programme and the related Council papers.

9.2 Community Lifelines Programme

Introduction

290. The Secretariat introduced the Community Lifelines Programme and its overall goal, noting that separate presentations would be made for the Water, Energy and Information and Communication Technologies sectors for the 2001-2002 Work Programme component.

291. This was followed by presentation of the 2003 Community Lifelines Work Programme and Budget, the STAR Working Group Recommendations and a plenary discussion session.

Reporting for 2002, Council Papers and Plenary Discussions

Water

292. The Secretariat presented the Water sector of the work programme referring to the Director's Annual Report to Council Part 2, Work Programme Report 2001-2002, pages 6-15.

293. The Secretariat reminded Council that the Council Paper "SOPAC Ministerial High Level Meeting – Pacific Consultation on Water In Small Island Countries" had already been presented and endorsed under Agenda Item 8.5 and noted the relevant STAR Papers from the Water sector.

294. The Secretariat acknowledged contributions made by the donor community, in particular:

- Department for International Development (for the funding of the Unit Head and the development of strategic alliances)
- UNDESA/Dutch Government (for the extension of the Water Resources Specialist for one year)
- Asian Development Bank and the International Secretariat of Dialogue on Water and Climate (for the funding of the Pacific pre-com process for the third World Water Forum)
- NZAID and UNEP (for funding a number of various projects)
- ESCAP (for providing funding towards the Strategic Planning Management workshop held in August 2002)
- Taiwan (for funding the water asset management programme)
- World Bank, Pacific Water Association and AusAID (for their in-kind contribution and indirect funding towards preparations for the 3rd World Water Forum in 2003)
- The University of the South Pacific (for the Global International Waters Assessment (GIWA) from GEF funding sources).

295. The Secretariat highlighted the current staffing arrangements and noted that the recruitment of the Water Resources Engineer had been problematic however the position was hoped to be filled by the end of the year. The Secretariat advised that the Water Quality Officer position had been secured on a time-share basis with the University of the South Pacific.

296. The Secretariat in presenting the Water sector work programme highlighted that a large portion of the first half of the year was dominated by regional activities and more specifically preparations towards the 3rd World Water Forum.

297. The Secretariat noted Australia's comment on the work programme reporting style across all programmes and the difficulty in comparing tasks undertaken within those agreed at the 30th Annual Session. This applied to deferred tasks as well as additional new tasks. Australia asked this to be taken into account in subsequent annual reporting.

Energy

298. The Secretariat presented the Energy

sector of the work programme referring to the Director's Annual Report to Council Part 2, Work Programme Report 2001-2002, pages 16-26.

299. The Secretariat referred to the object of the Energy sector and the key performance indicators noting that the work programme activities achieved and not achieved during 2001-2002 had not been specifically referenced but this level of detail would be provided in 2003 reporting.

300. The Secretariat went on to refer to the four Council papers, namely:

- Regional Energy Meeting (REM 2002) Outcomes (AS 31/9.2.1),
- Energy Sector Developments (AS 31/9.2.4),
- Energy for Sustainable Development – Pacific's Energy Future (AS 31/9.2.5),
- UN-ESCAP Initiative in the Pacific Region (AS 31/9.2.6).

301. The Secretariat acknowledged funding support to the Energy sector from Australia, New Zealand, Denmark, Japan, the Government of Taiwan/ROC, UNEP, UNESCO, UNDESA, Perez Guerrero, WWF, Mobil, FSP and UN Theme Group (Samoa).

302. The Secretariat informed Council of the current staffing arrangement for the Energy sector noting that this would be further discussed in Council Paper AS31/9.2.4

303. The Secretariat following reporting on the regional and individual member country programme activities also highlighted new activities and partnerships that had been developed during 2002.

304. The Secretariat as part of the work programme reporting took the opportunity to formally declare the winner of the World Earth Day 2002 competition, Energy Wizards of the 21st Century and presented the national and overall regional prize to Kiribati, noting that the regional winner was – King George Fifth and Elaine Bernacchi School.

305. Tuvalu acknowledged and commended the work carried out by SOPAC during 2002 and pledged to work closely with the Energy sector in carrying out both national and regional energy programmes, especially the Regional Biomass Assessment project.

306. Kiribati commended the work of the Energy Unit and acknowledged the prize awarded

to them for being the overall winner for the World Earth Day 2002 competition.

307. The Secretariat introduced Council Paper AS31/9.2.1 – Regional Energy Meeting (REM 2002) Outcomes highlighting the Pacific Energy Policy Plan, the GEF Energy Efficiency and Energy Conservation concept paper, the energy Type II initiative for the WSSD and the Rarotonga Declaration on Energy for Sustainable Development.

308. Australia noted the outcomes of the REM2002, and stated that although it could endorse the Pacific Energy Policy and Plan and the Type II Energy Initiative, it could not endorse the aspect of the Rarotonga Declaration relating to the Kyoto Protocol and internationally mandated renewable energy targets. Australia preferred simply to note the outcomes of the REM2002.

309. The Chair clarified that the Rarotonga Declaration specifically focused on Pacific Island countries, and that Australia and New Zealand were not included because of not being classified as small island states.

310. The Secretariat highlighted that the European Union had also launched a Type II Energy Initiative as part of its commitment to the WSSD and that a EU delegation would be visiting the Pacific to identify potential collaborative activities that link with the Pacific Type II Energy Initiative.

311. Australia confirmed that because the whole Council was being asked to endorse the declaration, even though it only applied to SIDS, that Australia's reservation to endorsement remained.

312. Niue sought clarification on Type I and Type II Energy Initiatives. The Secretariat clarified Niue's query regarding the Type II Initiatives advising that there were three types of documents to be produced as a result of the World Summit on Sustainable Development (WSSD). The Type I document was the Johannesburg Programme of Action endorsed by the Summit, the Type II documents were expression of initiatives and partnerships developed through the World Summit preparatory process and launched at the Summit, the Type III was the political Declaration agreed to in Johannesburg.

313. Marshall Islands commended SOPAC's work in the Energy sector and endorsed the proceedings of the REM 2002.

314. Council noted and endorsed the outcomes of the Regional Energy Meeting

(REM2002) and noted Australia's reservation and concern in respect to the reference to the Kyoto Protocol and internationally mandated targets.

315. The Secretariat introduced Council Paper AS31/9.2.4 – Energy Sector Developments highlighting the regional mandate for energy; the World Summit on Sustainable Development; the Type II Pacific Initiative on Energy for Sustainable Development; the GEF Funded Project – Pacific Islands

316. Renewable Energy Initiative Project (PIREP); GEF project proposal – Pacific Islands Energy Efficiency in the Transport Sector (PIEETS); the ADB – Renewable Energy and Efficiency in Rural Areas (REEP); the ESCAP – strategic planning and management initiative; gender and energy – women and energy; and energy staffing within community lifelines.

317. Council noted the recent energy sector developments including the significant increase in the number of projects/programmes that would be operating within the Community Lifelines Programme, and acknowledged the need for additional financial and technical support to meet these future new commitments as urgent.

318. The Secretariat introduced Council Paper AS31/9.2.5 – Energy for Sustainable Development – Pacific's Energy Future highlighting the outcomes of the recent World Summit on Sustainable Development (WSSD) and the need to consider increasing the percentage share of renewable energy in the regions primary energy supply and to set targets to achieve this objective.

319. Australia highlighted the importance of renewable energy in the region, but cautioned against setting targets that would be difficult to meet. In relation to renewable energy targets, Australia supported the view of many developing countries at WSSD that they be allowed to set their own goals for balancing environmental, health and economic objectives in energy production.

320. The Secretariat responded to SPREP's question concerning the current level of renewable energy in the region by advising that making a regional estimate was difficult since each of the member countries had a significantly wide and varied energy source and for this to be realistic would need to be calculated on a weighted basis. As a starting point each countries current energy position would need to be detailed so as to provide a baseline from which to make future judgments so the coun-

tries could address their specific needs and make their respective commitments. However, this should not prevent countries from setting targets and the Pacific Energy Policy and Plan would assist where required as a guide towards setting and achieving these targets.

321. Niue highlighted that it would be useful to set benchmarks before proceeding and highlighted that they would require SOPAC to provide assistance with this activity.

322. Council noted and endorsed that many PICs have already embarked on projects and activities that promote the utilisation of renewable energy resources and agreed that:

- (i) island countries in the region work together to achieve a regional target where the aim is to increase the share of renewable energy sources to at least 15% of the primary energy supplied by 2010; and
- (ii) to achieve this development strategy and target there is a need for increased access to financial and technical resources so as to allow the effective and timely development of renewable energy resources and that this be through the development of partnerships and alliances leading to increased international and regional cooperation.

323. The Secretariat introduced Council Paper AS31/9.2.6 – UN-ESCAP Initiative in the Pacific Region highlighting the recent new developments in relation to activities implemented by UN-ESCAP in the areas of Energy and the possible future opportunities available for support to member countries within the Community Lifelines Programme.

324. The Secretariat responded to Australia's query regarding the meaning of TCDC (Technical Cooperation and Development Cooperation) as provided under the ESCAP programme was a partnership where ESCAP could provide funds to assist with travel where the cost for the training was being provided through another partner and generally where this level of training could not be provided nationally. The Secretariat further highlighted that TCDC funding was currently being used to fund PICs to participate in Small Hydro Power training in China.

325. Australia asked the Secretariat to encourage greater involvement of ESCAP in the region.

326. Fiji acknowledged the return of ESCAP to the region and noted the work carried out

by ESCAP in organizing with SOPAC the Strategic Planning and Management Workshop in water and energy held in Sigatoka (Fiji) in August 2002. They further acknowledged that they were happy to see ESCAP again contributing to the development of the region and that ESCAP had planned to continue to provide assistance especially in the area of training and capacity building.

327. Fiji noted that recent assistance had been provided by ESCAP in mining and water legislation, and that there were also opportunities for the engagement of consultants in the GIS sector.

328. Samoa supported the recommendation in the Council Paper AS31/9.2.6 and further recommended that ESCAP member countries should be briefed on the new programme activities so that they could also be raised in the ESCAP meeting attended by country representatives. Samoa highlighting that they had successfully accessed TCDC funding and set up their own TCDC facility.

329. The Secretariat highlighted that on many occasions SOPAC had invited ESCAP to its meetings but their attendance had been very poor and suggested that there was opportunity for additional cooperation with member countries and that technical briefing papers could be provided to member countries attending ESCAP meetings.

330. Niue highlighted that it was not a member of ESCAP and sought clarification on how it could actively participate in ESCAP programmes.

331. The Secretariat responded to Niue confirming that where possible co-funding would be identified so as to allow non-ESCAP member countries to participate in ESCAP meetings and workshops. The Secretariat noted that in relation to the recent ESCAP workshop on Strategic Planning and Management for Water and Energy held in Sigatoka back to back with the Third World Water Forum jointly funded by ESCAP and DFID to maximize country participation.

332. The Marshall Islands highlighted that it had worked through the Pacific Island Forum Secretariat to access ESCAP assistance in the past.

333. Council noted and endorsed the recent UN-ESCAP activities in the region relating to advocacy in the energy sector through; institutional capacity building on renewable energy; development of strategic planning and

management guidelines; and regional and national workshops on strategic planning and management, including the need to urge ESCAP to re-establish programmes in the region through the Community Lifelines programme, particularly in energy and water, and utilise the TCDC facility.

Information and Communication Technologies

334. The Secretariat presented the Information and Communication Technologies (ICT) sector of the work programme referring to the Director's Annual Report to Council Part 2, Work Programme Report 2001-2002, pages 51-72 and noted the two council papers as well as the five relevant STAR papers.

335. The Secretariat advised Council on the objectives, key performance indicators and staffing issues detailed in the Director's Annual Report to Council Part 2 and noted that the future reporting structure would be in two areas each with two components: Information and Communications Technologies, and GIS and Remote Sensing where one area would be the Community Lifelines Programme while the other the Corporate Services Programme.

336. The Secretariat highlighted two issues:

- (i) In order to use ICT and GIS/RS as tools for sustainable development, these tools must be selected on the basis of cost effectiveness and appropriateness and should meet regional guidelines and standards to maximise capacity development while exploring the use of Open-Source software to minimise costs of licensing.
- (ii) The Secretariat has assisted in communication areas in smaller island countries and in particular in establishment and development of national Internet Service Providers as well as assisting governments in establishing local and wide area networks.

337. The Secretariat noted the following work programme activities not covered in the Director's Annual Report to Council Part 2:

- The communications link with SPC, Nabua is underway as well as the upgrade of communication and data storage in the Secretariat. In addition, the implementation of a collocation server in metropolitan France will be undertaken later this year where all three tasks have been supported through French funding.
- Cook Islands requested an asset manage-

ment system for the water utility using GIS tools.

- Fiji requested assistance in establishing and an asset management system for the Fiji Electric Authority using GIS.
- Samoa requested assistance in upgrading the Samoa observatory network.
- A two-week training attachment in ICT was provided for a staff member from the Ministry of Lands, survey and Natural Resources, Tonga.
- Tuvalu requested assistance in establishing a link between the ISP, the Hospital and the Maritime School to assist in tele-health and tele-education.
- Vanuatu requested assistance in establishing a national ICT and Mapping facility in the Ministry of Lands.

338. The Secretariat advised that with the increasing number of CDs that are released at the Annual Sessions it would be considering consolidating these datasets on a single DVD next year as the Secretariat has been specifying DVD drives as replacements for CD drives since mid 2002.

339. Fiji stated that GIS/RS use is essential for the member countries and that acquisition of images is becoming a fundamental component of ICT. Fiji thanked the Secretariat for informing member countries on the availability of satellite image data and thanked the Secretariat for assistance in image acquisition. Fiji recommended that information dissemination, image acquisition and optionally image post processing be formally integrated in the Secretariat's work programme.

340. Marshall Islands acknowledged the support from the ICT sector and recognised that the Secretariat provided this in a professional and timely manner, especially enabling the Suva Embassy to access Internet and supporting the embassy information system. Marshall Islands recommended that ICT activities continue and they further supported the work of the Secretariat.

341. The Chair of STAR noted that the growth of GIS/RS presentations during the past few Annual Sessions has highlighted the increase in work done in the region using these tools and the increase in acquiring image data.

342. Samoa thanked the Secretariat for training an ICT officer during the last three years

and also recognised the important role of ICT in the country tasks, highlighting hazard warnings and the field of fibre optics. Samoa further noted the difficulties in staying current with these technologies and recognised the need to fully participate in these development and looked forward to continuing advice and support from the Secretariat.

343. Federated States of Micronesia thanked the Secretariat for its support, especially in Kosrae, and the service provided to the Embassy in the provision of Internet to allow communications with their government. Federated States of Micronesia requested the Secretariat to assist Chuuk State with its land management programme as a high priority.

344. Kiribati commended the Secretariat in interconnecting the various Departments of the Ministry of Natural Resources and Development, and in supporting the national ISP through software development. Kiribati requested the Secretariat to assist in establishing a computer laboratory for USP students at the High Commission in Suva. Kiribati also requested the Secretariat to investigate low cost systems for Internet access.

345. Vanuatu commended the Secretariat for conducting the national GIS/RS workshop and with the increasing importance of ICT in Vanuatu, requested the Secretariat to assist in the AusAID funded project to establish a national ICT and mapping centre.

346. Nauru thanked SOPAC for their support and assistance in ICT as well as GIS/RS. Nauru requested SOPAC to assist their High Commission in Fiji in developing a networked information system with access to the Internet for staff and USP students.

347. Tuvalu thanked the Secretariat in establishing the sole ISP, and also in developing networks for the government, and in capacity building in GIS/RS through workshops or fellowship attachments.

348. Cook Islands acknowledged assistance from the Secretariat in ICT and GIS/RS and commended the Secretariat in explaining the technical issues in layman's terms at various levels. Cook Islands stated that governments should have realistic expectations and identify sectors that could be addressed at national government level and where specialist assistance is required from the Secretariat within the context of the current support it is providing the member countries.

349. Australia supported the Cook Islands and expressed concern about the expanded role of

the Secretariat in ICT moving its focus away from its core business. Australia noted that the Secretariat had been set up to help in the development of non-living resources and the ICT role taken on significantly extends beyond this responsibility. Australia further noted that some of this work has been carried out under an income-generating basis and recommended that these activities be separated from the core work to ensure they did not take resources away from public good activities. The Secretariat role was a user of ICT as it relates to its core business of the development of non-living resources, rather than as a provider of communication technology.

350. The Secretariat responded, noting that it had chaired the communications sector of the Forum Officials meeting in April this year where it was recognised that countries have a critical need for ICT and that this is a high priority. As well as this, ICT is fundamental to the SOPAC work programme. The Secretariat stated that the Forum meeting recognised that countries are at various levels of ICT development and have different needs, but they have limited alternatives for ICT support and often request assistance from the Secretariat. He further stated that the work programme is therefore demand driven and that countries requested that information be shared cost effectively, especially in the capacity building sector.

351. The Secretariat advised that the inclusion of ICT in the Community Lifelines Programme is clearly shown in the vision statement of the Pacific Islands ICT Policy and Strategic Plan: "ICT for Every Pacific Islander". This reflects an emerging lifeline and one of the highest priorities defined is in tele-health. Furthermore, if communications can be established from the urban to the rural area then information will reach every Pacific Islander. The decision to include ICT in the Community Lifelines Programme was agreed at the 30th Annual Session in Majuro. Ref 10.4 SOPAC Corporate Plan.

352. Niue stated that there has been a strong uptake of GIS/RS through the work of the Secretariat. Niue further advised that there are some current problems with the private sector that controls the domain name of Niue and requested assistance from the Secretariat.

353. The Secretariat commented that while it could only highlight the issues and problems, it is the responsibility of Council to define the strategy for the Secretariat and while in the past, tasks have been demand driven, completed and appreciated, it is the Council that

needs to define how ICT can best fit in the future work programmes.

354. Marshall Islands highlighted the need to address ICT issues and SOPAC is responding to this need.

355. The Secretariat introduced the council paper AS31/9.2.2 – Status of Pacific Islands ICT Policy and Strategic Plan and advised that this was originally a SOPAC, SPC and Forum Secretariat initiative. A one week workshop was conducted in Noumea with funding support from Australia, France and New Zealand.

356. The Secretariat advised that Pacific Islands ICT Policy and Strategic Plan has four guiding principles and that the CROP Organisations are taking the lead on each as follows:

- Human Resources USP
- Infrastructure Development SOPAC
- Cooperation between Stakeholders SPC
- Appropriate policy and regulation Forum

357. Furthermore, the document was presented and endorsed by Ministers at the Forum Communication Meeting. The latest development is a survey that has been sent to member countries to monitor ICT in Pacific Islands Countries.

358. Council was requested to note the following recommendations:

- (i) Note progress made in developing and adopting the Regional ICT Policy and Strategic Plan.
- (ii) Endorse the need for a regular review of the policy and strategic plan, and the CROP ICT Working Group identify a suitable review process, such as in conjunction with the annual meeting of the working group. Furthermore, the Secretariat play a leading role in this process.
- (iii) Agreed that the profile of "ICT for Every Pacific Islander" warrants highlighting. Furthermore, Council urged the Secretariat to promote this profile through the ICT Working Group, noting that the ICT officials meeting in Noumea suggested this profile could be achieved by: (i) a Pacific decade of ICT; (ii) a Pacific year of ICT; (iii) establishing an annual Pacific ICT forum.

359. Australia expressed its concern that the Secretariat is proposing to take a leading role in the review of the CROP ICT Policy and re-

requested assurance that this work would not impact on SOPAC core activities.

360. The Secretariat clarified that the recommendation of the Council paper clearly states that the Secretariat will play a leading role in the CROP ICT Working Group in regard to the review process. The Secretariat would also play a role in implementing the plan within its mandate and approved work programme.

361. Papua New Guinea commented that the role of telecommunications management was removed from the Forum Secretariat by Pacific island countries several years ago where this has resulted in the telecommunication companies and regulators creating their own organisation that functions as a private sector lobby group.

362. Papua New Guinea stated that it has invested considerable sums of money in ICT development and capacity building where staff are often recruited by the private sector, leading to the need for CROP agencies to continuously assist member countries in capacity building.

363. The Secretariat introduced the Council Paper AS31/9.2.3 – ADB ICT Assessment Workshop that was conducted in Nadi, with participation by the Telecommunication industry, the ICT sector and the users.

364. Council was requested to note the following recommendation:

(i) Council request the Secretariat, on behalf of its members, to seek funding particularly from AusAID, Japan and ADB to develop their national ICT capacity and infrastructure.

365. Australia questioned the role of SOPAC in ICT development, and in particular in the development of National ICT capacity and infrastructure.

366. The Secretariat highlighted that the Council must give clear guidance on what is the Secretariat's role in its work programme framework as adopted in Majuro.

367. The Forum Secretariat highlighted the e-pasifika programme on developing national ICT strategies.

368. Council requested the Secretariat to assist its members, when asked to seek funding particularly from AusAID, Japan and ADB to develop their national ICT capacity and infrastructure.

Draft Work Programme and Budget for 2003

369. The Secretariat presented the Community Lifelines Draft Work Programme and Budget for 2003 referring to the Director's Report, Part 3, pages 30-37, and outlined the working structure of the Community Lifelines Programme as well as links to other Programme areas within the Secretariat.

370. The Chair of Star presented the outcomes of the STAR Energy Working Group (EWG) and highlighted the following recommendations as noted in Paper AS 31/8.4 – STAR Chair's Report.

371. Recognising the importance of energy efficiency and conservation in the region the STAR EWG recommended the following:

- SOPAC treat as a priority the work on benchmarking of energy use for commercial buildings.
- SOPAC develop partnerships with other government agencies and industry partners and that the opportunity existed to share energy conservation data which could link in as part of the energy supply and demand database.
- SOPAC to establish best practice energy use standards for tropical climate, taking into account the cost of energy within the Pacific Island countries.
- SOPAC to disseminate widely the findings from benchmarking activities and it was recognized that it is necessary to ensure that the information on potential energy and financial savings reaches higher authorities within the Pacific Island countries.
- SOPAC to highlight the economic and environmental aspects of energy consumption to identify the potential for energy reductions in Pacific Island economies.
- SOPAC develop an education programme in energy efficiency and conservation targeting the general public. Note was specifically made of the experience of Integrated Energy Services Ltd in the Pacific where energy savings in the tourist industry could be as high as 50% with 1-3 year payback.
- SOPAC research and consider for adoption as appropriate, technologies used in developing countries for recycling waste plastic. This being particularly important considering the volumes of waste plastic and oil in Pacific island nations.

372. The STAR EWG noted the decision reached at the recent Regional Energy Meeting in Rarotonga in July 2002 that the focus of energy efficiency be in the transport sector.

373. The STAR EWG also noted the interest of industry players on renewable energy in the Pacific. Particularly the interest shown by US Wave Energy and Ukraine SEA Electrical Generators to install demonstration wave energy projects in selected countries in the region.

374. The STAR EWG was briefed by the Secretariat on the status of the energy policy and the geothermal deep drilling funding proposal and confirmed that the Secretariat would continue to provide assistance to member countries with their energy demand and supply database and national energy policy statements.

375. Council endorsed the STAR EWG recommendations.

Joint Council/TAG Session on Community Lifelines

376. Australia commented on the content of the Draft Work Programme for 2003 and questioned the component statements compared to SOPAC's geoscience business. Concern was also raised about dedicating resources to areas in which SOPAC is not mandated, in particular in the area of ICT. Issues were also raised about other parts of the programme such as wastewater and health. Australia advised that these issues would be raised during the review of the programme strategies scheduled over the next three months.

377. The Chair reminded Council that re-organisation of the Secretariat was presented at 30th Annual Session in Majuro, where the corporate plan was endorsed. The Chair requested that delegates who were not at Majuro should study the adopted corporate plan as this would clarify the revised role and activities of the Secretariat.

378. Papua New Guinea commended the Chair of STAR for the report and the important contribution of TAG to the Work Programme and the application of the STAR EWG recommendations. Papua New Guinea commended SOPAC on the standard of STAR presentations in that they provided significant insight into a range of new and innovative technologies and tools, and noted that these will be useful to employ as appropriate.

379. Papua New Guinea further illustrated to Council instances where the United Nations Development Programme had, on cessation of funding, handed over regional programmes to regional organisations using two examples, namely the UNDP Water and Sanitation Programme and the Disaster Management Programme (INDNR), now located at SOPAC.

380. Papua New Guinea stated that UNDP has established an ICT programme and this too could lose its funding in the future and then be offered for transfer to a regional organisation. He further stated that the Secretariat has developed capacity building in difficult areas not undertaken by others and questioned that if ICT is not a Secretariat responsibility then who should be responsible for this area.

381. Papua New Guinea further stated that the Pacific is well endowed with renewable energy resources such as solar, biomass and hydropower and each country may have different potential resources and that these are just some of the competing priority areas.

382. Papua New Guinea highlighted that SOPAC with the mandate for regional energy matters is well positioned to handle such a wide range of technologies as well as the ability to coordinate regional programmes. Papua New Guinea noted that the Energy Programme had formerly been located at the Forum Secretariat and questioned if it was not now at SOPAC, where would it be.

383. Australia acknowledged the comments made by Papua New Guinea and accepted that Member Countries regard ICT, Water, Energy and some other sectors as priorities in the region but the Secretariat did not have the resources to cover all these areas adequately and needed Council guidance in order to prioritise their resources most effectively.

384. The Chair noted these comments and advised that the future Community Lifelines Programme should not be influenced by the availability of existing resources; but rather by the priorities and needs of the member states.

9.3 Community Risk Programme (CRP)

385. The Deputy Director introduced the new Community Risk Programme (CRP) which was presented to Council in 3 parts: Part 1 2002 DMU, EVI and HAU Work Programme in Progress; Part 2 Council Papers and Part 3 Proposed Community Risk Programme.

386. The Secretariat commenced with a progress report on the DMU project, which included an overview of the main activities of the key components Professional Development, Country Programme Support and Advocacy and Partnerships, and the delivery of the agreed work programme. It was indicated that the success of the Comprehensive Hazard and Risk Management (CHARM) programme, which is one of the major elements of the new Community Risk Programme is being supported through the development of an accredited training course and the Advocacy Strategy.

387. The Secretariat advised that the many of the project initiatives were highly dependent on the effectiveness of the national focal point for disaster management, the NDMO. The performance of many of the NDMOs could be improved through having supporting legislation, more flexible plans, improved communication processes, role clarity, and appropriate resources for effective operations.

388. The Secretariat stated that the challenge in building safer communities required the coordinated support of a range of donors and partner organisations.

389. The Secretariat then presented to Council progress made on Phase III of the EVI project in 2002. Key successes highlighted were the completion of 13 SOPAC member country EVI data profiles with a total of 21 out of 32 target countries now complete. Also EVI data for over a 100 countries for 31 out of the 54 indicators have also been compiled to provide the basis for testing and refinement of the EVI. Delays in data activities in collaborating countries have slowed the overall project progress. The Secretariat stressed that funding now needs to be secured to ensure completion of Phase III and the development of a robust global EVI tool.

390. Finally the Secretariat provided the Joint Council/TAG with a work programme report for the Hazard activities. Key issues raised for consideration by Council included a fundamental lack of information in the Region, the need to expand the hazard and risk assessment programme and the development of national GIS databases. The Secretariat indicated that an extension of the work in these areas would more clearly define social outcomes and suitable risk treatment options.

391. Samoa stated their continued interest in the Pacific Cities project, queried funding implications for ongoing work and indicated that they were prepared to consider funding

for the work but would need an outline of what is required.

392. The Secretariat highlighted the benefits of utilising bilateral funds such as Samoa had done and would provide details for further work in regard to the Apia part of Pacific cities.

393. Kiribati commended SOPAC for the work carried out and informed the Joint Committee/TAG that Kiribati will appoint an NDMO before the end of 2002. Kiribati also expressed an interest to register for the Regional Aviation Accident workshop to be conducted in Nadi in October 2002 and requested an update on the offer of a fire truck from Australia.

394. The Secretariat responded that they will pass on Kiribati's expression of interest to the Aviation workshop organisers and indicated that the Australian Fire Services had provided some vehicles to the region however this was dependent upon existing infrastructure to service and maintain the vehicles.

395. Kiribati informed the Secretariat that the Plant and Vehicle Unit services all government vehicles.

396. Papua New Guinea acknowledged and commended the presentations and with reference to the hazard presentation, noted that there are a large number of initiatives requiring funding and indicated support for current work being done on risk assessment for the main centres around the region, particularly the pilot project in Port Vila and emphasised the importance of Lae as a site that required attention. Papua New Guinea also commended the work programmes, especially that of the DMU and expressed their support for the initiatives.

397. The STAR Chair and the Hazard Working Group raised concerns regarding the level of support and resources available for the new CRP. They noted that funding is going more to downstream community activities and advised Council of the importance of also investing resources to hazard research particularly to areas that provide maximum benefit.

398. The Secretariat advised that greater research is required in newly-recognised areas of tectonic movement in Kiribati and Nauru. It is essential to understand the science to determine where resources are best placed. The Secretariat further advised that there is a need to find the correct balance in terms of building capacities within countries in order to manage and respond effectively to disasters whilst at the same time developing a greater

level of understanding of the science of the causes of the hazards and possible measures for mitigation.

399. The Joint Council/TAG were invited to consider papers AS9.3.1 – International Community Risk Conference – May 2003; AS9.3.2 – The role of CHARM and its advocacy; AS9.3.3 – Update on Environmental Vulnerability; and AS9.3.4 – Hazard Assessment.

400. The Secretariat introduced Paper AS9.3.1 to advise Council of the “International Community Risk Conference”, to be held in Fiji in May 2003.

401. Australia indicated support for the Conference and stated that the success of the conference would depend upon who participated. They indicated that they would like to make sure that key people are invited and are interested in how the Secretariat will ensure those people participate.

402. The Secretariat pointed out that the 2003 Conference initiative came out of the 2001 Regional Disaster Manager’s meeting held in Auckland and that SOPAC would fund a number of NDMOs as the conference would be followed by the next regional NDMO meeting. The Secretariat also acknowledged the need to target officials that are decision makers in order to move the risk programme forward.

403. Council agreed to support the planned International Community Risk Conference as an activity towards building safer communities.

404. The Secretariat introduced Paper AS9.3.2 to advise Council of the progress of mainstreaming risk management practices using CHARM and the planned activities of the high-level advocacy team.

405. Council noted and endorsed the continuing work in promoting and advocating CHARM as the tool for mainstreaming risk management practices in the region.

406. The Secretariat introduced Paper AS9.3.3 to provide Council with an update on progress with the development of the EVI and international moves towards addressing the issue of vulnerability.

407. Council noted the progress of the EVI project and urged donors to provide assistance to complete the work before Barbados+10. A side meeting on Environmental Vulnerability and Barbados +10 was convened to provide more detail on the EVI project (see Appendix 6 for a summary record).

408. The Secretariat introduced Paper AS31/9.3.4 to provide Council with background information on Tropical Cyclone Waka, Vava’u District, Tonga, 31 December 2001; Mw 7.1 earthquake and tsunami; Port Vila, Vanuatu, 3 January 2002; and the Catastrophe Insurance Pilot Project, Port Vila.

409. The Secretariat indicated that they had responded successfully to the 1998 Sissano event in Papua New Guinea and in 2002 for the Port Vila earthquake and tsunami through funding support provided by Japan and DFID respectively. On another occasion SOPAC funded a response to Cyclone Waka in Tonga. The respective member countries and donors appreciated the technical assistance provided to Papua New Guinea, Vanuatu and Tonga.

410. Papua New Guinea supported the need for a rapid response mechanism.

411. The Secretariat noted that there is a Disaster Relief Fund at the Forum Secretariat, which automatically provides \$20,000 in assistance when a state of disaster is declared. A possible broader and valuable option would be to utilise part of this fund for rapid response technical support. This would allow the immediate mobilisation of support to member countries instead of losing valuable time preparing project proposals for funding. Whilst the Secretariat may not always be the agency that provides the rapid response service it is uniquely placed to assist in the identification of experts who can.

412. The Council accepted the Chair’s offer to take up the matter with the Forum Secretariat.

413. The Joint Council/TAG noted the recommendations in AS31/9.3.4 and asked the Secretariat to consider them where appropriate in the new programme.

- To identify funding to utilise the methodology and data obtained from past technical disaster response efforts in developing rapid and routine post-disaster damage assessment for SOPAC member countries in order to provide prompt technical situation reports to donors involved in disaster recovery.
- To encourage the institutionalisation of a technical disaster response capability in SOPAC, including the development of an operational plan and funding pool to enable rapid response in order to cope with sudden onset disasters in the region.

- To seek commitment from member countries and development partners to an expansion of the Catastrophe Insurance pilot project from local to regional scale in order to realise an effective scheme for risk-financing for catastrophes in the region. This commitment to include defining the complete regional risk environment for natural hazards; developing a rapid objective means of assessing and verifying damage levels from any disaster in the region for the purpose of claims assessment; expanding the current SOPAC risk-loss modelling to the regional context and implementing financial risk-management models to better define the parameters of the scheme.

414. The Secretariat presented the Community Risk Programme for 2003. It was stated that the real challenge that communities face in the Pacific was to find ways of living with acceptable risks rather than simply suffering the consequences of the risks that are unacceptable. In order to build a safer world it was necessary to bring together all of the elements that can assist with understanding the environment, the hazards within it and develop strategies for enhancing community safety that were both practical and affordable.

415. The Secretariat further stated that by combining the current expertise within the organization they can provide more effective programming support to the various aspects of identifying, analysing and treating community risk.

416. The Secretariat defined some of the language proposed to be used in the new programme and outlined some of the change drivers that have influenced the planning for this new programme including the impact of disasters on the achievement of sustainable development.

417. The Secretariat reiterated the regional vision adopted by the Pacific Islands Forum Leaders that "Vulnerability to the effects of natural hazards, environmental damage and other threats will be overcome" and indicated that the vision could not be achieved unless member countries plan for and mitigate the effects of disasters on their communities.

418. The Secretariat stated the goal and key activities of the proposed programme. Of the seven components, the two that define community risk were Community Risk Management and Hazard Assessment.

419. The Secretariat accepted that further improvements to the CRP were necessary.

420. The 2003 Work Programme was endorsed by the Joint Council/TAG session.

9.4 Corporate Support Services

421. The Acting Manager of the Corporate Support Services Programme introduced the new cross-cutting programme, describing the various components that had been transferred to the new structure. He reported briefly on the 2002 activities of those components.

422. The Acting Manager presented the 2003 Work Programme and Budget of the new Corporate Support Services Programme. He informed the meeting that the Publications and Library activities along with parts of Information Technology from the old structure had been incorporated with Finance and Administration into the new Corporate Support Services.

423. The Joint Council/TAG session supported the 2003 Work Programme of the Corporate Support Services Programme.

9.5 Other Matters

424. The Secretariat advised that this agenda item was to address any other issues that might not have been captured in the content and the relevance of the proposed new work programme structure.

425. Cook Islands expressed appreciation to all the presenters for the substantial amount of work that had already been achieved toward the establishing of the four pillars of the new framework of the SOPAC Work Programme. He urged the other member countries that were able to, to participate fully in the exercise, and affirmed that the Cook Islands would certainly do so if it could afford to. He invited the technical advisers that were present to share their perceptions on the broad issues that might seem abstract at the moment.

426. The technical adviser from BGS expressed his optimism about the whole restructuring exercise. He pointed out to Council that a closer examination of the migration of the old structure into the new would reveal that the change was in the presentation rather than the content. He was totally confident that work programme delivery was not going to be

adversely affected, but rather the member states were to expect a more holistic approach to work programme delivery which could go a long way in facilitating the translation of technical interpretation into policy guidelines.

427. The technical adviser from the University of Hawaii completely agreed with the sentiments expressed by the adviser from BGS. In his capacity as the longest-serving technical adviser he expressed to Council his satisfaction with a more holistic approach, and that while the new structure was not yet 'perfect' – he was also satisfied that the critical ongoing work from the old structure was adequately contained in the three programme areas of the new structure. He pronounced the new framework a "very good start."

428. The Chair of STAR reiterated the views expressed by the longer-serving advisers, which was also the view of the STAR scientists. The approach would be more holistic and there was a lot more work to be done toward getting it "right" but he was confident that with goodwill and further development, the new programme structure would only strengthen the organisation and serve the member states better.

429. The Director invited the STAR and TAG advisers to think about how the sessions of the STAR and the Joint Council/TAG were structured this year and how they could be improved upon in the new year. He acknowledged that the whole exercise was a growing process and it was desirable to get everybody's cooperation. He favoured more interaction between the decision makers and scientists, but whatever new format the group would arrive at he urged that it be strategic.

430. Papua New Guinea, having now had the privilege of hearing the TAG advisers' interventions during this Joint Council/TAG Session, felt that it was a process well worth preserving. While he concurred with the Director's appeal for some thought on the process for the new year. He urged the meeting to maintain confidence in the Technical Advisory Group, and strongly advised that the relationship between Council and its TAG scientists could only be enhanced by the new way of doing things.

431. To capture the sentiments being expressed by the member states at this juncture, the Secretariat suggested to the meeting that the TAG and STAR scientists be involved with the member states and the Secretariat in finalising the work programme

strategies and frameworks for the three new operational programmes. Council agreed to this suggestion and recommendation (ii) of agenda item 7.8 was modified to reflect this agreement.

432. The Chair of STAR assured the Secretariat that he was more than happy to help whenever his input was required. He stressed again to Council, that they should regard the STAR and TAG as a resource for them; a much cheaper resource than consultants. He had noted the suggestions by the Director and Papua New Guinea on finding a more suitable format for the following year, and he urged those who had attended the STAR session earlier on in the week, not to be reticent in providing him with some guidance.

433. The Deputy Director took the opportunity to thank all of the technical advisers whom he found invaluable as an advisory group. He deeply appreciated the close working relations he enjoyed with them, particularly with the STAR Chair, and reiterated his deep gratitude for their presence, commitment and assurance of their continued availability to SOPAC. Council acknowledged these sentiments by acclamation.

434. The Chair formally closed the Joint Council/TAG Session of the 31st Session of SOPAC after adding expressions of appreciation to all STAR and TAG advisers on behalf of the Governing Council.

10. ESTABLISHMENT AND ADMINISTRATION

10.1 Director Position

435. The Director introduced the agenda item and paper AS31/10.1. According to procedure, with the term for the current Director expiring in early 2004, the position needed to be advertised in advance of a new appointment of Director being taken in the Council Session in 2003. He outlined the two options available to Council for an ad-hoc appointments committee. Also in accordance with the procedures and in the interest of the appointments committee completing its work, applications for the Director of the SOPAC should close 30 June 2003.

436. Australia said it was important that the selection and appointment process is transparent and conducted on the basis of merit. Australia commended the recent selection of a new Director by SPREP as a good model.

437. Council noted the job profile and draft advertisement that were provided by the Secretariat and asked the Secretariat to provide a redraft for formal approval by the members before the end of the year. Council also agreed that the member countries with Suva-based missions would be responsible for the work of the Ad Hoc Appointment Committee as set out in the rules of procedure for executive appointments in preparation for a decision being made at the SOPAC 32nd Session.

10.2 SOPAC/SPC/SPTO Headquarters “Pacific Village”

438. The Director provided background on the “Pacific Village” concept. The offer from Fiji to provide a headquarters site and building to house the SOPAC Secretariat in the early 80’s was part of the country’s bid for hosting SOPAC in Fiji. Since that time, the issue of merging SOPAC and SPC re-entered the regional agenda, and as a consequence the original Fiji commitment to house SOPAC has been subsumed into a broader concept of the “Pacific Village” which would house the three regional organisations SOPAC, SPC and SPTO. The complex would also serve as a regional facility to host large international meetings and similar events.

439. Fiji informed Council that Government had gone to tender for the project. They were pursuing all funding sources to raise the necessary finances for the complex, estimated at around F\$34m. Fiji remained fully committed to the project, although there has been a proposal for a change of location. They were also confident that work would begin on the complex before the next SOPAC annual session.

440. Niue asked the Secretariat whether a risk assessment study would be made of the new site; and she wanted to know what the contribution from SOPAC was expected to be.

441. The Secretariat assured Council that geologically speaking there were no additional risks than that faced by adjacent properties including the University of the South Pacific.

442. The Chair thanked Fiji for their update and looked forward to seeing the work begin before the Session in 2003.

10.3 CROP Remuneration Implementation Update

443. The Secretariat introduced agenda item

10.3, advising the Council that the purpose of this item was to provide an annual update on progress in the implementation of the CROP remuneration process as agreed in the Council decision of 2000.

444. Council noted that there remained two outstanding issues:

- The tax treatment of Fijian staff remains unresolved and is as such an element of inconsistency within the Secretariat remuneration regulations. The Council was advised that the Secretary General of the Forum Secretariat has approached the Government of Fiji upon this matter and that deliberation was in progress.
- It was highlighted to the Council that the CROP organisations are at different stages of implementation within the process of harmonisation. It was noted that the Forum Secretariat and the SOPAC Secretariat are the organisations closest to being in line with the agreed implementation process.

445. The Secretariat reminded Council that during the 2000 CROP Working Group discussions it was agreed that this process should be subject to a 3-year review to gauge progress. It was stressed that this review process is considered important in ensuring that harmonisation is effective and that remuneration discrepancies do not recur. Council noted that 2003 is the date for the first review, and that arrangements will need to be made to conduct this review.

446. The Secretariat asked Council to consider the recommendation proposed in this agenda item that Council note progress with the implementation of the new staff remuneration system, supports the 3-year CROP review scheduled for 2003.

447. Council noted the progress with the implementation of the new staff remuneration system. Council supported the three-year CROP review scheduled for 2003, and encouraged the Secretariat to participate.

10.4 Staffing Policy Issues

448. The Secretariat introduced this agenda item and raised three p

olicy issues:

- i. Staff Performance Management System
- ii. Redundancy Policy
- iii. Director’s Allowance

i. *Staff Performance Management System*

449. The Deputy Director described the process conducted during 2001 that was to review and adapt (spring-clean) the Secretariat Staff Regulations in order that they were in line with the CROP remuneration harmonisation process. In particular the Secretariat staff Performance Management System (PMS) was introduced as a Secretariat initiative to adhere with the CROP process, which enables regular review and monitoring of staff performance against agreed outputs. The Council was advised that the PMS was tested in 2001 before full adoption in 2002.

450. The Secretariat asked Council to note that the PMS documentation will be subject to review and some modification following finalisation of the new Secretariat Organisational Structure.

451. Council noted the progress in the implementation of the staff Performance Management System.

ii. *Redundancy Policy*

452. The Secretariat reminded Council that following its 30th Session, the Secretariat was asked to review the necessity of a Redundancy Policy.

453. The agreed policy was applicable only to *“permanent and fixed-term or short-term contract staff. They do not apply to persons engaged as temporary employees or to those who have reached the expiry of the fixed-term contract on the retirement age for support staff.”*

454. The Secretariat reported that with the implementation of the CROP Remuneration System no staff are now “permanent”, all are on contract. Contracts are subject to availability of funds, and the staff performance management system is in place as a monitoring tool. The Secretariat advised that given the these facts, a redundancy policy is not required.

455. Council agreed to remove the redundancy policy and delete reference to it from the Staff Regulations.

iii. *Director’s Allowance*

456. The Deputy Director asked Council to consider staff regulation 25: Directors Entitlements and to note the amendments proposed in the supplementary paper. In particular the

Council was asked to note the change in language proposed under regulation 25c which refers to the entitlement of the Director to a domestic assistance allowance, as determined by the Chair of the Governing Council.

457. In reference to the amended text proposed in supplementary paper 10.1 Australia noted the presence of other CROP organisations in the Council and asked for elaboration on the process of establishing Director’s entitlements in other organisations.

458. SPREP advised Council that they too had reviewed the Staff Regulations, in July 2002, in line with the CROP remuneration harmonisation process. In response to Australia’s request SPREP then read to Council the section from their Staff Regulations that refers to the definition of the Director’s entitlements:

- (a) rent-free accommodation up to a rental limit specified in Schedule 1;
- (b) electricity charges for accommodation; and
- (c) a domestic assistance allowance. The allowance is to be adjusted at the time and in accordance with the same rate of adjustments made to pay in Samoan Public Service and the rate for the time being is set out in Schedule 1.

459. The Forum Secretariat advised that the entitlement afforded to the Secretary General of the Forum Secretariat is subject to annual adjustment according to the Fiji Consumer Price Index (CPI), and that the Forum Secretariat is also responsible for the utility bills (water and electricity) accruing to the Secretary General’s official residence.

460. The University of the South Pacific (USP) asked Council to note that while the Terms and Conditions of employment within the USP were very similar to those for the Directors of other CROP organisations, for historical and practical reasons the remuneration is lower.

461. Australia reiterated some uncertainty on this matter, and asked the Secretariat and Council to clarify who had responsibility for determining the Director’s domestic assistance entitlements.

462. The Forum Secretariat advised that the domestic assistance entitlements of CROP Directors was initially determined in 1994 and set by the Forum Officials Committee at a level of \$7,800, and agreed to be subject to adjustment annually according to economic conditions (CPI).

463. The Chair again asked for clarification of responsibility for setting the Director's domestic assistance entitlement, stressing that there appeared to be some inconsistency as to whether the Forum Officials Committee or the Chair of the Secretariat Governing Council had ultimate responsibility for this process.

464. The Forum Secretariat reiterated that the level was originally agreed and set by the Forum Official Committee, but that there was discretion of the Council Chair in any adjustment to local conditions or economic factors.

465. Australia suggested that the recommendation text be changed to ensure that the process for determining the Director's domestic assistance entitlements is clearly described within this text to ensure transparency of procedure. Australia also referred to the process of adjustment proposed by SPREP that provided a framework for such entitlements to be adjusted according to an agreed public sector benchmark.

466. The Chair asked for further clarification from SPREP regarding the process of adjustment and entitlement determination adopted.

467. SPREP reminded Council that the original reason for the domestic assistance entitlement was to provide the Director with the means to hire home help and assistance in line with needs and local conditions. As such the benchmarking process adopted by SPREP is intended to allow for and accommodate local market conditions and circumstances.

468. Papua New Guinea noted that the Forum Officials Committee agreed to give discretion to the Chair of Council in decisions regarding adjustment of the Director's domestic assistance entitlement, reminding Council that the base-line level is set, based on the level advised to Council by the Forum Secretariat and agreed by the Forum Officials Committee, but that there was a very real need for local and economic circumstances to be accounted for and adjustments to be made in consultation with the Chair of Council.

469. Papua New Guinea highlighted the need for and acceptability of discretion being given to the Council Chair, describing a speculative scenario in which an incoming incumbent to the position of Director of the Secretariat from Australia wished to bring home help from home (Australia). In this circumstance, in order to accommodate the requirements of the incumbent, it would be necessary to adjust the Director's domestic assistance entitlement.

470. The Secretariat stressed the need to consider the nature of this process. It was stressed to Council that a draft contract would be prepared for the incoming incumbent and brought to Council for consideration and endorsement before a formal offer is made. This process enables Council to review salary and entitlements and gives the Chair final responsibility to approve and sign the contract as approved.

471. The Director reminded the Council that the salary package historically offered was tagged to that of the Secretary General of the Forum Secretariat and that this arrangement ceased with the implementation of the new CROP Remuneration System.

472. The Director suggested to Council that if the current process for determining the salary and entitlements of the Director were not sufficiently clear, that Council should advise the Secretariat of changes felt necessary.

473. Niue asked the Secretariat to clarify if the changes in wording the supplementary paper referred to the current Directorship, or whether it related specifically to the incoming incumbent. Niue also requested clarification of the budgetary implications of adjustments in the Director's entitlements, specifically whether this had implications on the Secretariat's Regular Budget.

474. The Secretariat advised Council that the Director's salary has always been funded from the Regular Budget. The Secretariat further advised that the current staff regulation 25 is that which relates to the current Director, and that any proposed amendments would apply to successive appointments.

475. Australia reiterated that amendments are to relate to the contract of the incoming incumbent of the Director's position, however it noted the need for allowances adjustment mechanisms to be included explicitly within the staff regulations in order to clearly elaborate the process. In so requesting, Australia asked the Secretariat to return to Council in 2003 with a further amendment to the text in consideration of these discussions and concerns.

476. Papua New Guinea stressed the need for a salary adjustment process as a necessary component in securing appropriate personnel for the CROP organisations. Agreement with Australia concerning further review during 2003 was expressed. Papua New Guinea advised Council that in all adjustment decisions

the Chair would be guided by relevant information provided by the Secretariat.

477. The Secretariat proposed to Council that the text of regulation 25c be further amended to delete reference to the Director's salary or entitlements being linked to those of the Secretary General of the Forum Secretariat.

478. Council recommended that the Secretariat prepare a further draft for Staff Regulation 25, paragraph c taking into account the issues raised, for consideration by Council at the 2003 meeting and before a contract is offered to the new Director.

10.5 Status of Ratification of SOPAC Constitution

479. The Secretariat introduced Council paper AS31/10.5 – Status of Ratification of SOPAC Constitution.

480. The Federated States of Micronesia informed the Council that it has ratified the SOPAC Constitution and that the instrument of ratification has been prepared for submission.

10.6 Status of MOU's with other organisations

481. The Secretariat outlined Council paper AS31/10.6 – Status of MOU's and LOA's with other organisations. Council were advised that the focus of the paper was to advise on the current partnership arrangements between the Secretariat and other organisations.

482. The Secretariat then informed Council of an amendment to Council paper AS31/10.6 indicating a duplication of agreement 54 and agreement 68, agreement 54 being an earlier version of agreement 68.

483. New Caledonia requested that the Secretariat clarify column 2 of the MOU agreement 64 stating that the text did not seem to make sense. The Secretariat advised New Caledonia that this particular text was extracted directly from the MOU.

484. The Secretariat stated for the record that a renewed MOU had been agreed to on 30th September, 2002 between SOPAC and KIGAM.

485. Papua New Guinea queried the Secretariat as to whether atoll islands in Papua New Guinea could be included among the atoll islands in agreement 68 to which the Secre-

tariat advised that part of the project included a decision-making process which involved 6 countries on which two were selected as part of a decision matrix. The final beneficiary of the pilot project was Tonga.

486. Council noted the status of MOUs and LOAs with other organisations.

11. 2003 WORK PROGRAMME AND BUDGET

11.1 Reserve Fund Ceiling

487. The Secretariat presented paper AS31/11.1 as a requirement by Council for the Secretariat to review the ceiling on the Reserve Fund annually.

488. The Secretariat advised that after taking on board assumptions, and based on the 30 June 2002 Accounts, it would cost F\$586,004 to close the Secretariat, should it cease operations. The Secretariat advised that after taking into consideration Council's decision at its last meeting, it recommended that the Reserve Fund Ceiling remain at F\$400,000. Council endorsed the Reserve Fund Ceiling remain at F\$400,000.

11.2 Justification for Service Provided from Funds Generated from Income-earning Activities

489. The Secretariat presented the paper AS31/11.2 as a requirement by Council for the Secretariat to update Council annually on the justification for service provided from Funds Generated from Income Earning Activities. The Secretariat advised Council that the paper had two parts – draft guidelines for activities resulting in funds generated from income earning activities and justification for the use of these funds earned in 2003. The draft guidelines was an additional aspect which the Secretariat was requested to prepare by Council. These guidelines were in the context of the process to be followed when the Secretariat engages in income-earning activities.

490. Australia expressed concern that the impact on the public good charter of the organisation, its work programme, the potential for conflict of interest and the risk of cutting across the private sector whilst being subsidised by donors. In addition Australia stated that they would like to see the guidelines further developed to address these issues. Australia also raised the issue of the use of the SOPAC umbrella for consulting work and that

it should be clear that people concerned are under contract with SOPAC.

491. Papua New Guinea stated that the Council had engaged the Director and the Deputy Director with the faith and trust that they would be able to ensure that these activities do not have an impact on the ongoing activities in the Approved Work program and Budget. Papua New Guinea also stated that in his view, Council should not micro-manage the Secretariat and that the provisions of the draft guidelines were adequate. Papua New Guinea stated that it was the role of the supervising officers to ensure that the projects were completed on time and that it was the role of the Council to question the Secretariat when there are delays in the completion of the projects.

492. Niue thanked the Secretariat for preparing the paper and stated that it was the Council who encouraged the Secretariat to earn as much income from selling the data from SOPAC in consultations with the countries concerned. Niue suggested further development of the guidelines.

493. In response to Papua New Guinea, Australia mentioned that it was not their wish to micro-manage the process and that they were interested in the Secretariat further developing the guidelines so that they are comprehensive and transparent. This would provide a framework for income generation which avoid a conflict of interest with public good focus of the organisation.

494. Cook Islands thanked Australia and Papua New Guinea for their contributions and commended the Secretariat for their effort. Cook Islands enquired as to whether the suggestion put forward by Australia would be prohibitive or could it be incorporated into the guidelines.

495. In response to Australia the Secretariat stated that it saw no problems in taking into consideration the suggestion put forward by Australia. The Secretariat also suggested to the Council that in the interim it would take on board the draft guidelines and come back with a more refined document in the next session.

496. Council agreed that the draft guidelines be considered interim at this stage.

11.3 Appointment of Auditor

497. The Secretariat presented paper AS31/

11.3 on the appointment of the auditor of SOPAC's 2002 and 2003 financial statements. The Secretariat advised Council that following the required tendering process, its recommendation that the current auditors, Ernst & Young be retained as the auditors for 2002 and 2003 financial statements.

498. Council adopted the recommendation that the current auditors, Ernst & Young be appointed auditors for 2002 and 2003 financial statements.

11.4 Business Plan 2003 for implementation of the Corporate Plan 2002-2004

499. The Secretariat introduced to Council agenda item 11.4, and drew the attention of Council to the Business Plan text.

500. The Secretariat informed Council that the identified priority actions in the Business Plan 2003, were considered to be more focussed and less ambitious than those contained within the Business Plan 2002, stressing that 2002 has been the first year of implementation, of such a process in the organisation.

501. The Secretariat referred to the recommendation that Council make any modifications and recommendations they felt necessary and endorse the Business Plan 2003.

502. Council endorsed the Business Plan for 2003.

11.5 Approval of 2003 Work Programme and Budget

503. The Secretariat referred Council to the Director's Annual Report Part 3, and asked Council to note in particular the introductory section, in that this differs from previous Work Programme and Budget documents submitted to Council. This was of particular importance considering the points emphasised in this section in relation to the "transitional" context of this proposed Work Programme and Budget.

504. Council was asked to note that for 2003 member-country contributions were not to change from 2002 levels.

505. Council was asked to note that the allocation of EU project budget at present did not go beyond the allocation of sums of financing under each Programme, and that further de-

tailed allocation must await the definition of a work programme for the EU Project to be determined early 2003.

506. Council was advised this additional budgetary detail would be circulated as soon as it became available.

507. Vanuatu referred to Tables 3 and 4 and noted an inconsistency in the total contributions made by Associate Members, being FJ\$63,000 in Table 3 and FJ\$60,000 in Table 4, and requested clarification from the Secretariat.

508. The Secretariat advised that the correct total should be noted as FJ\$63,000, and that the individual contributions made by associate members should be French Polynesia: FJ\$43,000 and New Caledonia: FJ\$20,000.

509. Australia asked Council to note that the 2003 Proposed Budget was, in line with all other work in relation to the New Organisational Structure, was in transition. Australia also expressed their desire to see the budget show much more clearly links from budgetary designation to discernable and measurable outcomes from Secretariat programme strategies.

510. Australia also noted that Table 4 presented a 2% increase in member contributions proposed for the year 2004, and reminded Council that a member contribution increase of 12.6% was agreed in 2000 for the year 2001. It was strongly recommended that this proposed 2% increase in contributions is removed and that contributions are maintained at current levels. It was expressed that this would be in line with current pressure and efforts across all donor, regional, and international organisations to operate efficiently and economically.

511. The Secretariat noted the comment from Australia and expressed the view that agreement by Council on this element of the Budget was inevitably a sensitive issue. The Secretariat suggested to Council that consideration of any change in member contributions for successive years would provide a strategic approach to managing the budget.

512. Samoa noted the proposed increase in Member Contributions and stated that it did not support the proposal.

513. Samoa also asked the Secretariat what provisions were made for new requests from member countries in the light of the new Programme and Budget, and requested countries be given the opportunities to reassess priori-

ties and thereafter request inclusions in the Work Programme.

514. The Secretariat explained that the Work Programme and Budget as presented was a 'snap-shot' and that there remained full flexibility in modifying priorities and addressing the changing needs of member countries. It was further expressed that the Work Programme and Budget before Council was a draft, and that the inclusion of new work, or the modification of activities was possible.

515. The Secretariat reassured Council that within this strategic framework, reprogramming and flexibility of work priorities was considered normal.

516. The Secretariat stressed to Council that they have a key role in the prioritisation of Work Programme activities, and that guidance and momentum in dictating our strategic direction was the responsibility of the Council. The Director raised the example of the Environmental Vulnerability Index (EVI) as an important project that needed the full endorsement and support of member countries to ensure success, and stressed further the role the Council has in promoting and determining the work conducted by the Secretariat.

517. Niue expressed its support for the EVI Project and noted the importance of its completion. She also acknowledged to Council that its membership contribution was in arrears, but that these arrears should be paid in full before the end of 2002. Other Council members whose contributions were in arrears were also encouraged to ensure rapid settlement.

518. Council approved:

- (i) the Revised Budget of FJ\$8,656,839 for 2002.
- (ii) the Work Programme and Budget of FJ\$12,345,634 for 2003, as presented in the Director's Report subject to changes requested by countries at the session.

12. OTHER BUSINESS

519. Australia noted that after discussions with TAG and Council members they would like to suggest that the running of Council/STAR be reviewed as part of the planned discussions in reviewing the strategic work programme activities to ensure the most effective use of these meetings.

520. Fiji queried developments regarding upcoming international symposiums as dis-

cussed in Majuro. The Secretariat noted that the most significant event to be convened by SOPAC is the 2003 Community Risk Symposium. The Secretariat also noted interest by the International Seabed Authority to host a workshop in the region in June 2003 prior to their Annual meeting in Kingston, Jamaica in July. The Secretariat also indicated that the Jackson Lum Memorial Symposium preparations are ongoing.

521. The Secretariat noted that countries that have paid their contributions should be recognised. The Secretariat encouraged those members that have yet to pay their contribution to please inform the Secretariat of their situations.

522. The Secretariat also noted that SOPAC was 30 years old this year, and that given the new Corporate Plan and strategic directions it might be useful to consider whether the Constitution was still appropriate or whether there was a need to review it. The Secretariat suggested that Council may wish to consider this at its next meeting, noting that the Secretariat did not have the expertise to review it.

13. VENUE AND DATE OF 32ND ANNUAL SESSION

523. Niue informed Council of its intention to host the next Council Session in Niue, in September 2003 and noted a preliminary date the week beginning 23 September 2003.

14. ADOPTION OF AGREED RECORD OF PROCEEDINGS

524. Council considered the draft summary record of the Proceedings of the 31st Annual Session of SOPAC and endorsed it subject to amendments proposed during this session of the meeting.

525. The Proceedings volume will be made available both in hard and electronic copy, at the latest, by the end of the year.

15. CLOSING

526. The Director expressed that the Secretariat faced a number of major challenges over the next year. The year would be of significance to him personally because it was to be

his last year at the helm. He was hoping to ensure these challenges were met in readiness for his successor. The Director reminded Council of the many changes the Secretariat had undergone in the past ten years, having expanded both in size and scope evident by the increase in the Secretariat's budget from FJ\$3m to F\$12m for the same period.

527. As a further continuation of this progressive process, the Director called upon Council to become champions of the Secretariat's work in the region and in their countries. The Director also stressed the importance of this level of participation by the Council in addressing the challenges faced over the coming year.

528. Summarising the challenges highlighted by the Director:

- The importance to develop, finalise and implement the new organisational structure. In this challenge the Director emphasised the crucial importance of feedback and comment from member countries in this process. He reminded Council of the agreed recommendation that this work would undergo full review by the end of October 2002, in order to be fully endorsed and ready to be adopted by 31st December 2002.
- The need to address the implementation of the large scale EU EDF8 project (Reducing Vulnerability of Pacific Island States), and the expansion of this project through EDF9 to include 6 new ACP countries. The Director again expressed the crucial role that member countries and active country representatives must play in the successful implementation of this project.
- The vital and time-bound implementation of the Maritime Boundaries project upon which a number of other ocean management projects are dependent.
- The role of the Secretariat in regard to issues of security. The Director asked the Council that it must consider the role and unique interventions that the Secretariat can contribute towards enhanced security in the region.
- The importance in wisely choosing a successor for the Director's position. He expressed how vital it would be to select a successor with the capability and vision to take the organisation forward by building on what had already been achieved, and urged Council to think about the matter carefully in the year they had before them,

so as to make the correct decision at the next session, rather than be swayed by the politics usually surrounding the making of such appointments.

- The need to encourage interaction and collaboration between the Secretariat, member countries and other national, regional and international organisations, agencies and programmes. Such interaction is seen as key to ensuring effective and appropriate work programme delivery. The Council members must be proactive to ensure that the Secretariat can be responsive to their needs.

529. In closing the Director expressed his thanks to:

- The drafting committee for their hard work under the able Chair of Niue.
- The donor organisations and the Technical Advisory Group for their vision and support in helping the countries of the region.
- The outgoing Chair the Marshall Islands for their help and support over the last year.
- The Secretariats CROP 'sisters' for their sincere cooperation and contribution through working with the Secretariat.
- The Forum Secretariat for allowing the Secretariat to make use of the facilities, and for providing such an effective environment for the session.
- The staff of the Secretariat who have all worked hard, confirming that the success of the Secretariat was due to his staff.
- The Chair for her able and positive leadership in guiding Council.

530. In conclusion the Director noted the challenges of the coming year and expressed

the Secretariat's aim to report to the next Council with success and progress in these identified areas of challenge and called for all members and organisations to provide guidance and input in support of this task.

531. The Chair added her thanks to the staff of the Secretariat for a well run and effective meeting.

532. The Cook Islands thanked the Secretariat, and invited the honourable representative from Papua New Guinea to give the Vote of Thanks on behalf of the SOPAC Governing Council.

533. Papua New Guinea commended the Chair on her leadership and guidance, thanking Nauru for the welcome they afforded Council in their role as hosts and recognised the success of this meeting. He asked the Chair to pass on the regards and gratitude of Council to the President of Nauru. He added Council's appreciation of the support provided by the Forum Secretariat and commended the Director, the Deputy Director and all SOPAC Secretariat staff for their hard work and role in this highly successful meeting. He also noted the positive and important input from the TAG and other organisations present.

534. In conclusion, Papua New Guinea expressed the important role healthy discussion has in the definition of a progressive approach to the regions problems and priorities while accounting for the needs and desires of individual countries. Papua New Guinea encouraged all Council members to make full use of the Secretariat and looked forward to seeing the results of the current organisational structure changes being developed.

535. The Chair thanked all delegates, and Secretariat staff and formally closed proceedings.

APPENDICES

1	List of Participants	59
2	Agenda	69
3	Designation of National Representatives	70
4	Statements by Delegations	
	Part I: Member Countries	71
	Part II: CROP Organisations	82
	Part III: Supporting Governments & International Agencies	87
	Part IV: National Institutions	92
5	STAR Reports	
	STAR Chair's Report to Council	97
	STAR Working Group Reports	100
6	Summary Record of EVI Side Meeting	106
7	List of Conference Room Documents	109
8	List of Acronyms	111

APPENDIX 1

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SCIENCE, TECHNOLOGY AND RESOURCES NETWORK (STAR):
(Theme: Geoscience and Sustainable Development in Pacific Island States, 2002-2012)

OPENING SESSION OF GOVERNING COUNCIL

1. OPENING
2. ELECTIONS
3. AGENDA AND WORKING PROCEDURES
4. REPRESENTATION
5. DIRECTOR'S ANNUAL REPORT (Part 1a)
6. STATEMENTS
7. DIRECTOR'S ANNUAL REPORT (Part 1b)

JOINT COUNCIL-TECHNICAL ADVISORY GROUP (TAG) SESSION

(Member countries and other delegates discuss the SOPAC Technical Work Program)

8. MISCELLANEOUS REPORTS
9. DIRECTOR'S ANNUAL REPORT (Part 2) Work Program Report 2001-2002
10. DIRECTOR'S ANNUAL REPORT (Part 3) Draft Work Program and Budget 2003

GOVERNING COUNCIL POLICY SESSION

(Items in this session could be restricted to Member Countries and CROP Organisations if the items require only Council consideration. Otherwise this session will be open).

11. ESTABLISHMENT AND ADMINISTRATION
12. APPROVAL OF 2003 WORK PROGRAM AND BUDGET
13. OTHER BUSINESS
14. VENUE AND DATE OF 32nd ANNUAL SESSION
15. ADOPTION OF AGREED RECORD OF PROCEEDINGS
15. CLOSING

APPENDIX 3

DESIGNATION OF NATIONAL REPRESENTATIVES

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Australia: Mr Graham Fletcher, Assistant Secretary, Pacific Islands Branch, Department of Foreign Affairs and Trade, Canberra ACT 2600, Australia. Tel: (61) 2 62612153, Fax: (61)2 62612332. Email: graham.fletcher@dfat.gov.au

Cook Islands: Secretary, Mr Edwin Pittman, Secretary, Ministry of Foreign Affairs & Immigration, PO Box 105, Rarotonga, Cook Islands, Tel: (682) 29347, Fax: (682) 21247. Email: secfa@foraffairs.gov.ck

Federated States of Micronesia: Hon. Mr Sebastian Anefal, Secretary, Department of Economic Affairs, PO Box 12, Palikir, Pohnpei, Federated States of Micronesia, Tel: (691) 3202620, Fax: (691) 3205854. Email: fsmrd@mail.fm

Fiji Islands: Mr Bhaskar Rao, Director, Mineral Resources Department, Private Mail Bag GPO, Suva, Fiji, Tel: (679) 387065, Fax: (679) 370039. Email: brao@mrd.gov.fj

French Polynesia: Rosita Hoffman, Head of International Affairs, PO Box 2551, Papeete, Tahiti, French Polynesia. Tel: (689) 472 266, Fax: (689) 472 202. Email: rosita.hoffman@presidence.pf

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Niue: Mrs Sisilia G Talagi, Secretary to Government, Premiers Department, Office of the Secretary to Government, PO Box 40, Alofi, Niue, Tel: (683) 4200, Fax: (683) 4232/4151. Email: secgov.premier@mail.gov.nu

Papua New Guinea: Mr Kuma Aua, Secretary, Department of Mining, Private Mail Bag, Port Moresby Post Office, National Capital District, Papua New Guinea, Tel: (675) 3211961, Fax: (675) 3217958. Email: kuma_aua@mineral.gov.pg

Samoa: Secretary for Foreign Affairs, Ministry of Foreign Affairs, PO Box L1859, Apia, Samoa, Tel: (685) 63222, Fax: (685) 21504. Email: mfa@mfa.gov.ws

Solomon Islands: Mr Francis Orodani, Permanent Secretary, Ministry of Mines and Energy, PO Box G37, Honiara, Solomon Islands, Tel: (677) 25974/25507, Fax: (677) 25811.

Tonga: Mr Tevita Malolo, Secretary & Surveyor General, Ministry of Lands, Surveys and Natural Resources, PO Box 5, Nuku'alofa, Tonga. Tel: (676) 23611, Fax: (676) 23216. Email: minlands@kalianet.to

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APPENDIX 4

STATEMENTS BY DELEGATIONS

PART I: STATEMENTS FROM MEMBER COUNTRIES

FEDERATED STATES OF MICRONESIA

Madam Chair, SOPAC Director, the Honorable Ministers, Chairman of STAR and TAG, National Representatives, distinguished delegates, ladies and gentlemen.

I wish to first convey our National Representative's regrets, the Honorable Sebastian L. Anefal, that as National Representative to SOPAC for not being able to be with us.

Madam Chair, our delegation wishes to congratulate you on assuming the Chairmanship and my government's appreciation to your government for hosting this session. Our sincere appreciation also goes to the outgoing Chair person for his leadership during the past year.

Madam Chair, we once again come to this meeting with a renewed sense of dedication and commitment to work closely with SOPAC in fulfilling our tasks as identified by our people.

SOPAC's dedication and commitment to work closely with our national and statement governments was highlighted by the Director's recent visit to the States of Pohnpei, Chuuk and Yap after the Annual Session in Majuro last year. We truly feel that such a visit gave our key government officials and private sector representatives the opportunity to hold practical discussions with the Director on how to chart out a more practical work program for my country. The visit also gave more favourable exposure of what SOPAC is all about to the citizens of FSM.

We see SOPAC as an efficient conduit for the effective transfer of technologies. This is an essential element for the sustainable development of our islands. We continue to hope that this role of SOPAC continues to strengthen and we place more emphasis on projects which depend on the use of such technologies. For example, one of the priority tasks completed this year by SOPAC in the FSM involves the multibeam mapping of the Yap and Chuuk Harbours. This is certainly a task that we do not have the capacity and the technology to implement.

Some of the technologies being received with

great enthusiasm in the FSM relate to GIS and Remote Sensing information systems. By mentioning the above, we must also express deep gratitude to SOPAC for a job well done in the State of Kosrae.

The capability to understand and implement such technologies also require training, a service which SOPAC has effectively provided. This indeed is illustrated by SOPAC accepting one of our nationals to undertake the Earth, Science and Marine Geology Program, a 3-year course at USP.

It will be remised of me if I do not underscore that our work of course cannot be successful without the generous support of donor countries who have shown interest in our islands and have provided invaluable human and financial resources to effectively implement in-country projects.

We will continue to work and liaise with the SOPAC Secretariat in pursuing projects which are of greatest priority to our nation.

Madam Chair, I thank you for the opportunity and wish to conclude by thanking your Government for hosting this 31st Annual Session of the SOPAC Government Council here in Suva. We look forward to a very successful meeting.

FIJI ISLANDS

Thank you Madam Chair for allowing us to make a few comments during this the opening session of the 31st annual session of SOPAC. However at the outset, please let me first take the opportunity to congratulate you on your appointment as Chair for this session and for the upcoming year. In the spirit of letting everyone have the time to make their statements today, I will be brief and leave detailed comment on aspects of work programs and other matters to their relevant sessions.

This Annual Session is important for a number of reasons, the first being that we meet to agree on the new corporate structure that follows on from the Corporate Plan that we so strongly

debated last year in Majuro. Agreement on this is fundamental to the future of SOPAC and the development of ongoing and new work programs. This new program structure captures well the current catchphrase “sustainable development and management of our resources” and more importantly sets the new strategic direction for SOPAC. It also reflects the new policy direction with regard to oceans, and sustainable development that has been stressed recently at the Forum and the WSSD meets. One might say in passing that this calls perhaps for us to consider a name change for our organisation. Sustainable development of resources is particularly critical to our small developing economies and would guarantee a cleaner, safer and more prosperous social and economic environment for our future peoples. Secondly this meeting sees the successful culmination of efforts over the years towards securing EU funds. It will mean a significant injection of funds into the work program of SOPAC and help improve our resilience against the vulnerabilities from natural hazards, lack of technical capacity and capability in small island states and help better manage our natural resources.

Fiji is happy to note certain other successes and initiatives including the development of the concept paper on sustainable development, the environmental vulnerability index, marine boundary delimitation and risk management/insurance. The recent ADB supported workshop on Water was important as it highlighted to us the importance of this resource – our very livelihood depends on this.

All of the above initiatives are of relevance both to us regionally as a group as well as locally to Fiji. Whilst it is good to note the movement of SOPAC into such strategic and policy areas, we would like to express a concern, albeit a small one. SOPAC is rapidly changing from its initial mandate and some of us still would like a strong geoscience and technical focus. Talented, experienced manpower and programs in technical and professional areas are also required and essential to ensure relevance of policy initiatives and to the original core functions of SOPAC which included excellence in applied earth-science delivery. Fiji would like to see continued strong efforts made to recruit technical expertise recently lost and to see that gaps do not develop in project delivery as funds exit mid way (as has developed in minerals, DMU and may develop in water).

We need such expertise and data to move from the policy into the implementation phase.

Fiji considers itself to be still in a recovery mode after the events of 2000 and the elections of September 2001 with 2000 and 2001 seeing some of the lowest levels of mineral exploration investment. The assistance provided by SOPAC in matters related to policy development, training and project implementation is therefore extremely relevant. To address our immediate needs I would like SOPAC to address capacity development with some priority.

The minerals sector, which experienced a downturn due to commodity prices and political events, is however, slowly but surely recovering. Early 2002 saw the grant of Offshore Petroleum Exploration Licences to Dampier Oil, the first such grant for 20 years, and here an important part was placed by the SOPAC sponsored Hydrocarbons database held at AGSO (now Geoscience Australia) in Canberra. There has been significant and encouraging news from the Emperor Mine at Vatukoula, which has embarked on a major expansion programme and the given stability in and further improvement in commodity prices exploration investment may begin a modest but steady rise. In support of this Fiji is concentrating on the development of new legislation, regulations and policies with regard to mining and community liaison and this has commenced with the development of fiscal incentives for mining in the 2002 Budget.

Resource constraints do not allow us to individually carry out the many varied tasks required to effectively assess and manage our natural resources. In this regard assistance provided by donor agencies such as SOPAC, and donor nations assist considerably. With regard to assistance in the minerals sector we are appreciative of the assistance provided by Japan through the Metal Mining Agency of Japan (MMAJ), which has assisted mineral exploration activities in Namosi, and in Southern Viti Levu and undertaken marine scientific research activities within the North Fiji Basin. We are eagerly anticipating the commencement of the a third phase of “Japan-SOPAC Cooperative Study on Mineral Resources of the South Pacific Region “ which could see additional work in the North Fiji Basin.

In closing, Madam Chair, I would once again like to take this opportunity to welcome you as Chair and also express our sincere thanks to the outgoing Chair, the Republic of the Marshall Islands for a job well done.

Vinaka Vaka Levu.

REPUBLIC OF KIRIBATI

Madame Chair,

May I take this opportunity to congratulate you Madame to the Chair and secondly be rest assured that you have the full support of my delegation, not just throughout this meeting but also for the rest of your entire tenure as Chair of this prestigious regional club. Likewise may I also join the other speakers in thanking the outgoing Chair for his guidance in the past year. Madame Chair, may I through you thank the Government of Nauru for agreeing to host this 31st Annual Session here in Suva and especially the warm welcome and pleasant hospitality accorded us since our first arrival on this beautiful capital city of Fiji.

While I have the floor may I also extend our appreciation to the Director and his support staff for their efforts in making this meeting possible, once again. The distribution of meeting papers and their subsequent receipt at our different and individual capitals, well in advance of the session, speaks for itself of the effectiveness and collective commitments of the entire SOPAC staff. It goes without saying that without the Director's good and able leadership and of course if the dedication of your support staff were not there in the first place, we would not be able to have another successful meeting of this kind.

To my novice understanding of this meeting, various projects of SOPAC would be discussed under the Work Program Agenda Item, but at this point in time, I wish to briefly touch on three of our priority programs that befall under the umbrella of SOPAC. The others I will discuss under the appropriate agenda items.

Kiribati, like the rest of the Small Island Developing States, still continues to place significant reliance and value on the technical and funding assistance rendered by SOPAC in the area of water, given our limited underground water supply. On South Tarawa, alone, where most of the population resides and relies heavily on the supplied water supply therefore any delays in its distribution or other natural inflicting causes such as droughts and sea level rise, would no doubt create a major disaster for the major disaster for the island populace. May I in this connection extend our humble pleas to the donor agencies present in this forum that this is one of the significant areas that we, SOPAC member countries, would continue to require support and assistance in. I must therefore stress to donor agencies around the table that this is still an area that we, member coun-

tries, would continue to require support and assistance in.

Our other priority area of equal concern is our surrounding coastal area. Because of our limited land area the problem of coastal erosion especially around the capital Tarawa is continuously exacerbated by direct beach mining for construction purposes and their needs for development. Beach mining by the community as well as construction firms is having a serious impact on our coastlines, however with the assistance of SOPAC, we have identified an area offshore to provide the public with their aggregate needs for construction. We are at the verge of finalizing our proposal for submission to Government for their consideration and once accepted, we will venture into this new type of project. Given its status as a pioneering project, my delegation wishes to register our request to SOPAC of their assistance in providing us with the technical expertise and advice so that it could be operating on a viable basis. We believe that this project could serve as a case study that could be adopted in other low-lying countries that have similar problems with construction aggregates. We would also like to seek the assistance of other colleagues around the table who have expertise in this area and are willing to share their expertise with us.

As you all know Kiribati is a country with limited natural resource and as such we would like to we would like to explore the deepwater minerals present in our exclusive economic zone. Of course this is a very expensive task to carry out by ourselves and we continue to seek the assistance of developed countries in this area. In making that remark, we wish to recognize the assistance provided by Japan and in particular in identifying the areas of cobalt rich crusts and manganese nodules in our EEZ. May I specifically request that Japan favourably considers including Kiribati in this next phase so that we have a better picture and understanding of our mineral resource and its potential so as to enable us to plan for the future of these untapped deep sea minerals.

Last but not the least, it would be a remiss on my part if I do not acknowledge the support of the funding donors who have undoubtedly with our needed extra budgetary requirements, which has made it possible for Kiribati to achieve her goals.

With those few remarks, I thank you all for your attention.

Kam rabwa.

REPUBLIC OF THE MARSHALL ISLANDS

It gives me great pleasure to join you and the rest of the member countries' representatives together with the scientists and experts who have taken times out of their busy schedules to join us. Kindly allow me this opportunity to extend the RMI's gratitude and appreciation for the supports from SOPAC during our tenure as the Chair of the SOPAC Governing Council but especially for the valuable contributions by the members of the STAR.

I would also like to acknowledge the presence of the other regional organizations, the international organizations and institutions who have joined us in this important meeting.

Madam Chair, I offer my delegation's support during your term as the Chair of the Governing Council and our congratulations on your role. We have every confidence in your ability to lead us on through this meeting. Furthermore, I would like also to express our gratitude to SOPAC and its staff for the assistance the Marshall Islands has benefited from. Let me also register our gratitude and appreciation to the donor countries, the EU for their continuing support – to the Governments of Japan and Korea for their generous assistance in conducting the deep sea survey within the exclusive economic zone of the Marshall Islands.

But before I get carried away with these preliminaries, let me bring us back to what is at hand and the work before us. Madam Chair, through you I would like to officially present the following project requests to be considered by SOPAC:

Regional Maritime Boundaries Project Further assistance in determining the RMI's boundaries particularly in regards to meeting our obligations under the Western and Central Pacific Tuna Convention. Mindful of the limitation of funding, we urge the Secretariat to actively seek funding to ensure full project implementation.

Energy Assistance to the formulation and development of National Energy Policy and capacity building in the implementation process.

Geographical Information System Extension of the Geographical System to the Outer Islands particularly to Jaluit Atoll in order to enhance conservation policies.

Waste Water Strategic Plan of Action Assist with the development of a Policy Statement/Framework, Capacity building and staff train-

ing for Majuro Sewage Company, assessment of the Majuro Waste System Outfall and a follow-up on the status of the Majuro Water Lens in Laura.

Transfer of Technology Assistance with the establishment of Outer Islands Radio Communication System and Training.

Ocean Monitoring The RMI recognizes the activities of the long-standing Triton Buoy Program and the Argo Program as they relate to improving our understanding

Of both the climate and the oceanographic processes. We would welcome more training opportunities especially in Data handling. These should also be expanded to include public awareness schemes and opportunities under the South Pacific Sea Level and Climate Monitoring Project (Phase III)

Offshore Sand Recovery and Environmental Impact We note with appreciation the recently completed fieldwork by SOPAC to determine offshore sand reserves and the potential environmental impact resulting from the recovery process. We look forward to the outcome of this work as they have direct bearing on sound planning and management decision. Marshall Islands also requests SOPAC's assistance with regards to environmental assessment of pearl farming in Bikirin Island, Majuro.

Pacific Regional Ocean Policy The Policy would provide a platform from which we will be able to develop a strategic action plan for the sustainable development of our ocean and its resources. We encourage the Secretariat to play a proactive role in the preparation and Organization of a Regional Ocean Forum.

Madam Chair, the RMI endorses the new SOPAC Corporate Plan and we very much welcome its implementation as soon as possible. We also welcome the creation of the Business Plan and while we are of the view that it should be in place and operational, we strongly recommend that we continue to monitor it and make changes accordingly.

Please allow me once again to thank the Director of SOPAC, Mr. Alf Simpson and his staff for their continued commitment to ensure that the operation of this Organization is of the highest standard.

I thank you Madam Chair for the opportunity to say a few words on behalf of the RMI's delegation.

NIUE

Delegates, Observers and Development Partners, Director of SOPAC and Staff, Ladies and Gentlemen

Greetings, but firstly I wish to congratulate you Madame Chair and the outgoing Chairman for the meeting's organisation and arrangements.

Niue joined the SOPAC membership in 1994/1995 not long before strong view were registered for it to be merged with another regional organisation. Eight years to date, Niue is pleased, very pleased that SOPAC's achievements has proven its value as a stand alone intergovernmental organisation. The UNDP originated programmes that have to be regionalised, namely the Water and the Disaster Programmes have been incorporated well into the SOPAC's corporate and strategies plans. SOPAC's leadership in the EVI initiative, technology and remote sensing for mapping, traditional programmes including energy developments, amongst others have received international recognition. We can only but congratulate the SOPAC's management team, dedicated leadership and all staff for the terrific teamwork.

However, Government would like to remind the ICT division to ensure that information on government's situations are factually correct before it's made.

There are opportunities for sustainable economic development utilising the technical knowledge at SOPAC. Niue, under EU funding, will be embarking on the development of renewable energy in the next five years. As SOPAC played an important role at the start, Niue will rely on SOPAC to provide the technical assistance. It even deserved a mention in the Fiji Times this morning. Niue cannot purport to have other "riders" involved. Too many cooks appeared to cause distractions in past projects, rather than tangible genuine assistance.

Niue aims to be the region's Mecca for renewable energy development and training. Niue for the first time in 2002 participated in the SOPAC run Certificate in Earth Science.

The Government of Niue further re-affirms its wish and commitment to host the 32nd Session of SOPAC's Governing council in 2003, in Niue. Niue has recently entered into an arrangement with Polynesian Airlines to provide a jet service for the next five years. Hence you can jet in from either Samoa or from Auckland. Niue has many interesting physical features of interest to the geologists and scientists. You won't be

bored, lost or marooned. Delegates, observers, development partners and scientists, see you all in 2003.

PAPUA NEW GUINEA

Introduction

Madam Chair; Members of the Governing Council; Distinguished Representatives of Governments and institutions of member countries; Distinguished delegates from donor Governments and agencies supporting SOPAC; Advisors of the SOPAC Secretariat; SOPAC Director and secretariat staff; Ladies and Gentlemen.

On behalf of my Government and the people of Papua New Guinea, I wish to extend to you all our warmest greetings. I feel very honored to be delegated the duty of representing PNG on this special occasion of the 31st SOPAC Annual Session in Suva, The Republic of the Fiji Islands.

Madam Chair; the PNG National Representative, Mr. Kuma Aua sends his apology and I convey his best wishes to all of you.

Madam Chair; I can assure the meeting that PNG will continue to recognize SOPAC as an important regional geoscientific organization. PNG encourages SOPAC to continue to work towards meeting member country needs and to remain in tune with the donor funding requirements and concerns. PNG reiterates that capacity building, both in human resources and institutions is its major priority.

Madam Chair; I would like to take this opportunity to thank SOPAC for its assistance to PNG over the years. A very important contribution from SOPAC is the on-going institutional strengthening of the PNG Department of Mining through the sponsorship of PNG nationals to undertake studies in geoscience. Recently, SOPAC was instrumental in securing assistance from JAMSTEC to commit resources to conduct extensive offshore investigations into the cause of the 1998 Aitape Tsunami. These are only two of the many projects undertaken by SOPAC to assist PNG. I extend PNGs' gratitude also to those countries and institutions that provided assistance over the years through SOPAC.

Mineral and Energy Sectors

Madam Chair, this is a summary of the mineral and energy sector reports obtained from

the Mining Division of the Department of Mining (DoM) and the Petroleum Division of the Department of Petroleum and Energy (DoPE). Energy sectors include petroleum and geothermal development. More information can be obtained from the relevant offices of the respective PNG Government Departments.

MINERAL SECTOR

MINERAL EXPLORATION: PNG has been receiving less of the worldwide exploration dollar than it received throughout the 1980-90s. However, based on the available data it is estimated that US\$10.1 million was spent on exploration in PNG in 2001. This compares with US\$15 million for 2000.

Despite the downturn in exploration, PNG was still ranked at 11th placing in 2001 compared to 4th in 1999 on the offshore destination for a portion of the exploration funds of Australian Stock Exchange listed companies.

Ramu Nickel and Cobalt, Kainantu Gold, Frieda Copper, and Hidden Valley Gold projects are at the advanced exploration stage. In June this year, the Government issued a Mining Lease to Highlands Pacific Limited to develop the Kainantu underground gold project. Ramu Nickel and Cobalt project has been put on hold because of very high capital cost requirements and low nickel price. Exploration work is still being conducted in other projects

PRODUCTION

Total mineral production for the year 2001 was less than for 2000. In 2001, the total mineral production was about 67,000kg gold, 69,368kg silver and 203,762 tonnes copper. In 2000, 74,540kg gold, 79,197kg silver and 203,061 tonnes of copper were produced.

One major factor in the downturn was the closure of mining operations earlier in the year at Misima and scheduled staged pit preparation at Porgera Mine. Work at Misima is now concentrated on production from low grade stock piled ore. Misima Mine will close in latter half of 2004. The focus in mining now in PNG is on efficiency and cost cutting to enhance revenues and production in the future.

PROJECTS

1. Ok Tedi Copper Mine

Ok Tedi Mine produced a total of 14,144kg gold, 35,770 kg silver and 203,762 tonnes copper as of December 2001. The grade of 30.73 million tonnes of ore mined in 2001 was 0.93% copper and 0.8 g/t gold, and recoveries in the mill were 71.4% and 56.2% respectively.

In January 2002, BHP Billiton officially pulled out of Ok Tedi Mine and relinquished all of its shares to the people of Western Province and the National Government. The government has about 82% shares in Ok Tedi Mining Ltd.

2. Porgera Gold Mine

Porgera Gold Mine exceeded the 2001 forecast by 10.9% to produce about 23,658kg gold in 2001. Based on revised pit plan, its reserves at the end of June 2001 were estimated at 69.2 million tonnes grading 3.1g/t gold and containing 6.9 million ounces of gold.

Porgera Mine was temporarily shut down on 16th July 2002 following repeated disruptions of power supply to the mine from Hides Gas Project. At present, operations at Porgera Mine remain suspended.

3. Lihir Gold Mine

Lihir's gold production in 2001 was a record 21,382 kg exceeding forecast by 6.9%. The mineral resources including the ore reserves for Lihir project are estimated to be 353.8 million tonnes averaging 3.04g/t gold for 34.6 million ounces of contained gold.

4. Misima Gold Mine and Tolukuma Gold Mine

Production from Misima stockpiles and from underground mining at Tolukuma contributed over 7400 kg gold to the overall PNG production.

EXTERNAL FUNDED PROJECTS

Madam Chair, in an attempt to rectify the downturn in exploration, PNG received a loan of US\$10 million in 2000 from the World Bank under the Mining Institutional Strengthening and Capacity Building Project. The loan is being used primarily for staff training and re-organization of data holdings with the aim of enabling private sector electronic access to our large database through a soon to be established website.

The Department of Mining was awarded a grant of Euro 50million (appro. K150 million) late in 2001 from the European Unions' 8th European Development Fund (EDF) Sysmin special facility. The bulk of this grant will be used to conduct a large airborne geophysical survey and complementary geochemical sampling and mapping program in selected parts of the country. It is envisaged that the new data generated will help stimulate exploration.

ENERGY SECTOR

GEOTHERMAL ENERGY

Madam Chair, PNG is pursuing investigations into its geothermal potential for electricity generation. Foreign organizations have shown some interest in the project recently and have had some discussions with local industries and government officials in PNG. GSPNG has taken steps to liaise with external donors and agencies for assistance in funding equipment to explore the geothermal resources.

Lihir Gold Mine is at an advanced stage of constructing a 6MW geothermal plant on the island to supply electricity for its mining operations.

PETROLEUM EXPLORATION

Petroleum exploration activity for the year 2001 remained at a relatively low level. In 1990, petroleum exploration was at its peak with a total of 40 Petroleum Prospecting Licenses (PPL). At the end of year 2001, it declined to 23 PPLs with 5 Petroleum Development Licenses (PDL), 5 Petroleum Retention Licenses (PRL) and 1 Petroleum Processing Facility License (PPFL).

PRODUCTION

The main petroleum industry comprises operations in Kutubu, Moran, Gobe oil projects and Hides Gas Project. Since commencing oil production in 1991, a total of over 320 million barrels of oil (MMBO) and 34 million standard cubic feet (MMSCF) gas was extracted to the end of 2001 from these projects. Kutubu and Moran Oil production in 2001 averaged 39,000 barrels of oil per day (BOPD). Gobe Oil production averaged 21,000 BOPD for the same period. The Hides Gas Project produced a total of 5,075 MMSCF gas.

PROJECTS

1. Kutubu Oil Project

Kutubu Oil Project commenced production in 1991 and up to the end of 2001, over 268 MMBLO and 618 million standard cubic feet (MMSCF) gas has been extracted. The cumulative production as of 31st December 2001 is 267.58 million stock tank barrels oil (MMSTBO). The remaining recoverable oil reserves are 43.22 MMSTBO.

2. Gobe Oil Project

Gobe Oil Project commenced production in 1998 and so far, over 37 MMBBLO and 95 MMSCF gas have been produced. Cumulative production at the end of 2001 is 37 MMSTBO with remaining recoverable reserves of 38 MMSTBO.

3. Moran Oil Project

Moran Oil Project commenced production in 1998 and up to the end of 2001, over 15 MMBBLO and over 20 MMSCF gas were extracted. Cumulative production last year was 15 MMSTBO, and the remaining recoverable reserves are 112.8 MMSTBO.

4. Hides Gas Project

Hides Gas Project exploits a large onshore gas field, which commenced production in 1991 and has produced over 31000 MMSCF gas at the end of 2001. Minor production of gas sales to Porgera Gold Mine for electricity generation commenced in late 1991. A small volume of condensate is refined on site and sold locally.

SPECIAL PROJECTS

1. PNG Gas To Queensland (GTQ)

The GTQ negotiations between the State and the project proponents have been ongoing since 1996. Progress on major issues such as fiscal stability and State participation in the upstream and infrastructure development were slow. Negotiations is ongoing, Itochu, a Japanese conglomerate, has submitted a proposal for the State's financing requirements for the project. No decision on this has been made as yet.

2. Napa Napa Refinery

The Napa Napa Oil Refinery was the first downstream petroleum project to be granted a Petroleum Processing Facility License by the Government in February 2000. InterOil was awarded the contract and engineering design, procurement and construction is in progress. The refinery is expected to be in operation in 2004.

GEOLOGICAL HAZARDS

Madam Chair, PNG experienced several damaging natural disasters last year and this year. The GSPNG was heavily involved in carrying out assessments and investigations into these disasters. However, this work has been severely constrained by financial difficulties and the problems of aging equipment and theft, and vandalism of equipment.

In May 2002, a severe flood damaged a bridge on the major Highlands Highway in the Markham Valley. The Highlands Region and parts of the coastal areas were completely isolated for more than 6 weeks. Supplies had reached a very critical stage until the bridge was repaired.

Lae port is PNG's largest and the country relies heavily on it. In June 2000, the wharf suffered structural damage when a submarine landslide destroyed 2 rear pile supports under one of its loading berths. The berth settled by about 160mm. It caused great concern among the business communities within the region who depend on the port.

On the 1st of July 2002, a large landslide occurred in the Finisterre Range, northwest of Lae City. It completely destroyed 2 villages and killed 38 people. More than 200 people were displaced and are living in Care Centres.

In early August 2002, Pago Volcano in West New Britain Province began erupting. It affected more than 15,000 people who were displaced from their homes, food gardens and properties. The Hoskins airport was closed and shipping services were disrupted.

A new El Nino began in mid-2002 and by the middle of September 2002 has caused the Ok Tedi Mining project to ration food after the water level decreased below 2m from the normal level of 7m. Ok Tedi Mine relies very heavily on the Fly River for transporting the copper concentrate from Kiunga port to the coast as well

as to ship goods and equipment to the mine site using barges. The Highlands Region is currently feeling some impact of the El Nino too. Food gardens and cash crops have been affected. Water supplies are drying up in the highlands and in some parts of the coastal areas.

On Monday 9th September 2002, a magnitude 7.6 earthquake occurred 40km off the coast and 100km west-northwest of Wewak, the capital of East Sepik Province. It created a meter high tsunami that reached 10-15m inland. The earthquake killed 4 people and or destroyed almost 900 houses and properties. A somewhat weaker earthquake but with extremely high casualties, occurred along the same coastline, near Aitape, in 1998.

REGIONAL GEOLOGICAL MAPPING

A mineral district study of Wau began in June 2001. Funded by the World Bank Project, this study is part of geological mapping fieldwork in the Wau to Menyamya areas.

PROPOSED GSPNG WORK PROGRAMME FOR 2003

Madam Chair, GSPNG is planning to carry out two major projects at the beginning of 2003. The projects need highly sophisticated offshore surveying equipment and expertise. These projects require the assistance of SOPAC.

The Lae port has been affected and requires an urgent offshore geological survey to determine the extent of damage. A bathymetric survey needs to be carried. The project has been scheduled to begin early next year. We plan to borrow equipment from other organizations to carry out the survey.

A similar project is also planned for Aitape. It is hoped that the same equipment can be used to carry out a bathymetric survey in the shallow water regions that were impossible to reach in the previous surveys by JAMSTEC. The data collected in Aitape will be combined with the previous surveys carried out by JAMSTEC in 2000 to complete the dataset.

CONCLUSION

In conclusion Madam Chair, I would like to highlight a number of issues:

- The serious decline in mineral exploration in PNG, and maturing operations at a number of mines and in oil production are great concerns for the relevant authorities in PNG. While the outlook for discovery of new oil reserves is not encouraging, the mineral potential in PNG remains very bright. There is an acute need to reverse the declining trend of mineral exploration, and initiatives on this matter by the new Government of PNG are promising.
- The Department of Mining in PNG, through a World Bank Project and a European Union Project, is re-building itself in the areas of staff capabilities in re-organization of its extensive data holdings, and in the acquisition of new geophysical data in two large prospective areas in PNG. These efforts in institutional strengthening will have a flow-on effect and will stimulate industry. These are the most encouraging developments in the Mineral Sector for many years.
- While the future is looking brighter for the Mineral Industry in PNG, there are continuing problems related to natural disasters in the country. Mitigation of the effects of these events will depend to some extent on the viability of the relevant investigative and monitoring agencies. PNG has received considerable benefit in the past from the assistance of SOPAC in efforts to mitigate the effects of natural disasters. It is sincerely hoped that this co-operation will continue.

Thank you for your attention.

TONGA

Thank you Madam Chair for allowing us to make few comments during the opening session of this 31st Annual Session of SOPAC. I understand that we have a very tight meeting agenda ahead of us to cover during this session. But since this is my first time to attend the SOPAC's Council meeting, as the new National Representative of SOPAC for the Kingdom of Tonga, I would like to present my compliments and very warm greetings to everyone of you attending this forum. To my fellow Councilors, friends and supporters of SOPAC, I wish you well and I am looking forward to working closely with you, in all matters pertaining to the betterment of SOPAC and to the region as a whole.

Madam Chair, I wish to associate myself (and

my delegation) with previous speakers in congratulating you for being selected as the Chairperson of the 31st Annual Session and for the SOPAC's Governing Council for the next 12 months. Further, on behalf of my delegation, the Government and the people of Kingdom of Tonga, I wish to express here my sincere appreciation and gratitude to your Government and the people of Nauru for having accepted to host this important meeting here in Suva, Fiji. This has indeed reflected the true spirit of co-operative life style of a broad Pacific Community, that our forefathers had enjoyed in sharing all the available resources in this part of the globe. Only in this way, that we with our very small voices in the Pacific region can be heard and recognized by the most developed and industrious countries of the northern hemisphere.

Madam Chair, I would like to take this opportunity to acknowledge the Secretariat for its invaluable assistance and support in a number of joint projects conducted during the year for the Kingdom of Tonga. From our record, a total of 7 projects were implemented, of which 3 were completed, one was deferred and the other 3 projects are yet to be completed. To highlight a few, the following projects were implemented during the year:

- Assessment of the damages inflicted by cyclone Waka in the Vava'u District on the 30th December 2001. This assessment, funded by AusAID and NZODA, was conducted for the Government of Tonga to see what lessons can be learnt in terms of planning future risk reduction strategies. In view of SOPAC's capability in this area, the Secretariat is hereby urged to assist in the capacity building and capability development of the Information System Technology Unit (and the Natural Resources Division) of Ministry of Lands, Survey and Natural Resources (MLSNR) during the implementation of part of the Cyclone Emergency and Risk Management Project co-funded by the Government of Tonga and the World Bank.
- Assessment of coastal erosion in the Kanokupolu area (western Tongatapu). This is part of Tonga's requirement for the assessment of coastal erosion problems in the Tongatapu and 'Atata Island. Assessment of coastal erosion in Kanokupolu area, funded by the Commonwealth Secretariat, was done by BGS's consultant under SOPAC's arrangement. Tonga has now received the preliminary report from the consultant but we await the final report with

recommendations. SOPAC is also requested to further arrange donors and consultant (if and when required) to undertake the remaining part of the project, covering the other affected coastal areas of Tongatapu (including the low-lying areas) and 'Atata Island.

- With regard to our requirements for Capacity Building it is pleasing to report that 3 candidates from Tonga have completed the USP Certificate in Earth Science during the year. One candidate is currently doing the same certificate at USP. Other training workshops were made available to candidates from Tonga through SOPAC in the areas of Disaster Management and Relief activities and the Renewable Energy Sector. SOPAC is urged to assist in securing financial donors for postgraduate courses in one of the related areas of geoscience (such as hydro-geology, coastal engineering and marine geology).
- Tonga has noted the efforts putting in by SOPAC on its preliminary claims preparation of Tonga's Extended Continental Shelf (ECS). During the year a candidate from Tonga attended a training workshop on Article 76 of the UNCLOS, held at the University of Southampton in the United Kingdom. This training, funded by the United Nations, was arranged by SOPAC. Tonga has also noted that although the time frame for submitting its claim is extended to 2009, we believe that this extended time frame is getting short to us. At the moment we are still trying to identify a multi-skilled and affordable consultant to carryout a full desktop study of Tonga's anticipated ECS and also, to undertake the assessment and verification of the coordinates of its base points. SOPAC is urged to assist us on the above task, and in particular, the identification of the right consultant for the job and also, to assist us in securing financial donors to meet the required costs.
- I have also noted the invaluable assistance provided directly by the Secretariat to line Ministries in Tonga, such as the Ministry of Works Disaster Management Unit, the Ministry of Police's Fire Department, Tonga Trust and the Tonga Water Board. I have also noted that all of the Secretariat's contributions and commitments were undertaken without the endorsement of the National Representative of SOPAC. The Secretariat is strongly urged to consider working closely with the SOPAC's National Representative in all matters pertaining to the

services committed by SOPAC to its member country. If I am SOPAC's National Representative for the Kingdom of Tonga, then I expect my endorsement to be included in all requisitions (for providing services), coming to SOPAC from various points of contact that had been informally established by the Secretariat in Tonga. SOPAC's commitment to any request from a member country should be subject to endorsement of its National Representative.

Madam Chair, the Government of the Kingdom of Tonga recognises and appreciates the assistance from donor countries and organisations that have contributed in so many ways to the work programs of the Secretariat. Their continued efforts to support and encourage the development and improvement of the well being of the people of the Pacific region is highly appreciated.

In the next year's program, we place our priorities on tasks relating to the following issues:

1. Maritime Boundary Delimitation & ECS Claims:

A complete desktop study that would involve the following elements:

- (i) Delineation of the most advantageous system of archipelagic baselines for the specific case and configuration of the Kingdom of Tonga under article 76 of the UN Convention on the Law of the Sea. These baselines are important because all maritime spaces, including a 350 M limit for the extended continental shelf (ECS), are computed from them.
- (ii) A compilation of all bathymetric and geophysical information available in the public domain necessary for the implementation of article 76 of the UN Convention on the Law of the Sea beyond 200 nautical miles.
- (iii) An assessment of existing data and information in order to determine if Tonga can proceed immediately with the preparation of a submission to the Commission on the Limits of the Continental Shelf.
- (iv) The determination of all maritime spaces under the national jurisdiction of the Kingdom of Tonga: Territorial Sea, Contiguous Zone, and Exclusive Economic Zone and the continental shelf up to and beyond 200 M.

- (v) A comparative analysis of the traditional historic maritime claim of Tonga and the 200 nautical miles limits determined from the new archipelagic baselines.
- (vi) A compilation of the national legislation on maritime spaces of the Kingdom of Tonga and its neighbours: New Zealand, Fiji, France, Samoa, American Samoa (as a US territory), and Niue (territory of New Zealand).
- (vii) A determination of all the overlapping maritime areas under the national jurisdiction of Tonga and those of its six neighbouring States.
- (viii) A determination of the most beneficial scenarios for international maritime boundary delimitation between Tonga and all its six neighbouring States.

Tonga has identified the Consultant to undertake the above tasks ((i) – (viii)) at a total cost of about US\$50,000. SOPAC is hereby requested to assist the MLSNR in finding a donor to meet the consultant's cost.

2. *Offshore Sand Dredging: TO 2001.006*

This is still a priority project for us in Tonga. We would therefore like to re-activate the existing project proposal as above by seeking SOPAC assistance in reviewing of the original project document and redrafting of a new proposal detailing various dredging components and equipment required with the estimated costs for the whole operation. SOPAC may wish to assist the MLSNR in finding a donor to fund this long requested project.

3. *Review of Tonga Water Supply Master Plan: TO 2001.007*

SOPAC is requested to assist the MLSNR and Tonga Water Board in finding a consultant (and a donor funding agency) to review the existing and outdated Water Supply Master Plan and also redraft the Water Resource Management Legislation for the MLSNR.

4. *Assessment of Coastal Erosion Problems: TO 2000.005*

The issue of coastal erosion is a very much a concern to all coastal villages and low-lying

areas in Tonga and this project is still a priority for Tonga. SOPAC is requested to continue with its current assistance in assessing the problems associated with coastal erosion throughout the Tonga islands.

5. *Review of the Mineral Act and Petroleum Act:*

Tonga has recently received a number of applications from commercial companies for prospecting licenses for minerals and petroleum in our offshore areas. We have noticed that our current Mineral Act is inadequate for the purpose of accepting those applications. SOPAC is requested to review the current Mineral and Petroleum Acts and also assist Tonga in the assessment of those applications.

6. *Cyclone Emergency and Risk Management Project (CERMP):*

This project is funded by the Tonga Government and the World Bank. The MLSNR is one of the implementing agencies of the project. Tasks involved will focus on the “establishment of a high-resolution land and geographic information system for support of risk management” within the MLSNR. The process will include:

- Aerial photography of 10 main islands;
- Establishment of geographical information for national use; and
- Development and implementation of a national risk management strategy for national hazards and climate change effects, including risk assessment for key hazards in vulnerable areas.

The budget allocation for the above tasks is TS\$1.6 million. In view of the importance of the above project for the capacity and capability building of the MLSNR, SOPAC is requested to consider providing assistance when and where required by the MLSNR during the implementation of this project.

Finally Madam Chair, I would like to take this opportunity to congratulate the outgoing Chair and the Director of SOPAC and his staff for their tremendous contributions which they had committed to the development of this region, during the past twelve months.

Malo

TUVALU

Mr Chairman, Distinguished members of the Governing Council and your delegations, Director of SOPAC, Representatives of CROP agencies, Advisers, Observers, Secretariat staff, ladies and gentlemen.

Let me first congratulate you, Mr Chairman, on your appointment to the Chair of SOPAC for the next twelve months. I believe that with your vast knowledge and experience, you would lead and guide us constructively towards informed and meaningful decisions on important tasks ahead. My delegation remains committed to assist you in whatever ways we can.

On the same note, Mr Chairman, I would also like to express our appreciation to the outgoing Chair, Marshall Islands, for the splendid work and excellent manner in which she conducted the work of the Governing Council during the last year.

It gives me great pleasure, Mr Chairman, to attend this 31st SOPAC Governing Council Meeting for the first time since my appointment as the Tuvalu National Representative to SOPAC in June. As anticipated, my delegation is sincerely happy at seeing and meeting old friends at this meeting. We look forward to sharing and working in close partnership with you for the common good and benefit of all SOPAC member countries.

As a small member state of SOPAC, with very limited resources, capability and capacity, Tuvalu had and will always lean upon the ongoing support provided by SOPAC. Tuvalu values its SOPAC membership not only as a means of regional cooperation but for the valuable opportunity to resort to in terms of assistance in areas beyond its technical and economic capability. In this regard also Mr Chairman, my delegation continues to acknowledge the assistance provided to SOPAC by the donor community, and we would ask that their assistance continue in order to provide funding to support SOPAC's ongoing and new programmes to the member countries.

Mr Chairman, I would like to also acknowledge the support provided by SOPAC in recovering our internet-service provider and which avoided us to be one step back in the level of telecommunication advantages. We hope this support will continue to expand to other areas of IT capabilities. SOPAC's assistance under its disaster management, energy, ocean and near-shore surveying and mineral prospecting, fisheries' and environmental programmes etc, are also acknowledged with sincere appreciation.

Mr Chairman, we note that SOPAC will encounter new and additional challenges in view of the changing circumstances in the various sector activities it undertakes, and its work for the successful implementation of the Corporate Plan 2002-2004. SOPAC's role will also become more important in ensuring the interests of the SOPAC memberships are retained. In this respect, the leadership of SOPAC will play an important role to ensure SOPAC remains strong and also capable of adapting its programmes to meet the changing circumstances.

Mr Chairman, my delegation will reserve its comments and remarks on agenda items for this meeting to the appropriate time schedule for discussion.

Finally, Mr Chairman, on behalf of my delegation, I wish to acknowledge the hard work, dedication and useful services provided to the members by the Director and his staff. We thank them for their untiring efforts and pray that we remain with our Agency and that SOPAC will continue to prosper in the years ahead.

Mr Chairman, may I also register through you Tuvalu's appreciation to the people and the government of Nauru for hosting this 31st Annual General meeting of SOPAC's Governing Council here in Suva, although it would have been interesting and different having it on Nauru.

With these remarks, Mr Chairman, ladies and gentlemen, I thank you for your attention.

PART II: STATEMENTS BY CROP ORGANISATIONS

FORUM SECRETARIAT

Madam Chairperson, Distinguished Delegates.

The Forum Secretariat is privileged for this opportunity to address the 31st Annual Council meeting.

SOPAC as you all know is a member of the Council of Regional Organisations in the Pacific (CROP) of which we now have ten members, the most recent additions being the South Pacific Board of Education Assessment and the Fiji School of Medicine. As a family member of CROP, the Secretariat is happy to report that

SOPAC has fully participated in the CROP process and contributed to regional policy initiatives.

In the past year these initiatives have included the development of the Pacific Islands Regional Ocean Policy (PIROP), which was endorsed by our Leaders in their last meeting, the Pacific Islands Information and Communications Technologies Policy and Strategic Plan (PIIPP), and the Regional Energy Policy and Plan (REDP), which were endorsed by Ministers in April and July 2002 respectively.

These policies are due in part to the respective CROP working groups, namely the CROP Marine Sector Working Group, ICT Working Group, and the Energy Working Group, of which SOPAC is an active member. And today SOPAC continues in its efforts with the CROP working group members to work toward viable strategic plans of the PIROP, PIIPP and the REPP.

SOPAC has also been instrumental in taking up the water issue and in developing a regional action plan on sustainable water uses. This is evident in the recent Ministerial Declaration on water, which has been acknowledged by our Leaders. The Forum Secretariat actively participated and supported on regional issues of importance that have been addressed by SOPAC under its mandate.=

SOPAC not only participated in the work of CROP but also taken its own initiative in developing strategies of importance to the region to guide its program of work with member countries. For example, we acknowledge SOPAC's poverty strategy and its draft sustainable development strategy. These are important issues for the region and internationally, as evident in the recent World Summit on Sustainable Development held in South Africa.

Inter-agency cooperation with SOPAC was evident in the 8th European Development Fund (EDF) Pacific Regional Indicative Programme and this work led directly to the approval of the FJD5 million "Reducing Vulnerability through Island Systems Management" - an important initiative that aims to address water, aggregates and hazards in Pacific ACP States. SOPAC continues to take active role in the various CROP working groups, which are examining policy areas to be addressed under the 9th EDF Regional Programme (FJD60 million).

Finally, I want to place on record the Forum Secretariat's appreciation to the Director and Deputy Director and staff of SOPAC for their strong sense of commitment to the CROP proc-

ess and collaboration with the Forum and other regional bodies. We hope to continue our excellent working relations in years to come.

Thank you.

SECRETARIAT OF THE PACIFIC COMMUNITY

Madam Chairperson, Honoured Delegates, Director and Staff of SOPAC, Development Partners, Colleagues, Ladies and Gentlemen.

I bring greetings and best wishes from the Director General and staff of the Secretariat of the Pacific Community to the 31st Annual Session of the SOPAC Governing Council.

Madam Chairperson let me first of all join the other speakers in congratulating you for your appointment as the Chairperson for the 31st SOPAC Annual Session and also to thank the Hon Minister Assisting the President of Nauru, Hon Remy Namaduk for the focussed and challenging opening address. I would also like to thank the Director for SOPAC, Mr Alfred Simpson, for his hard-hitting and visionary message. I echo much of the challenges to development Mr Simpson referred to. A major challenge we all face today, whether at regional, international or national level relate to our role as the guardians and the custodians of the resource of the Pacific Island region. We often forget that much of our resources particularly our natural resources will not grow, but our populations and development do. We often forget that our decisions today, will affect the livelihood of future generations of Pacific Island people. The current generations of Pacific Island people are the stewards of our resources. I am sure we want to leave behind a legacy that we can be proud of, a legacy that our children and their children can relate to as contributing to their sustainable development. To achieve these, we must be good stewards of our resources, we must strive for balanced development that can adequately support the current generation of Pacific Island people yet not undermine the livelihood of future generations. This is where the challenge is for all of us.; We need to be better advocates for responsible management of our resources; we need walk the talk of good management and governance.

Madam Chairperson, the Secretariat of the Pacific Community has enjoyed a very good working relationship with SOPAC over the past few years, and we are very happy and privileged to participate at this Council Session.

SPC is a firm believer in 'strategic', collaborative, and partnership approach amongst regional organisations in responding to, and addressing important priorities of our respective member countries. We are very happy to say that from our perspective, this vision is being increasingly achieved by the various regional organisations. Of important note is the recent inclusion into CROP the Fiji School of Medicine (FSM) and the South Pacific Board for Education Assessment (SPBEA) bringing to ten the number of regional organizations now under the CROP umbrella.

The Council of Regional Organisations of the Pacific (CROP) has in our view matured into a very useful mechanism that provides an important forum for the heads of the ten Pacific regional organisations to discuss important cross-cutting issues affecting the region and within the jurisdictions of the CROP agencies. Examples of such collaborative responses include the recent effort that went into the Johannesburg Summit on Sustainable Development.

My statement at the 30th Annual Session of the Governing Council in Majuro last year referred to an initiative by SPC, SOPAC and SPREP to develop a CROP brochure. I am pleased to note that this became a CROP-wide effort and the brochure you now have with you is an outcome of this joint effort – aimed at helping people better understand Pacific regionalism. Unfortunately we now need to revise the brochure to include the Fiji School of Medicine and the South Pacific Board for Education Assessment.

A number of very significant events are taking place in SPC this year that will be of interest to the SOPAC Council. These include:

- The Development of the new SPC Corporate Plan (2003 - 2005). The process we have followed is similar to SOPAC's approach involving wide consultation with the SPC membership and development partners. We have sent out the draft version to members and we hope to present a revised draft for the consideration of our governing body in November this year.
- The development of Programme Strategic Plans. Every programme in SPC has now developed three-year strategic plans. We will be presenting the plans to our CRGA this year for their information and consideration. The programme strategic plans provide the link between the corporate plan and country/territory priorities. The strategic

plans have a standard format, and they will also provide the basis for donor consultation and funding support. They provide a basis for longer analysis and planning of interventions.

- The presentation of our budget has undergone a major overhaul to make it more result based. The presentation now links funds to Strategic Plan objectives, expected outputs for the budget year and key indicators. The strategic plans provide the basis for our programme budgets.
- We are also conducting external reviews of a number of our programmes to ensure their continued importance and/or relevance to country priorities. This year we have commissioned two external programmes reviews for the Suva-based programmes; the Community Education Training Centre (CETC), the Regional Media Centre (RMC); a full divisional review of the Land Resources Division (LRD) (comprising the Agriculture and Forestry Programmes) and a corporate wide external review of our Finance section. The LRD review is a big undertaking because it involves approximately one-third of the SPC technical programmes.
- We have also developed a quality assurance framework and good practice standards and guidelines both in programme development and management areas. This will ensure the are corporate guidelines in these important areas.
- We also commissioned as organization-wide Job-evaluation (job-sizing) exercise undertaken by the same consultants that did the CROP harmonisation exercise. The outcome of that exercise has flown into our structure.

Now focussing on the SPC-SOPAC relationship:

This has also grown in scope over the past year. Major collaborations between SOPAC and SPC in the last twelve months include, but not limited to:

- A joint SOPAC/SPC organised Regional Energy meeting in Cook Islands this year.
- The SPC agreeing at the 2nd SPC/SOPAC/SPREP Colloquium held in Noumea this year that it will review its position with regards the implementation of energy projects in acknowledgement of SOPAC's lead role in this sector.

- Collaborative work with PIFS and other CROP agencies in the development of the regional ICT Policy and Strategic Plan.
- Collaborative work in the new SPC-DIFID population GIS mapping project.
- Collaborative work in the regional consultations relating to EDF 8 projects, and the SOPAC/SPREP organised Regional Wastewater meeting last year, and Water in Small Islands Consultation this year.
- Possible joint environment health development project for Micronesia.
- Manihiki Lagoon Project involving the SOPAC Coastal and Information Technology Units and the SPC Aquaculture programme.
- SOPAC-SPC Network link between SOPAC and SPC Nabua site.
- SOPAC Consultancy to investigate waterlogging of taro pits in Palau under an SPC project.

At the host country level, and together with SPTO, SOPAC and SPC also have a joint project with the Government of the Republic of Fiji Islands on the subject of the Pacific Village. This initiative has been very slow to gather momentum. We look forward to the progress update from the Government of Fiji on the office complex for SPC/SOPAC and SPTO during the presentation of that agenda item.

At the strategic and corporate planning level, SPC welcomes SOPAC's input into its Corporate Planning development.

Madam Chairperson, what we are trying to portray in our statement is simply, that CROP organisations have focussed on the need to work together in a more collaborative and transparent way, to ensure we respond more effectively and appropriately to your needs for which we were established to address. More specifically with SOPAC, we believe, our relationship, and collaborative efforts can only grow stronger in our mutual efforts to serve our members.

Finally Madam Chairperson, we wish to thank you for your leadership in this Council Session, the delegates for your continued guidance to the SOPAC work programme, the SOPAC Secretariat for inviting us to participate, and the Government and people of the Republic of Nauru, the host of the 31st SOPAC Annual Session.

Thank you for your attention.

SOUTH PACIFIC REGIONAL ENVIRONMENT PROGRAMME

Let me begin Madam Chair, by congratulating you on your selection as Chairperson and your Government for hosting this 31st Annual Session of the Governing Council. I firmly believe that all member countries, no matter their size and circumstances, should have the opportunity to chair and steer the direction of regional agencies if only for a year.

Let me also thank H.E. Mr Mack Kaminaga and his colleague Ms Marie Maddison, for their guidance over the past year and for making the 30th Session in Majuro last year such a successful and enjoyable event.

I would also like to thank the Director of SOPAC for the invitation to attend this session. An invitation I welcomed both personally and as a member of SPREP's management. Personally, I was delighted because it would enable me to continue my rewarding and close association with SOPAC, almost unbroken over the last eleven or so years. While it is early days yet for me to work out how phase II of my association with SOPAC might pan out for me personally, I am definite Madam Chair that, for you, for the SOPAC Secretariat and the delegates, this could only be a positive development. Because now, with my relegation to the observer section, your work would be a lot easier, the meeting would progress much more smoothly and most likely conclude a lot earlier so that we could all have some time for sightseeing or shopping before we catch our planes back home.

As part of the executive management of SPREP, I was also pleased to receive the invitation so that SPREP continue to attend and demonstrate support for a sister CROP agency and its Governing Council. In the many years that I was a country delegate to SOPAC and other CROP agencies governing meetings, the frequent observation or complaint by delegates was that, for some of us who inhabit CROP agencies, the tendency was to attend meetings in far away and exotic places rather than regional travel to member countries or CROP agencies. Irrespective of whether this observation is fair or unfair on regional public servants, my presence here is a pledge that SPREP management is with SOPAC and CROP agencies for the long haul. We might still need to do some of these travel to faraway and exotic places but the priority is with regional travel and support to CROP agencies.

After all the CROP agencies were created by the island countries to serve their needs in the

various areas each agency specialises in, and we should all cooperate in the pursuit of this common duty to the region.

SPREP is here to listen, learn and observe how we could work together with SOPAC Secretariat in the areas where we have common interest so that our work is complementary and not competitive.

Let me conclude Madam Chair by wishing you a successful 31st Session and a productive tenure over the next twelve months. Soifua

UNIVERSITY OF THE SOUTH PACIFIC

Mr. Chairman, Director of SOPAC, Mr Simpson, Distinguished SOPAC Government Representatives, Representatives from Fellow CROP Agencies, and from other Regional and International Organisations, Participating Geoscientists, Ladies and gentlemen....

The University has worked in close collaboration with the South Pacific Applied Geoscience Commission (SOPAC) for a considerable period of time, and this working relationship has been welcomed by both Organisations. The Vice-Chancellor, Mr. Savenaca Siwatibau, University senior management, and the USP Heads of Sections, who directly interact with SOPAC, wish to record their appreciation for this long-standing co-operation, and wish this 31st Annual Session in Suva, fruitful deliberations.

In the area of undergraduate and postgraduate geoscience studies, the University offers the Region several programmes of university study. Bachelor of Science programmes in Earth Science, Marine Science, and Environmental Science show a pleasing level of enrolments. The Bachelor of Arts in Marine Affairs also includes an Earth Science component. Two years ago, new postgraduate diploma programmes in Environmental Science and in Environmental Studies were inaugurated; each of these programmes include major earth science components; a postgraduate diploma in Marine Science is also a popular programme serviced through the Marine Studies Programme, the School of Social and Economic Development, and the School of Pure & Applied Sciences.

The University is very pleased indeed to see a growing number of its own graduates from Fiji and the region entering the ranks of SOPAC staff, and wishes to express its appreciation to SOPAC for providing these opportunities.

This year, 2002, SOPAC again supported teaching and other services at USP: the third year

Applied Geology course in the Earth Science BSc (Messrs Carpenter, and Overmars, staff of the Water Resources Unit), and the Ocean Resources Management courses in the School of Social and Economic Development School. The University is grateful to the SOPAC Director and Deputy Director for offering the services of Geoscience Commission staff to assist with teaching.

With respect to the Earth Science and Marine Geology Certificate Programme, the University continues conferring the award for as long as SOPAC should require this. The Certificate studies continued early this year, and the intake of students for the new part of the cycle is currently underway. The University, as of course SOPAC, is indeed grateful to CFTC for the continued funding of the Training Coordinator's position.

The University's Marine Studies Programme is involved with SOPAC in several major initiatives, and this collaboration will continue:

- Involvement in the CROP Marine Sector Working Group with SOPAC as one the major players. Professor South had represented the University and, until his departure in May, had been very involved with the development of the Oceans Policy for the Pacific Islands. The University seeks to strengthen its participation and representation on all CROP Working Groups, including the newly-envisaged Group on Sustainable Development.
- SOPAC is represented on the USP Marine Studies Advisory Group;
- Collaboration of the University with the oceans ARGO BUOYS Project, and with the Global reef Monitoring Programme.
- IOI-Pacific Islands (with USP) offered a course on Responsible Fisheries in the Pacific Islands region: the implementation of the Post UNCED International Instruments, in July of this year. There is plans for another offering in January of 2003.

The Pacific Centre for the Environment and Sustainable Development (PACE-SD), established last year as a new University initiative continues collaboration and inter-change with SOPAC in Climate Change and Variability, and Disaster Management. The following will be of special interest to SOPAC member countries:

- A 16-week postgraduate-level programme, on Climate Change, Vulnerability and Adaptation Assessment, is currently in progress at the University. This face-to-

face, full-time programme will afford the completing student two postgraduate courses which may be used for a postgraduate diploma.

- The Pacific Island Community-based Conservation course will commence in semester 1 of 2003, and be repeated in the second semester. This will equate one postgraduate course credit, and will involve face-to-face and in-country research/field activities; this programme trains in conservation practices for the region, and will be coordinated by both PACE-SD and the Institute of Applied Science (IAS).

The University has been strongly represented alongside SOPAC in the CROP Energy Working Group (EWG) **and**

- participation has extended to most EWG meetings and activities; USP has contributed to the Regional Energy Policy document, and to the Energy initiatives that were presented at the WSSD.
- USP has proposed hosting a Centre of Excellence in Energy; there is some interest from donors, and CROP has expressed its general support for this initiative. USP's role in training, capacity building, research and development will complement the activities of the CROP partners.
- Capacity building for Wind Power funded by DANIDA. USP's role was to design and

implement a postgraduate course in wind power; this has been done and the course is ready to be offered once the wind turbine, an integral part of the training hardware, is installed. Currently SOPAC is negotiating with France for funding to enable the purchase of a wind energy conversion system.

- Associate Professor M. Kumar, the USP rep. on the PSA Council is convening a session on energy at the Bangkok Science Congress next March; invitations will be extended to technical and policy experts to present papers at this meeting highlighting the issues pertinent to small island developing states.

Last year SOPAC formally invited the University to participate in its Disaster Management programme development, with a possible view to eventually formalising undergraduate and postgraduate course components to already-existing degree programmes which will help train skilled personnel in this area. Development on this is still continuing.

On a final note, the Vice-Chancellor of the University of the South Pacific wishes to thank most sincerely the SOPAC Governing Council for the invitation to be represented at this, and past council meeting(s). The University notes, and highly commends, the excellent contribution the Commission has made to geoscience research and development in the Region, and wishes it all the best of success in its future endeavours.

PART III: STATEMENTS FROM SUPPORTING GOVERNMENTS AND INTERNATIONAL AGENCIES

DELEGATION OF THE EUROPEAN UNION FOR THE PACIFIC

Mme Chair, Honorable Delegates, Participants, Ladies and Gentlemen

I am grateful for this opportunity to address the 31st annual SOPAC Governing Council hosted by the Republic of Nauru, in my capacity as representative of the European Commission for regional affairs in the Pacific.

I will join a number of previous speakers to express that I, too, was particularly inspired by the statements this morning made by the outgoing and the incoming Chair as well as by the visionary words addressed to us by Mr Alf

Simpson, Director of SOPAC. We will take these words at heart and pass the messages on to our European Commissioner, Mr Poul Nielson, who will be in the region as of next week and who will be signing the new Pacific Regional Programme under the Cotonou Agreement. The signing ceremony will take place in this very same Forum Conference room together with Mr Levi, Secretary General of the Forum Secretariat and Authorising Officer for the European Development Fund on behalf of the region.

As a European Union, we are happy to support the work of SOPAC by means of addressing the important objective of vulnerability reduction in the 8 Pacific ACP States covered by the Lome Convention through the development of an in-

tegrated planning and management system (Island Systems Management) in the sectors impacting on hazard mitigation and risk assessment, aggregates for construction and water and sanitation. This programme will be implemented over an estimated 4 years and the European contribution will be 7 Meuro. It is our clear intention to broaden the programme and include also the 6 new Pacific ACP States under the Cotonou Agreement: Cook Islands, FSM, Marshall Islands, Nauru, Niue and Palau in the near future.

Substantial work still needs to be done in focusing the programme on reducing the vulnerability of Island States and determine the concrete activities and results to be expected. The present meeting and subsequent regional and /or bilateral discussions will surely assist in this process of prioritizing project activities and deliver tangible responses on what will be the practical results for the end-beneficiaries.

As it is indeed a multi-sector project, it is important that the recipient countries are fully informed of the project and, in each country, the different stakeholders are equally associated so as to achieve maximum impact in each country and ensure ownership.

In addition, the European Union will also very much focus within the bilateral country programmes around the region on the development of renewable energy (solar, wind etc..) in response to the identified needs in terms of sustainable development. We are in close partnership with our member states present in the region (in particular France and the UK) as well as with the Pacific Power Association to realize the programmes with the countries concerned and with the specialized mandated organizations SOPAC, associated with SPC.

Allow me to conclude, Mme Chair, in thanking you and the honorable Delegates for your kind attention and to wish you a very productive continuation of your Council's proceedings.

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

Thank you Mr./Madam Chair.

There are three main categories of Japanese Government's Official Development Assistance (ODA):

- (1) Bilateral Grants (Grant Aid and technical Cooperation),

- (2) Bilateral Loans (Loan Assistance, generally known as "Yen Loan"), and
- (3) Contributions and subscriptions to multi-lateral donor organizations.

The major portion of bilateral grants is undertaken by the Japan International Cooperation Agency (JICA) which is responsible for the technical cooperation aspect of Japan's ODA programs.

Technical cooperation is aimed at the transfer of technology and knowledge that can serve the socioeconomic development of the developing countries. JICA carries out a variety of programs to support the nation building of developing countries through such technical cooperation. On behalf of JICA, I would like to express our sincere appreciation to the Secretariat of SOPAC and SOPAC member countries for our continuing cooperation of the years pursuing programs that JICA can best serve in.

JICA has supported numerous significant programs in SOPAC countries in the form of a JICA Expert, deep-sea mineral surveys and more recently deep-sea environmental surveys and equipment grants. At the same time JICA appreciates SOPAC's strategic vision to be supporting its member countries in their national and regional actions in three key programs areas, and to become a center of excellence for Pacific Island communities in these program areas, namely, Ocean and island management, Community Risk management, and Developing Community Lifelines. As an example of our support towards this noble vision, JICA participated this year in the recent formulation of SOPAC's Sustainable Development Strategy, in June 2002 in Sigatoka.

At the request of SOPAC, JICA and the Metal Mining Agency of Japan (MMAJ) have been carrying out exploration activities in deep-sea areas in the exclusive economic zones of SOPAC member countries since 1985. In 1999, Stage 1 of the program was successfully concluded. Several promising areas for manganese nodules, cobalt rich crusts and hydrothermal deposits were identified during Stage 1, and the result provided the impetus to seek a continuation of the co-operation program, which was requested by SOPAC in 2000.

JICA and MMAJ have worked closely with SOPAC on Stage 2 of the project. The first phase of Stage 2 has considered a detailed exploration and environmental surveys of promising areas selected following a review of the results of Stage 1 of the project. Surveys were com-

pleted within the exclusive economic zones of the Cook Islands and Fiji in 2000 and 2001 respectively. This year, together with SOPAC we have carried out and successfully completed a research cruise within the EEZ of the Republic of the Marshall Islands.

Although the first phase of the Stage 2 will be concluded in March 2003, JICA and MMAJ would like to advise of their intention to continue this important initiative and cooperative relationship with SOPAC. Further, JICA and MMAJ are making concerted efforts to secure the budget to conduct the second phase of the project.

Other JICA Assistance

The Japanese Government through JICA has been sending experts to the SOPAC Secretariat in Fiji since 1987 (seven since 1987). They have been involved in offshore minerals programs, construction of database and related data management and various works in the field of offshore programs. Mr. Nobuyuki Okamoto has been working as a JICA expert since last September along these lines with JICA's additional support in terms of equipment to assist its expert in his/her work.

The meeting of PALM 2000 in Japan between Heads of Pacific Island Governments and the Japanese Government agreed on priority areas for cooperation called the Miyazaki Initiative. These areas include

1. Supporting Sustainable Development of the Pacific Islands
2. Regional and Global Issues of Common Concern
3. Strengthening Partnership between Japan and Pacific Countries

We are looking forward for the further strengthening of our ties with SOPAC member countries after the coming meeting of Heads of Pacific Island governments and the Government of Japan in 2003.

JICA contributes to this partnership by assisting regional organizations or CROP members (e.g., SOPAC, PIF, SPC, USP, etc) through Human Resources Development through provision of

- Experts
- Senior Volunteers
- acceptance of trainees (in various JICA

Training Courses in Japan, of Third Country programs locally in the Pacific),

- and equipment grant.

JICA is looking forward for further potential areas of cooperation with SOPAC countries through these various possibilities.

Thank You.

KOREA INSTITUTE OF GEOSCIENCE AND MINERAL RESOURCES (KIGAM)

Madame Chair, Distinguished Delegates, SOPAC Director and Secretariat Staffs, and Ladies and Gentlemen,

First of all, KIGAM wishes to extend its warm congratulations to the Government of the Republic of Nauru for hosting the 31st SOPAC Annual Session here in Suva. And the KIGAM is pleased to be represented at the Opening Ceremony of the Governing Council and thanks SOPAC for the invitation to participate in the Session.

KIGAM and the Korean Government, as a global community, also would like to express our sincere appreciation to the SOPAC director and secretariat staffs for their continuous efforts and success for the sustainable development of the non-living resources, accumulation of geoscientific understanding, outreach of information technology, and vulnerability reduction for the people of Pacific.

KIGAM has been implementing our supporting program for the past few years in the Pacific Region. As far as SOPAC is concerned, KIGAM will continue to provide support to the on-going program and will look forward to widening the supporting areas for mutual benefit. In this regard, KIGAM will conclude a renewal of Memorandum of Understanding with SOPAC that may facilitate and strengthen such cooperation.

During the annual session, we look forwards to having chances to discuss how to develop the mutual relationships and to determine a new way forward for future collaboration with the Technical Secretariat, member countries, TAG members and supporting organizations. We believe that circum-Pacific countries including Korea should play an important role in improving the well-being, sustainable development, health and safety of the Pacific Island Countries and their people.

Thank you very much again Madame Chair for inviting me to address the meeting and we look forward to a productive and successful session.

TAIWAN/ROC

Madam Chairperson, Honourable Delegates, Observers, the Director and Staff of SOPAC, Distinguished Guests:

I am honoured to be here today to represent the Government of Taiwan/ROC at the 31st South Pacific Applied Geoscience Commission's Annual Session. On behalf of my Government, I extend greetings and congratulations on this occasion and would like to thank the Director, Mr Alfred Simpson and his colleagues of SOPAC, the Government of Nauru and the Government of the Republic of the Fiji Islands for all their efforts in making this meeting possible.

I feel that this meeting is very special because it provides the opportunity for all the representatives of the Pacific Island countries and related development partners to be exposed to the technical and scientific fields that are closely related to the development of this region.

With the complimentary communication, decision-making representatives and technical expert planners provide us with a more complete vision to promoting better regional cooperation. SOPAC has given us a good channel of exposure to advance technology programs, leading to a better vision for our development. Here, I would like to share with you something that had greatly impressed me earlier this year in April. I had received a copy of SOPAC's 2001 Annual Meeting Report and the cover had a satellite photo of an aerial view of Majuro, in the Marshall Islands taken from 400 kms above the ground. Before coming to Fiji towards the end of last year, I was previously stationed in Majuro, and in the centre of that cover photo, clearly recognisable, I was very shocked to see my official car parked outside my office in Majuro. I was totally amazed at what SOPAC could do and had mentioned this to Director Alfred Simpson. I was further astonished when Director Simpson then presented me with an even clearer, enlarged, colour photo of the same aerial view that was the original photo used on the cover of SOPAC's Annual Report.

I will always treasure this photo, not only as a memento but also with the knowledge that SOPAC's efforts in promoting scientific technology in the region are being successfully accomplished.

My Government has fully supported many productive programmes hosted by SOPAC in past years, and would like to acknowledge the excellent results for the betterment of the region. I can assure you, that the support of the Government of Taiwan/ROC will continue in the months and years ahead.

Finally, I wish all of us will have a very successful and fruitful meeting.

Thank you.

UNITED KINGDOM

I am pleased to be able to deliver a statement today on behalf of the UK Department for International Development.

Since the Annual Session last year, DFID has been directing its efforts to consolidate its current programme in the Pacific and to investing in new areas of work that are important for poverty reduction. We hope that these new initiatives will help to show that we will continue to be a visible and credible development partner as we continue the shift away from small bilateral programmes in the Pacific by 2004. Thereafter the UK will continue its development interest in the region through multilateral channels, particularly through the European Union.

The recent World Summit on Sustainable Development produced many positive things, but there are a number of outcomes that are particularly relevant to the three programming areas of SOPAC; Community Risk, Community Lifelines and the Oceans and Islands programmes. For example, on water and sanitation, energy, governance, including effective regulatory systems, management of the oceans, climate change and sustainable development of Small Island States. The Summit agreed that these outcomes should be effectively pursued at the regional as well as national level through regional institutions and bodies. These projected outcomes therefore provide SOPAC with the opportunity to play a significant role in their implementation in the Pacific, to support positive action at a national level.

A major achievement of the World Summit on Sustainable Development was the addition of access to sanitation to the Millennium Development Goals and the identification of poverty eradication and its clear relationship to sustainable development as the top priority. The addition of a specific target to halve the proportion of people without access to basic sani-

tation was an important achievement. The Summit noted that eradicating poverty is an indispensable requirement for sustainable development and that partnerships are needed at all levels to enable countries to achieve their sustainable development goals.

Another important outcome of the Summit Was the importance placed on taking forward 'Type two' partnership initiatives. These initiatives will promote partnerships between Governments, donors, greater involvement of people, particularly women, and communities to achieve the shared goals of sustainable development. We very much support these initiatives as a way of promoting development in a strategic and coherent way.

Finally it is perhaps important to mention that the summit emphasised the need to focus on implementation and for the international community to deliver on its promises. Perhaps the time has come to take a pause on new initiatives and new targets, and instead concentrate our efforts on the need for a real period of intensive implementation. SOPAC has made enormous progress in becoming more strategic with the adoption of a new corporate plan, a policy paper on its approach to poverty alleviation, the development of a Sustainable Development Strategy and a stronger focus on gender. Of course other management and structural changes are needed and desirable, but we should like to encourage SOPAC not to lose sight of the need for intensive implementation of its work programme, which would contribute to the implementation plan of the World Summit on Sustainable Development. SOPAC also has a key role to play in supporting, along with other regional partners, a more strategic approach to poverty elimination at the national level, in order to achieving long-term sustainable development outcomes.

We very much welcome the significant achievement of the development of a regional action plan on water and the draft SOPAC Sustainable Development Strategy that we believe will be put before the Governing Council during this years Annual Session. The UK will continue to support SOPAC in it efforts to promote sustainable development in the Pacific region through continued support for the SOPAC Water Resources Unit, the implementation of SOPAC's Sustainable Development Strategy and for building community resilience to natural disasters in Vanuatu. We will increasingly support SOPAC's programmes through multi-lateral institutions, particularly through programmes funded by the European Union

UNITED STATES OF AMERICA

Thank you, Madam Chair. Allow us to add our congratulations on your Chairmanship and wish you the best of luck in the year ahead.

We're glad to have the opportunity to be here again; I know that our absence in recent years has been noted. I have to blame our unique U.S. budgetary process; our fiscal year ends on September 30, and although theoretically a new budget is in place on October 1, in a practical sense there's often a period of weeks during which we operate via "continuing resolution", without a budget. Of course, I'm not suggesting that SOPAC change its annual meeting date to accommodate the U.S.! It's my hope that we've straightened the problem out, and will have travel funds obligated for SOPAC meetings in the future.

If I may just add a comment regarding agenda item 9.1.2 ...

The United States expressed certain reservations regarding language in the Pacific Islands Regional Ocean Policy with which we were uncomfortable, and although we expressed these reservations at the 2001 and 2002 SPREP meetings as well as at this year's PIF post-Forum Dialogue, we still have problems with the Policy, particularly its lack of mention of the UN Convention on the Law of the Sea.

The Policy states that "the region includes that part of the Pacific Ocean in which the island countries and territories that are members of the organisations comprising CROP....." which would appear to include the territories of the United States.

It may be useful to note that inasmuch as the United States was not involved in the drafting of this policy and in view of our remaining reservations, this policy does not apply to the United States, its Pacific territories, or their waters. That said, I must add that we applaud the development of this first-ever regional ocean policy, and recognise in it much insight and wisdom.

We look forward to working with our partners in the region throughout the policy's ongoing evolution.

Perhaps I'll just leave it at that, and say that we look forward to a week of constructive and useful meetings. Thank you.

WORLD METEOROLOGICAL ORGANISATION

Madame Chair, Your Excellencies, Mr Alf Simpson, Director of SOPAC, Distinguished Delegates, Ladies and Gentlemen.

I have pleasure on behalf of Professor G.O.P Obasi, the Secretary-General of the World Meteorological Organisation, to express appreciation to WMO and his own for the invitation extended to WMO and to convey his greetings and best wishes for the success of this event.

Your Excellencies, WMO continues to work very closely with the National Meteorological and Hydrological Services in the region and it also continues to collaborate with partner organisations in the protection of life and property, through various programmes such as climate change and variability, food security, disaster management, management of water resources, and information technology. Members of SOPAC are actively contributing to the programmes of WMO in particular, mitigation of natural disaster, and hydrology and water resources programme activities.

The Island countries are highly concerned about their vulnerability to climate change and variability, sea level rise, effects of ENSO/La Niña events, droughts, floods, and related environmental issues. These issues were recently discussed at WMO Regional Association V (South-West Pacific) Meeting in Manila, Philippines, May 2002. In this context, WMO supports the establishment of regional climate centers in the region for conducting studies and for exchanging results on subjects such as ENSO and La Niña and regional climate outlook. In this regard, WMO will continue to give high priority to the development of Climate Information and Prediction Services (CLIPS) in support of the implementation of environmental policy instruments.

Distinguished delegates, The mitigation of meteorological and hydrological related disaster, which represent nearly 75 per cent of all natural disaster, remains a major concern of WMO. The Pacific Island countries are highly vulnerable to natural disaster, such as tropical cyclones and associated storm surges, floods, droughts, which claim lives and cause damages to property.

In view of the frequent occurrence of such events, WMO will continue to give also high priority to the mitigation of natural disaster through the implementation of its relevant Programs and the International Strategy for Disaster Reduction (ISDR). WMO will continue to

provide the necessary support to the WMO Regional Association V (South-West Pacific) Tropical Cyclone Committee in its work to develop and implement strategies for enhancing early warning capabilities in the region, especially through the designated Regional Specialised Meteorological Centers (RSMCs) such as those in Nadi, Fiji, Honolulu, Hawaii, Brisbane, Australia and Wellington, New Zealand.

Ladies and gentlemen, as you are aware that the primary purpose of all National Meteorological and Hydrological Services is to contribute to the economic and social benefit and welfare of their communities. It is very important that these Services should maintain the operational capability in order to meet the national, regional and international commitments. In this connection, I would like to take the opportunity to express the appreciation of WMO to all Governments in the region for their support to the activities of their NMHSs and to WMO programmes and activities.

WMO will continue to collaborate with SOPAC and development partners in seeking and securing resources for the implementation of the Pacific-HYCOS and the training programme in hydrology for small islands in the Pacific region.

The Fourteenth World Meteorological Congress will be held in Geneva in May 2003 and I would like to extend an invitation to all Members of WMO to be represented at the Congress and for those who are not yet Members of WMO to apply for Membership in order to benefit from WMO's programmes and activities.

I wish you a successful meeting.

Thank you for your attention.

Speech by the WWF Representative on the occasion of the 31st Annual Session meeting of the SOPAC Governing Council

I would like to take this opportunity on behalf of WWF South Pacific to congratulate the Nauru Government on the chair and thank the Chairperson, and the Director, SOPAC for the invitation to attend the council.

In the SOPAC Director's opening address, he highlighted the importance of sustainable development for Pacific Island Countries. Sustainable development, requires real partnerships: collaboration, coordination and cooperation. WWF South Pacific commends SOPAC for its proactive efforts to reach out to civil society in the Pacific. A recent example of this is the Pacific Water Forum Consultation held in Fiji. WWF and SOPAC worked together to en-

sure that civil society voices are heard in the stakeholder dialogue.

The World Summit on Sustainable Development in South Africa last month, showcased the importance of multi stakeholder approaches to achieve sustainable development involving; Governments, Civil Society, International Organisation and the private sector.

WWF shares many of SOPAC values and objectives and the close working relations has benefit the work of both parties. At the core of both organizations is our desire to work to better the lives of Pacific Island people and support PIC Governments in their efforts to achieve sustainable development for their people. The WWF and SOPAC collaboration over the past year cover a broad spectrum of areas, like;

- WSSD consultations

- World Water Forum - civil society consultations
- Regional energy and marine policy-technical inputs
- Information Management and GIS
- SOPAC Sustainable Development Strategy – development
- Regional energy campaigns

Those are concrete example of this joint commitment by both organizations to work together, and paves the way for this next year in working together.

WWF wish the Government of Nauru and SOPAC Council a successful and productive meeting. Thank you

PART IV: STATEMENTS FROM NATIONAL INSTITUTIONS

BRITISH GEOLOGICAL SURVEY

Madam Chairman, distinguished representatives, delegates, ladies and gentlemen, the British Geological Survey presents its compliments to the 31st Annual Session of the SOPAC Governing Council and is pleased to attend the Meeting after its absence last year. We send our sincere best wishes to the meeting and look forward to its deliberations that we are confident will lead to progress and success. As a measure of its commitment, BGS has four staff in attendance at the Meeting

The BGS has been working in the Pacific region for many years and until the late 1980s contributed directly to the development of several national geological surveys within the region, including those in Fiji, Solomon Islands, Tonga and Vanuatu. In these countries we worked closely with local geologists both on and offshore, usually funded by the UK overseas aid/development programme. With the development of local expertise and the expansion and success of SOPAC, our role has diminished, but we still take a keen interest in the region and contribute whenever the opportunity arises, principally in partnership with SOPAC. Our Memorandum of Understanding with SOPAC constitutes a mechanism for co-operation.

We note the continued development of the SOPAC programme and, in particular, are very pleased to learn of the progress of the European Union's 8th EDF SOPAC Project – 'Re-

ducing Vulnerability in Pacific ACP States'. The vulnerability of the Pacific Island Nations needs to be addressed in a comprehensive fashion, and this Project, encompassing as it does many aspects of potential vulnerability, will make a major impact. We note that the Project has now reached implementation stage and hope that the BGS may have an active role.

We also view with concern the threat of global climate change, in particular on the low-lying island nations. We recognise that all of the Pacific intergovernmental organisations have a role to play here, but the physical impact on the land masses of any sea level change in our view needs particular focused study. In the earth sciences SOPAC is well equipped to make a significant contribution on this issue. BGS has a Global Change Programme and we are sure that links could be forged between the two organisations on this theme and we would wish to discuss this further in the near future.

Dave Tappin is one of the BGS scientists who support's the SOPAC programmes within the limits of the available funding. During the year he contributed further to the study of the tsunami that devastated the north coast of Papua New Guinea in 1998. Many papers, talks and popular science articles have now been produced on the cause of the tsunami, including one published in SOPAC Projects series. A paper on the work carried out during the year was presented at the STAR Session.

In April/May Dave visited the region to carry

out a coastal erosion study in Tonga. The project is funded by the Commonwealth Secretariat and is being implemented with full co-operation of staff from both SOPAC Techsec and Tonga. Dave presented a paper on the preliminary results at the STAR session. Whilst in the region Dave also attended the three-day meeting on Maritime Boundaries held in Nadi. After many years of underfunding we are pleased to note that there are now the resources available for an Oceans Programme. The enormous expanses of sea and the small land areas of many of the Island Nations dictate that this component of the SOPAC programme should receive a high priority, sadly lacking over the past ten years through budgetary constraints. BGS already has been working with SOPAC and Tonga on ECS delimitation and we hope that the preliminary collaboration will be extended in the future.

BGS is also pleased to announce that it has tendered for and won four contracts under a World Bank-supported technical assistance project to the mining sector in PNG. The overall project aims are to develop and support the Dept of Mining, thereby enhancing its ability to attract interest and investment from the international mining sector. The BGS projects cover:

- a training needs analysis for staff of the DoM;
- the design of a new IT infrastructure and database system;
- a geophysics project which will develop a database systems for the country's various geophysical datasets; and
- a remote sensing project which provide the DoM with a state of the art image processing system plus national data sets.

The projects form part of an institutional development programme with staff training as a key element of all projects. Work on these contracts began in January 2001 and will continue for up to 3 years. Dr David Greenbaum, the Regional Manager for Asia and the Pacific, is managing these activities, and Dr David Ovadia, Head of BGS International will also have a personal involvement in one of the projects

In conclusion, we wish to reaffirm our commitment to the Pacific region and to SOPAC and look forward to continuing our close association over the coming year. We wish all delegates a successful 31st Session.

INSTITUT DE RECHERCHE POUR LE DÉVELOPPEMENT (IRD)

On behalf of Dr Christian COLIN, (IRD Representative in New Caledonia), Mr Chairman, Distinguished Delegates, SOPAC Director and Ssecretariat staff, Ladies and Gentlemen.

IRD, through its center at Nouméa (in New Caledonia) and Papeete (in French Polynesia) and previously through its antenna at Port Vila (Vanuatu), has been working for a long time (since the end of the forties) in the Southwest Pacific region. IRD today is carrying out, as most of the participants to this general assembly are awarded, scientific programs, some of them being common with the geoscience activities developed by SOPAC in the Pacific area. These concerned, of course, geological and geophysical investigations (such as neo-tectonics, on land and offshore geology, seismic hazard assessment, seismic microzonation of Pacific cities, paleo-environment), but also physical oceanography (climate variability and El Niño phenomena), environmental coastal studies and remote sensing activities.

Related to Geoscience topic, IRD will continue in 2003 to support any efforts proposed by SOPAC to lead to a unified monitoring (or warning) regional network system. As a first step, IRD is involved in the Pacific Cities Seismic Microzoning Project.

By maintaining seismological (a regional network of 14 stations spread out all over the region) and space geodesy through a GPS permanent network in New Caledonia, Vanuatu and Futuna, IRD contributes with other institutions to a better understanding of the Southwest Pacific tectonic activity, and consequently to a better assessment of seismic hazard.

Recently, since 1998, a strong relationship in climate variability has been initiated with the SOEST of Hawaii University. Several countries covered by the SOPAC activities are concerned. From a technical point of view, this includes mapping in worldwide geodetic systems, marine navigation through GPS reference sites and tide gauges deployment. Moreover, several oceanographic cruises or transits including bathymetry (sea-beam) and coastal tectonic have been scheduled in 2002 and 2003 in Vanuatu, Fiji, Wallis and Futuna, and French Polynesia on board the IRD R/V Alis.

The R/V Alis of IRD is now equipped with a multiple sea-beam 0-1000 m (comparable to the swath mapping system already owned by SOPAC); scientific cruises have already allowed to get precise and well defined bathymetric sur-

veys in New Caledonia (North Province) and pretty soon around the lands, atolls (coral reef external slopes) and seamounts of the French Polynesian territories.

IRD is still involved in an international scientific program devoted to the El Niño/ENSO phenomenon study and on the regional impacts on a seasonal and an interannual time scales; different kinds of data are then collected: direct hydrological observations from in situ scientific equipment (temperature, salinity, oxygen, nutrients...) and direct current measurements both from a fixed hull Acoustic Doppler Current Profiler (ADCP) and from a L-ADCP coupled with a Sea-Bird CTD-Carousel Water Sampler lowered from the ship. Moreover drill massive coral samples, used as proxies (through the chemical contents of their skeleton covering several centuries with a monthly or a weekly time scale), give useful informations of the past (4000 years) climatic variability in the Pacific equatorial belt. Several specific cruises have been or are scheduled in 2002 and 2003 aboard the R/V Alis either along the equator (from 165° E to 175° E and from 20° S to 5° N), or around Fiji, Tuvalu, Tokelau and French Polynesia EEZ's.

In tropical marine coastal environment domain, IRD is still conducting a scientific program mainly devoted to the influence of terrigenous and anthropic inputs on the coastal ecosystems. This effort is mainly focussed on the Nouméa and Suva lagoons through an intense cooperation (research and formation) between IRD, USP, SOPAC, James Cook University and other partners. One cruise onboard the R/V Alis has been carried out in 2002 in Suva lagoon for 3 weeks. The cooperation with USP has grown up this year thanks to the help of the French Embassy.

IRD is still involved, through ocean linear models (sea level variability for example) in studying the impacts of the climatic variability on the coastal environment of the Pacific Island countries. Remote sensing methods may also be used as a complementary approach. A strong scientific cooperation may also be considered between SOPAC and IRD in that domain.

On behalf of the Chairman of the Board of IRD in Paris, I would like to take the opportunity to express my very sincere congratulations to the Director and the technical staff of the SOPAC organization for inviting IRD to this General Assembly, that illustrates the strong partnership between both institutions. We also appreciate the efficient assistance brought when getting work permissions to perform oceanographic

cruise campaigns by the IRD R/V Alis in the EEZ of several Pacific Island countries.

JAPAN MARINE SCIENCE AND TECHNOLOGY (JAMSTEC)

Thank you Madame Chair

First of all, on behalf of the Japan Marine Science and Technology Center (JAMSTEC) I would like to express deep appreciation to all SOPAC Member countries and SOPAC Secretariat or their continuous co-operation to our marine scientific research activities. We very much appreciate on smooth transmission of their consents to our research cruise plans, and buoy deployment and sampling in their EEZ's. As ordinary procedures, all observed data and results of sample analysis are reported to coastal states concerned, and at the same time opened to scientific communities. In particular, oceanographic observation data obtained by TRITON buoy network and Argo floats are delivered to the region on near real time basis.

It is our great pleasure if such data would be fully utilized by member countries for their own national interests in particular forecasting weather and fish migration. JAMSTEC is happy to co-operate with SOPAC Secretariat in strengthening efforts to develop member countries' capabilities in applying ocean data to their benefit. Taking this opportunity, we thank again the member countries' co-operation to dispatch their promising young marine experts to three training workshops on oceanographic data handling organized by JAMSTEC.

JAMSTEC invited directors of fourteen major oceanographic institutions to two-days symposium on Ocean Sciences in the 21st Century on 17 and 18 September 2002 in celebrating the Center's thirtieth anniversary. They shared the views that serious problems concerning global environmental changes such as global warming now threaten our planet, and appropriate measures must be taken to mitigate these and to achieve sustainable development. They identified the following approaches are important in order to develop a greater understanding of the unknown frontier, the sea, and to predict global environmental changes:

- exploring research in the earth and ecosystem through ocean science for a comprehensive understanding and prediction of the earth's systems as a prerequisite for wise decision making;
- improving systems for observing unknown

areas, such as the deep ocean, polar regions and the southern hemisphere;

- establishing a global observation network and a global data and information network;
- developing technologies and models for more effective observations and better predictions;
- encouraging recognition of the importance of ocean sciences by both general public and policy makers with multidisciplinary research that links scientific products and societal benefit;
- fostering appropriate human resources in ocean sciences.

In conclusion, I would like to express all the success of this session, and stress again that JAMSTEC will make every efforts to strengthen cooperation with SOPAC.

KOREA OCEAN RESEARCH AND DEVELOPMENT INSTITUTE (KORDI)

Distinguished guests; I am very pleased to represent the Korea Ocean Research and Development Institute (KORDI) on this occasion of the 31st Annual Session of SOPAC.

Since KORDI has initiated the Marine Scientific Research (MSR) program in the South Pacific in 1997, KORDI's interests in this region has been gradually increased and diversified. Currently, our survey program in the South Pacific region focuses on two fields. First, KORDI conducts a reconnaissance survey program for seabed minerals such as manganese crusts around the rims of old Cretaceous and Jurassic seamounts and polymetallic sulfide deposits formed in back arc basins. The other program is called Daeyang program, or a large marine study program of the South Pacific region, which differs from mineral reconnaissance surveys in that its main purpose lies on building basic scientific foundation focusing on understanding of material and energy flux between lithosphere, biosphere, and hydrosphere. In conducting these activities, we have been maintaining bilateral collaboration with coastal states and managed to establish mutual benefits from the results of surveys. I, on behalf of KORDI, would like borrow this occasion to express our sincere appreciation to SOPAC member countries for accepting KORDI's MSR requests in their Exclusive Economic Zone (EEZ) areas.

Regarding MSR in the South Pacific region, KORDI supported and participated SOPAC organized regional workshop held in Port Moresby last year, which handles sensitive issues concerning procedures of marine scientific application. We appreciated and welcomed SOPAC's role in issuing, collecting, and settling contrary views from survey body and coastal states.

In year 2002, we conducted two cruises in the North Fiji Basin in August and Bismarck Sea of Papua New Guinea in September using KORDI's research vessel Onnuri. Survey in North Fiji Basin was focused on hydrothermal activities in this area, however, this survey was unsuccessful. We were able to only maintain a few days survey and accomplished less than 30% of planned work due to bad weather conditions. On the other hand, the survey in Bismarck Sea, which was ended just two weeks ago, was mainly geophysical investigation focusing on plate movements.

The Ministry of Maritime Affairs and Fisheries (MOMAF) are going to review next year's survey proposals by this December and finalize its decision by February 2003. For next year's research cruises in South Pacific region, we are considering the North Fiji Basin as one of our target survey area where we were not able to make complete survey this year, and the Phoenix Island region of Kiribati. Survey in Phoenix Island will be our first time in Kiribati and will focus on seamount areas for seabed minerals. KORDI will submit MSR applications to coastal states as soon as such surveys are confirmed.

Moreover, during the session, I look forward to have conferences and discussions with related personnel from coastal states about our intended survey including information exchanges.

KORDI has implemented a new strategy in the region of the South Pacific through the establishment of the Korea-South Pacific Ocean Research Center (KSORC) in Chuuk State of the Federated States of Micronesia (FSM) in 2000. Although current activities of this Center are limited to FSM, we have no doubt that Center's role will expand to various geoscience fields and various regions in the near future. For example, this Center carried out terrestrial geological survey of Weno island of Chuuk State, and just completed first stage of bathymetry survey of the Chuuk Lagoon. We hope that KORDI's South Pacific Ocean Research Center will be another passage for further cooperation with SOPAC secretariat and member countries.

APPENDIX 5

STAR REPORTS

Introduction

STAR is SOPAC's Science, Technology and Resources Network and it acts as an interface between the SOPAC Secretariat and its member nations and the international scientific community. It does this in several ways. Every few years, an international scientific workshop or meeting is either convened by STAR, or held under its auspices, on a broad theme relevant to the SOPAC region. STAR members also correspond and tender advice during the intervening periods.

Each year, a meeting at which scientific papers are presented and discussed, and thematic Working Groups meet, is held in conjunction with the Annual Session of the SOPAC Governing Council. This year, as has been the arrangement for several years now, STAR met prior to the opening of this Council Meeting, from September 25th to 26th. The meeting was held at USP (and I thank that organisation for the use of their facilities) and was well attended, with over 100 people at some sessions.

STAR Presentations

The theme of this year's STAR meeting was "Geoscience and sustainable development in Pacific Island States, 2002-2012".

During the meeting, 47 scientific papers were presented orally and a number of others by the posters you see displayed outside. Abstracts of these are published in SOPAC Miscellaneous Report 487.

As is usual for these meetings, the information presented covered a very wide range and participants included representatives from disciplines other than earth science. I recommend the volume of abstracts as a guide to the range of material covered and as a source of much useful information.

In deference to our hosts, the STAR Meeting commenced with a session devoted to the development and geology of Nauru and then papers were grouped into the themes of Tectonics and Geology, Hazards, Non-living Resources, Human Resources, Sea Level and Oceans, Technology and Remote Sensing, and Habitats and

Coastal. The eight sessions were chaired by John Collen, Faatoia Malele, Keith Crook, Kazu Kitazawa, Dave Tappin, Daryl Rairi, Dave Garton, John Bonato and Paul Fairburn.

Let me briefly outline the scope of the presentations for you. During the session on Nauru, speakers examined the past development of the island and the challenges ahead, its tectonic setting on the Pacific plate and, on a smaller scale, issues associated with coastline development.

During the Tectonics and Geology session, papers covered aspects of the plate tectonic geology of Hawaii and Niue, proposals for a major collaborative study of mid-ocean rises, seismic observing systems in the Pacific, and the geology of northern Viti Levu.

Hazards papers summarised recent work on tsunamis, including data supporting the origin of the Sissano Tsunamis as the result of a submarine slump, flood forecasting for the Rewa River, and landslide hazards.

The session on non-living resources included discussion of the petroleum potential of New Caledonia, the Japan/SOPAC Deep-sea Mineral Resources programme, and problems of rainfall distribution and storage on Viti Levu. One paper examined the relationship between marine research programmes and mineral exploration. In what I think was a first for STAR, human resource issues were canvassed in a paper dealing with Business and Training Needs Analysis in geoscience organisations.

The sea level and oceans sessions contained several papers dealing with monitoring past and present sea level change, and the implications of this. New mass spectrometer-based instrumentation for analysing ocean waters was described, and several papers dealt with ocean observing systems, including the Global Ocean Observing System and the Triton buoy network.

As has been the case in recent years, the applications of Information Technology permeated much of the meeting but the session specifically devoted to this concentrated both on the increasingly high resolution satellite imagery available for the region and the application of remote sensing and GIS techniques for rapid mapping for a range of purposes.

The Habitats and Coastal papers were also, as usual, wide-ranging and included general papers on issues and problems and their management, discussion of areas with specific challenges, and more specific discussions of sedimentary processes and environmental settings. As examples only, papers discussed the large volume of multibeam surveying undertaken by SOPAC throughout the region during the past year, methods of determining rates of sedimentation using ^{137}Cs isotopes, erosion problems on Tongatapu and the significance of the biological input into sedimentation, as well as commercial means of pumping sediments.

During the Energy session, papers discussed the generation of electricity from wave energy, ocean energy utilisation and biomass conversion, as well as energy efficiency and the relationship of energy use to tourism.

Working Groups

In addition to the scientific presentations, four working groups also met. These working groups offer an opportunity for STAR delegates to bring to the attention of Council items of particular scientific and technical importance to the region.

This year the Energy, Hazards, Marine Scientific Research and Ocean and Coastal Observations, and Coastal and Nearshore Processes working groups met. I will report briefly on their main recommendations here and the full reports which contain supporting arguments for the conclusions are appended.

The Energy Working Group recognised the importance of energy efficiency and conservation in the region and recommended the following:

- that SOPAC treat as a priority the work on benchmarking of energy use for commercial buildings;
- that SOPAC develop partnerships with other government agencies and industry partners as the opportunity existed to share energy conservation data that could be part of the energy supply and demand database;
- that SOPAC establish best practice energy use standards for tropical climates, taking into account the cost of energy within the Pacific Island countries;
- that SOPAC disseminate widely the findings from benchmarking activities. It was recognized that it is necessary to ensure

that the information on potential energy and financial savings reaches higher authorities within the Pacific Island countries; and

- that SOPAC highlight the economic and environmental aspects of energy consumption to identify the potential for energy reductions in Pacific Island economies.

The Hazards Working Group reviewed the 2001 recommendations and agreed that these be carried over into 2002/3 and that the Community Risk Programme Manager seek funding opportunities when appropriate for the implementation of these initiatives.

One of the main discussions last year was on the need for an array of Pacific seismograph stations and on the proposal of the Director of Seismology at the Geophysical Institute of Israel to spend a sabbatical year at SOPAC. The WG learned that the array of stations has not been installed but reaffirmed its support for the project. The WG heard that the funding for the sabbatical had not materialised.

Other recommendations from 2001 include:

- a) That SOPAC carry out a shallow water bathymetry survey along the northern coast of Papua New Guinea to complement the deep-water surveys carried by JAMSTEC in 1999 and 2000. This will aid investigation of the transmission mechanism of the Sissano tsunami. It was also recommended that similar surveys be carried out in other areas prone to tsunami, including Mele Bay, Vanuatu and the Solomon Islands as part of co-ordinated regional program of investigation;
- b) That the Pacific Cities urban hazard and risk assessment project be extended to include Lae and Madang, PNG;
- c) That an onshore seismic reflection survey be conducted in the Lae region to test the hypothesis that Lae is located astride a plate boundary; and
- d) That continuous global positioning (C-GPS) stations be established on selected Micronesian atolls to investigate their vertical motion due to tectonic uplift/subsidence. Regarding this, the STAR presentation on the vertical tectonics of Nauru and Banaba by Loren Kroenke indicated the two islands were subject to recent tectonism.

The working group welcomed Japan's initiative in establishing a seismic network in the region in response to a previous working group recommendation. Recognising the importance to develop quickly such a network in the South Pacific it urged member countries to cooperate in integrating seismic networks and recommended SOPAC take the necessary steps to encourage the smooth exchange of seismic data.

Key recommendations of the **Marine Scientific Research and Ocean and Coastal Observations Working Group** are:

1. that multidisciplinary oceanographic research should be encouraged in the region to include more extensive marine scientific research and ocean observation and, where possible, additional resource assessment and increased coastal State country involvement and support;
2. that the merging of goals and an increase in cooperation between SOPAC coastal States and ocean researching States should be promoted;
3. that the sharing of data and information with coastal states would be improved by filling the vacant position of Marine Scientific Research Coordinator.
4. that the convening of workshops would improve understanding of the various data collected from marine scientific research cruise activities and to assess the importance of these to SOPAC member countries. As well, this would raise awareness of UNCLOS provisions with respect to marine scientific research to ensure that mechanisms for cooperation between the coastal state and the researching state are effective.
5. SOPAC should be commended for its role in developing ocean observing system initiatives, such as GOOS, in the region and it should now focus on increased involvement of SOPAC member countries in this regard. It should consider that the activity to be successful requires a dedicated professional as part of the SOPAC secretariat to coordinate planned and ongoing ocean observation activities and the function of Regional Ocean Observing initiatives.
6. The Ridge 2000 project should be endorsed by SOPAC as there are a number of potential benefits to the region at no cost. The US National Science Foundation has recently approved this new research initiative with an anticipated programme life of

twelve years and interdisciplinary studies at a small number of sites. One of those sites is the East Lau Spreading Center and collaborative opportunities to work with SOPAC scientists here are sought.

The Coastal and Nearshore Processes Working Group recommended

- that SOPAC continues with the work necessary to find alternate marine aggregate resources using the best technology available to SOPAC, as presented in STAR.
- That the Manihiki lagoon pearl farming project be designated a pilot project under Coastal GOOS. The rationale is that the project is intended to be continuous, producing a long-term data set and providing a useful product to the industry.
- It was brought to the attention of the working group that the Coastal GOOS Strategic Plan has been finished. It was recommended that SOPAC should explore the possibility of a seminar or workshop to present a synthesis of the strategy to the region. This should be a joint undertaking of SOPAC and the IOC to be targeted on or before the next meeting of STAR.
- It was recommended that a representative from SOPAC attend the 3rd Geohab meeting focussing on using geological mapping of the seabed with multibeam technology that is being held in Hobart in 2003.
- The working group noted that coastal erosion is still a serious issue in the coastal states and the use of high resolution satellite mapping with historical aerial photography to assess coastal change by SOPAC in Tonga and Fiji were excellent examples of how SOPAC has built up a working expertise in this area.
- The working group discussed the environmental assessment recommendation in the 2001 STAR report and proposed an amendment. It recommended that both Pacific SIDS and aid donor organisations/nations adopt as policy the standard operating practice of requiring a professional EIS for any development to be undertaken in the coastal zone and that SOPAC serve as technical reviewers of such EIS.
- Coastal zone studies and assessments should incorporate data collected from rocky shoreline sectors, which are usually by-passed in favour of beaches and estu-

aries. Rocky shorelines contain archives of extreme events and dating of these can provide a history of the incidents and magnitude of large wave events that have had major impacts on the coastal zones of SIDS.

STAR Business Meeting

As already reported to this meeting, the STAR Business Meeting elected myself to continue as Chair of STAR for the coming years and Mr Faatoia Malele, Deputy Director of the Meteorology Division of Samoa, to continue as Vice-Chair of STAR.

General Comments from Chair of STAR

At this point, I would appreciate this opportunity to convey some personal impressions of this STAR meeting. The first is the clearly applied direction to much of the research. This has always been a particular feature of STAR but is becoming more clearly articulated and was apparent in most presentations. It is also obvious from even a cursory glance at the posters. STAR discussions are becoming increasingly directed towards the provision of quality technical advice to member governments.

My last observation is prompted by a recent conversation with a colleague. He remarked, and I quote: "One of the reasons I trained as a scientist was a desire to help society. As a young scientist, I assumed that if I did good science, it would automatically end up in policy. But of course that didn't happen". Everyone is far too busy to automatically follow too much that happens outside their own area of expertise. If we want the results of science to be used to the full, we have to work at finding all possible mechanisms that allow the flow of information in a usable form. Without labouring the issue, I would simply like to make the point here that the STAR/SOPAC/Council interaction that brings together policymakers, planners, managers and scientists is quite unique in my experience and is something well worth nurturing.

As usual, STAR is indebted to staff of the SOPAC Secretariat for their cheerful and untiring efforts that make the meeting possible. The STAR meetings are organised over a much shorter time frame, and with fewer staff, than any other conferences with which I have been associated. The success is due to the efforts of the Secretariat. And finally, Madam Chair, may I take this opportunity on behalf of STAR to thank

our hosts, the Government and people of the Republic of Nauru, for the hospitality shown to us.

That concludes my address. Thank you.

John Collen, Chair, Science Technology and Resources Network (STAR)

Suva, 28 September 2002

APPENDICES

MINUTES OF STAR WORKING GROUPS

I. Hazards Working Group Report

Attendees:

David Tappin	- BGS
Lasarus Vuetibau	- Fiji Mineral Resources Department
Daisuke Suetsugu	- JAMSTEC, Japan
Kerry Stewart	- Dunlop Stewart, Auckland New Zealand
Tariq Rahiman	- Fiji Mineral Resources Department
Sakiusa Waqanisau	- Fiji Mineral Resources Department
Blair Craig	- Asia Pacific Area Network & Hawaii Synergy (NASA) USA
Alan Mearns	- SOPAC

David Tappin chaired the meeting and the minutes were taken by Alan Mearns

Discussion items:

1. The chair explained the process of the working groups
2. SOPAC discussed the new programming approach and the changes to the Hazard Assessment Unit since the last meeting in the Marshall Islands.
3. The Chair read out the report from the Working Group meeting of 2001, highlighting the main points discussed at that meeting. He also identified the talks at STAR related to the working group themes.

4. One of the main discussion of 2001 was the need to link existing arrays of Pacific seismograph stations under a common regional centre and that the Director of Seismology at the Geophysical Institute of Israel planned to spend a sabbatical year at SOPAC. The WG learned that the Regional Centre has not been established and the working group reaffirmed its support for the project. The WG heard that the funding to complement travel costs for the sabbatical had not materialised.

5. Daisuke Suetsugu made the following statement:

The sessional working group welcomed the initiative of Japan to establish a seismic network in the region in response to a previous working group recommendation. Recognising the importance to develop quickly such a network in the South Pacific it urged member countries to cooperate in integrating seismic networks for the smooth exchange of seismic data. The necessary steps have been taken by SOPAC Secretariat to gain donor funding, but none has been forthcoming.

6. The Working Group reviewed the 2001 recommendations and agreed that they be carried over into 2002/3 and that the Community Risk Programme Manager seek funding opportunities when appropriate for the implementation of these initiatives.

7. The recommendations from 2001 included:

- e) That SOPAC carry out a shallow water bathymetry survey along the northern coast of Papua New Guinea to complement the deep-water surveys carried by JAMSTEC in 1999 and 2000. The shallow water survey will greatly aid in the investigation of the transmission mechanism of the Sissano tsunami. The WG also recommended that similar surveys be carried out in other areas prone to tsunami including Mele Bay, Vanuatu and the Solomon Islands as part of co-ordinated regional program of investigation.
- f) That the Pacific Cities urban hazard and risk assessment project be extended to include Lae and Madang, PNG.
- g) That an onshore seismic reflection survey be conducted in the Lae region to test the hypothesis that Lae is located astride a plate boundary.
- h) That continuous global positioning (C-GPS)

stations be established on selected Micronesian atolls to investigate their vertical motion due to tectonic uplift/subsidence.

Recommendation 7a regarding PNG was discussed by Dave Tappin and the need for the seismic survey confirmed. The WG learned from Graham Shorten that the survey of Mele Bay was being carried out. The WG learned that for Recommendation 7b there was a strong interest PNG for Lae to be included in the Pacific Cities Project. For Recommendation 7c there has been no take-up. Regarding Recommendation 7d there was a presentation at STAR on vertical tectonics of Nauru and Banaba made by Loren Kroenke that indicated the two islands were subject to recent tectonism.

8. The link between scientific analysis and risk mitigation was discussed and the Working Group supports the proposed Community Risk Programming approach of linking scientific hazard solutions to identified CHARM risk reduction priorities.
9. Blair Craig – Asia Pacific Area Network & Hawaii Synergy (NASA) USA introduced his programme to the Working Group and requested advice as to how he could communicate the content of his programme to SOPAC and the countries. It was suggested that he talk directly with Alan Mearns, head of Community at Risk Programme.

II. Marine Scientific Research and Ocean and Coastal Observations Working Group Report

Working Group Participants:

Loren Kroenke
Peter Harris
Bill Erb
Chuck Fisher
Cristelle Pratt
Luna Wong
Donato Roqica
Nobuyuki Okamoto
Toru Nakamura
David Garton
Faatoia Malele
Gary McMurtry
Robert Smith
David Heydon
Naomi Atauea
Kazu Kitazawa (Chair)
Yves Lafoy

The Working Group met to review issues related to the development of observing systems within the Pacific region under the purview of SOPAC. The key recommendations and outcome of the discussions are presented as follows:

1. Multidisciplinary oceanographic research should be encouraged in the region to include more extensive marine scientific research and ocean observation and, where possible, additional resource assessment and increased coastal State country involvement and support.

Opportunities for conducting research or observations of direct interest to member countries could be identified and expanded by enhanced communication with member states via SOPAC. There is a need for researchers coming to the region to consider regional interests and involvement. Further, with regard to marine mining issues it was acknowledged that SOPAC member countries required urgent assistance toward development of their marine mineral policies and regulations.

2. Promote the merging of goals and an increase in cooperation between SOPAC coastal States and ocean researching States.

It was considered that this could be achieved by increased reporting during STAR by researching States concerning future programs and activities to be addressed in the next several years. The present balance of presentations between those focussing on project review and those focussing on new or planned activities and research are out of balance. The planning for the next STAR agenda should take this into account

3. Improve the sharing of data and information with coastal States by filling the vacant position of Marine Scientific Research Coordinator.

The working group believes that several critical functions are lacking in this area and that a dedicated, appropriately qualified professional is needed to fill this role. Member states are not getting proper information and feedback from research cruises in the region. The coordinator could serve as an interface and assist in the interpretation of the cruise results. Also, there are instances wherein researching States encounter difficulties in identifying contacts within the coastal State to seek permission for their cruise and to enlist

proper involvement from the coastal State in their cruises. The Coordinator could address the various constraints mentioned. In addition the Coordinator could assist in promoting resource exploration, enlisting researchers to assist in identifying potentially rich resource areas and assisting member countries in pursuing sources for additional assistance in this area.

4. Convene workshops to improve understanding of the various data collected from marine scientific research cruise activities and to assess the importance of these to SOPAC member countries. As well raise awareness of UNCLOS provisions with respect to marine scientific research to ensure that mechanisms for cooperation between the coastal State and the researching State are effective.
5. SOPAC should be praised for its role in developing ocean observing system initiatives such as GOOS, in the region and it should now focus on increased involvement of SOPAC member countries in this regard. It should consider that the activity to be successful requires a dedicated professional as part of the SOPAC secretariat to coordinate planned and ongoing ocean observation activities and the function of Regional Ocean Observing initiatives. As well, the incumbent could play a key role in seeking practical ways and means to disseminate available data to SOPAC member countries for their use.

The working group noted that ocean observation networks by moored buoys and observation floats are considerably developed, but felt that more data are necessary to deepen our understanding of the ocean and to use the ocean more effectively for local benefit.

The working group regretted that no presentation was made by Member country scientists on this subject. It recognised that direct involvement by Member countries in ocean observation is difficult at this stage. However, most observed data are available on a near real time basis and capacities in analysing and utilising such data are gradually improving. Therefore, the working group expressed its hope that presentations regarding application of oceanographic data to regional benefit would be made at the next STAR session by member country scientists.

Participants from Member countries expressed their views that high communica-

tion costs and technological difficulties in the region discourage countries in using near real time data. It thanked JAMSTEC for its offer of training opportunities to utilise ocean data.

6. The Ridge 2000 project should be endorsed by SOPAC as there are a number of potential benefits to the region at no cost.

The US National Science Foundation has recently approved a new research initiative Ridge 2000 Program, proposed by US scientists. The program office opened in October 2001, with an anticipated programme life of twelve years. One theme of the program is to conduct integrated and interdisciplinary studies at a small number of sites to achieve an understanding of the links between deep-earth processes and life in the deep ocean spreading centers. Three initial sites were chosen by scientists to conduct intensive, integrated and interdisciplinary studies; one of those sites is the East Lau Spreading Center in the Lau Basin. Collaborative opportunities to work in this region with SOPAC scientists are being sought. Tongan scientists and students, as well as scientists and students from other SOPAC member countries might be directly involved in the program. Particular measurements, surveys or samples, of interest to the Kingdom of Tonga and/or other SOPAC member countries should be identified. Recognizing that this spreading center is within the Exclusive Economic Zone of the Kingdom of Tonga their permission to conduct research is required.

III. Energy Group Working Group Report

In Attendance:

- (1) Tony Neil (PPA),
- (2) Artem Madatov (Sea Electrical Generators),
- (3) Frank Barram (Integrated Energy Services),
- (4) Trent Whyte (Integrated Energy Services),
- (5) Kifle Kahsai (USP),
- (6) Rupeni Mario (SOPAC),
- (7) Anare Matakiviti (SOPAC),
- (8) Yogita Chandra (SOPAC),
- (9) Paul Fairbairn (SOPAC),
- (10) Alan Bartmonavich (PIF).
- (11) Isaia Taape. (Tuvalu).

SOPAC opened the meeting introducing the current status of the energy programmes in the region. Points highlighted were:

- Regional Energy Meeting held in July 2002, Cook Islands endorsed two important papers:
 - Pacific Type II Energy Initiative
 - Pacific Energy Policy Paper
- Existing Regional Energy Programmes

Energy Efficiency and Conservation

The work on benchmarking for energy consumption in commercial building carried out by SOPAC was acknowledged by the EWG and recommended that the benchmarking work be further strengthened by collaborating with other partners and sharing information.

The EWG acknowledged the work on energy efficiency and conservation being carried out by industry partners in Pacific Island countries. One particular company, Integrated Energy Services shared its experiences with the EWG and highlighted the many energy savings opportunities especially in the tourist industry where savings as high as 50% could be realized with 1-3 year payback.

Recognising the importance of energy efficiency and conservation in the region the EWG recommended the following:

- SOPAC treat as a priority the work on benchmarking of energy consumption for commercial buildings.
- SOPAC to develop partnerships with other government agencies and industry partners and to share energy conservation data which could link in as part of the energy supply and demand database.
- SOPAC to establish best practice energy consumption standards for tropical climate, taking into account the cost of energy within the Pacific island countries.
- SOPAC to disseminate widely the findings from benchmarking activities and that the information on potential energy and financial savings reach higher authorities within the Pacific island countries.
- SOPAC to highlight the economic and environmental aspects of energy consumption to identify the potential for energy reductions in Pacific Island economies.

The EWG recognises the importance of energy efficiency and conservation in the small island economies and recommends that SOPAC develop an education programme targeting the general public.

The EWG recognizes the volume of waste plastics in Pacific Island nations and recommends that related technologies used in developed countries for recycling waste plastic be researched and considered for adoption as appropriate.

The EWG acknowledges the problems related to the disposal of waste oil in Pacific island countries and noted that one way of addressing the problem is to regulate its removal by the oil companies.

The EWG noted the decision reached at the recent Regional Energy Meeting in Rarotonga in July 2002 that the focus of energy efficiency be prioritized in the transport sector. It further noted that although the transport sector is one of the highest consumers of imported fuel, it is anticipated that energy saving in this sector may be more difficult to achieve.

The EWG noted the interest of industry players in developing wave energy technology in the Pacific. Particularly the interest shown by the US Wave Energy and the Ukarine SEA Electrical Generators to install demonstration projects in selected countries in the region and develop a formal relationship with SOPAC.

SOPAC briefed the EWG on status of the energy policy, the geothermal deep drilling funding proposal and confirmed that it continues to provide assistance to member countries with their energy demand and supply database and national energy policy statements.

IV. Coastal Working Group Report

Attendees

Gary McMurtry	- Chair
Robert Smith	- Rapporteur
Keith Cook	- HURL
Dave Tappin	- BGS
David Garton	- Georgia Institute of Technology
Peter Harris	- Australian Geological Survey Organisation
Bill Erb	- IOC Perth Regional Programme Office
Stephen Eagar	- Victoria University, NZ

Vili Baleivanualala	- Mineral Resources Department, Fiji
Luna Wong	- Mineral Resources Department, Fiji
Loren Kroenke	- UH, SOEST, HIGP
Chuck Fisher	- Penn State University
Seong-Pil Kim	- KIGAM

The working group reviewed the recommendations of the 2001 working group and discussed the relevance of the papers presented during STAR 2002.

Robert Smith updated the coastal working group on the various projects SOPAC worked on throughout the year. These range from investigation for sand and gravel resources, infrastructure development in the coastal zone, water quality monitoring and the use of GIS and remote sensing in the analysis of historical coastline change in the Marshall Islands, Cook Islands, Samoa, and the states of Yap and Chuuk in FSM. The benefits of multibeam mapping relating geological setting and habitats were also discussed noting the benefits this technology can bring to resource evaluation in SIDS.

Sand and gravel supply used in the islands for infrastructure development continues to be important. The working group noted the difficulty of accessing lagoon and offshore resources, using appropriate technology. SOPAC informed the working group of the significant progress that has been made with Kiribati to acquire a dredge to mine lagoon sand and gravel resources identified through previous survey work done there by SOPAC.

SOPAC informed the working group that funding has been secured to implement a real time coastal water quality monitoring buoy in Manihiki lagoon. Sensors to be included are a meteorological suite, conductivity, temperature, dissolved oxygen, chlorophyll and pH. Due to budget limitations, ammonia and nitrate sensors are to be included at a later date. Communication with the buoy is being investigated, including the use of Argos or the IRIDIUM system.

The working group recommended:

- That SOPAC continues with the work necessary to find alternate marine aggregate resources using the best technology available to SOPAC, as presented in STAR.
- The Manihiki lagoon Pearl farming project be designated a pilot project under Coastal

GOOS. The rationale is that the project is intended to be continuous, producing a long-term data set and providing a useful product to the industry.

- It was brought to the attention of the working group that the Coastal GOOS Strategic Plan has been finished. It was recommended that SOPAC should explore the possibility of a seminar or workshop to present a synthesis of the strategy to the region. This should be a joint undertaking of SOPAC and the IOC to be targeted on or before the next meeting of STAR.
- The working group was informed of the third Geohab meeting focussing on using geological mapping of the seabed with multibeam technology for habitat classification. It was recommended that a representative from SOPAC attend the 3rd meeting being held in Hobart in 2003.
- The working group noted that coastal erosion is still a serious issue in the coastal states and the use of high resolution satellite mapping with historical aerial photography to assess coastal change by SOPAC in Tonga and Fiji were excellent examples of how SOPAC has built up a working expertise in this area.
- The working group discussed the environmental assessment recommendation in the 2001 STAR report and proposed an amendment. It recommended that both Pacific

SIDS and aid donor organisations/nations adopt as policy the standard operating practice of requiring a professional EIS for any development to be undertaken in the coastal zone and that SOPAC serve as technical reviewers of such EIS. In addition, SOPAC may consider tapping expertise of advisors in cooperating countries.

- Coastal zone studies and assessments should incorporate data collected from rocky shoreline sectors, which are usually by-passed in favour of beaches and estuaries.

Rocky shorelines contain archives of extreme events such as cobbles and boulders, gravel deposits and isolated larger blocks (50-100 tonnes) of small clusters of blocks and placed by category 5 cyclones and tsunamis. Many of these deposits can be dated using concentrations of bomb ¹⁴C spanning the past 50 years or various cosmogenic isotopes for older sites. These can provide a history of the incidents and magnitude of large wave events that have had major impacts on the coastal zones of SIDS. The record of such events in beaches is commonly cryptic because erosion predominates. Their record in estuaries can be quite equivocal because finer sediments predominate. There may be no depositional record. Records may be modified by processes generated in the hinterland such as large floods, or the records may underestimate the magnitudes of the events of interest.

APPENDIX 6

SUMMARY RECORD OF EVI SIDE MEETING

ENVIRONMENTAL VULNERABILITY & BARBADOS+10

30 October 2002

Presentations by SOPAC Secretariat

The EVI side meeting started at 5:30pm and was attended by approximately 25 people from the Council/TAG members.

Craig Pratt, EVI Project Coordinator, welcomed everyone present and gave an overview of the EVI project. Topics outlined included Vulnerability and Barbados+10, background of the project, an introduction, progress, WSSD, and managing vulnerability.

Following this was a presentation by Dr Ursula Kaly, Research Team Leader to the EVI Project, talked on the background of the EVI for the benefit of Council/TAG members who are new to the EVI project that has been undertaken by SOPAC over the last four years. Dr Kaly highlighted some of the uses of the EVI including its use as a compliment to the State of Environment Reports (SoE), an initiative by the South Pacific Regional Environment Programme, and the ability of the EVI to produce outputs for different purposes.

Craig Pratt took to the floor again and provided an update of the EVI project. Topics covered included the main objective of the EVI project, and key partners comprising donors, organisations, and collaborating countries. In terms of project data needs, a minimum of 80% is required for an effective calculation of a country's EVI whereas 100% of data is targeted for further testing in order to develop a robust tool. This has seen the development of the "100 Country Database" where data has been sought on an Indicator-by-Indicator basis. With regards to the EVI project's tasks and timeframe, Craig highlighted that further work scheduled for the year 2003 is totally dependent on testing work that is scheduled for the end of the year. He went on to highlight some of the key outcomes from the WSSD and international recognition of the need to complete the all work towards completing vulnerability indices.

Dr Ursula Kaly ended SOPAC's presentation by providing insight into how we can begin to addressing environmental vulnerability.

Discussion

There was interesting feedback from the audience as questions centred on activities in further developing the EVI project, its mechanics, and different approaches to the EVI from social and economic perspectives.

In terms of further developing the EVI, Australia enquired about missing data sets which are essential in completing the "100 Country Database". The EVI Team responded that some of the key data that is unavailable include meteorology, fisheries, sulphur dioxide levels, glaciers, and number of vehicles. The Secretariat also added that most countries lack financial assistance to compile missing information and that the United Nations Environment Programme (UNEP) has been approached by the EVI Team to assist particularly in assisting international countries in compiling data as quickly as possible however this proposal has been unsuccessful so far.

Mr Chalapan Kaluwin, Australian Marine Science and Technology (AMSAT), touched on the five areas of vulnerability, as proposed by the EVI Team, and questioned the link between these and the Type II initiatives. Further comments were made that this was complicated as it is almost like a bilateral arrangement. To this, the EVI Team replied that the EVI is not driven from that perspective but is more of a problem-solving approach that is, in helping improve the condition of "poor me". AMSAT further added that Type II initiatives are economical issues and are bilateral. The EVI Team highlighted that the EVI is just a tool to determine issues but will not give a definite answer.

In regards to the uses of EVI, Bill Erb, UNESCO International Oceanographic Commission (IOC) enquired as to who are the actual users whether it is politicians or in the lower areas of developing policies. The EVI Team answered that the EVI is at a development stage, which would eventually show how we could move into the

future with some of the issues being addressed. The Secretariat added that the EVI tool could be used for comparisons between countries/islands using 54 key indicators. IOC further commented that some definitions used in the EVI such as internal and external risks are a duplication, which would eventually invalidate indicators. To this, The EVI Team responded that the indicators are different from the definitions. Extreme care has been taken by the Think Tanks and experts in development of indicators to ensure non-overlap of indicators in order to avoid invalidation.

In support of the EVI project, Australia commented that there is real potential for the region to benefit from SOPAC's efforts in carrying out the EVI project, which gives people the chance to actually use it as a tool. The SOPAC Secretariat further commented that SOPAC has taken the lead role in this change of thinking in defining the term "vulnerability" and is therefore essential to stress it in order to clarify its definition as opposed to that often used by other people. In addition, the audience was reminded of the initial purpose of developing the EVI, which was solely for the use in determining the Least Developed Country (LDC) status. However, as this exercise of ranking a country against each other is seen as a short-term benefit, this has resulted in a slight amendment of the EVI objectives.

Further enquiries by IOC were made as to how one would use the EVI as a tool. A supportive comment from the Secretariat was made of the importance of collecting data now for later use. It was also highlighted that the EVI gives an environmental "trend line" which goes beyond the static assessment method used in SoE reporting. The EVI team also explained scoring of EVI where a high score of 7 means highly vulnerable and a low score of 1 means highly resilient. Australia wanted a clarification on the calculation of each EVI score to which the EVI Team explained the statistics involved comprising scaling and linearisation and added that the EVI would undergo another extensive review during Think Tank II.

In relation to exposing the EVI project in Barbados+10, New Zealand enquired about the urgency of getting EVI data in preparation towards this. The EVI team responded that since the Barbados+10 is scheduled for early 2004, SOPAC would need at least two months from securing the appropriate funding to get all data before and testing and refinement can be carried out.

In support of SOPAC's efforts to undertake the EVI project, Samoa commented that the EVI

methodology is interesting since it includes comparisons between countries and compared it to the International Panel on Climate Change (IPCC) method in forecasting global climate before bringing it to national levels. In response, the EVI team highlighted the fact that the EVI methodology is different from that employed by the IPCC because of the difference in indicators and that it does not attempt to forecast or create scenarios.

In an effort to help locate further funding for the EVI project, Samoa enquired about the link between EVI and adaptation adding that the Global Environment Facility (GEF) are assisting other countries in funding Adaptation studies. The EVI team said that while this is noted, there is a difference between the timeframe of the EVI and Adaptation studies in that the EVI works on a 5-year period while Adaptation studies work on a 100-year period.

Further clarification was enquired by Cook Islands on the difference in terms of economic and social vulnerabilities, and as to how the EVI would be appreciated by policy-makers at the ground level. The EVI team responded saying that the outputs of the EVI profile are designed for easy understanding enabling its use as a tool for decision-making. The Secretariat added that the EVI project also addresses a capacity-building issue in terms of training people to identify and collect environmental data. Cook Islands further enquired as to how SOPAC would get the EVI as a decision-making tool to national leaders. To this the EVI team said that a country's EVI could be generated for every 5 years providing a quick simplistic answer to finding out problems. Cook Islands also wanted to know as to how Pacific island countries could use the EVI as a mechanism of improving their livelihoods. The EVI team stressed that the Pacific islands cannot afford a lot of environmental damage as opposed to bigger countries adding that the EVI would greatly contribute to sustainable development.

With regards to international support of the EVI project, Papua New Guinea enquired as to how far the project had gone in securing acceptance to help support the EVI. The EVI team informed the audience of the large number of people involved in reviewing the project including experts involved in Think Tank discussions and verbal support from Alliance of Small Island States (AOSIS) who unfortunately have yet to meet the data requirements of the EVI.

In terms of collaborating countries, Australia acknowledged the difficulties faced in getting the required information and enquired about limiting the EVI to SOPAC member countries

instead of including international countries, and/or calculating an EVI on a regional scale with whatever information is available from international countries. To this, the EVI team said that in order to make the EVI a global, robust tool it has been essential to include as many countries as possible having a wide range of geographical characteristics such as small, medium, large, landlocked, coastal, desert, extreme fragmentation, and ice habitats to name a few. In short, the inclusion of international countries would enable one to see how wide the EVI stretches on a global scale. It is important to include international countries with a diverse range of geographical nature in order to see how we, small islands, fare with the rest of the world. A point worth mentioning is that

the EVI was done in response to a call made by AOSIS during the Barbados Meeting in 1994 who face disadvantages due to remoteness, small size, dispersion, and limited natural resources. So, the EVI is a numerical proof of just how vulnerable the small island states are on a global level. With regards to choosing alternative countries, the audience was informed that the EVI project does not have the luxury of having extra funds to choose other countries than those currently engaged, as this would mean extra spending.

Discussions of the EVI side meeting came to a close around 7:00pm. Craig Pratt, coordinator of the EVI project thanked everyone for participating.

APPENDIX 7

LIST OF CONFERENCE ROOM DOCUMENTS

AS 31/1/Info 1	Information Circular
AS 31/1/Info 2	Program for Official Opening (<i>Circulated at Registration</i>)
AS 31/3.1 Rev.2	Provisional Agenda
AS 31/3.1/Info 1	Draft Working Schedule
AS 31/3.1/Info 2	Working Procedures
AS 31/3.1/Info 3 Rev. 1	List of Conference Room Documents
AS 31/3.1/Info 4	Provisional list of Participants (<i>Circulated at Registration</i>)
AS 31/4.1	Designation of SOPAC National Representatives
AS 31/5.1	Introduction to Director's Annual Report to Council
AS 31/7.1*	Issues Arising from 30th Annual Session
AS 31/7.2*	Summary Report of 2002 Donor Support
AS 31/7.3.1*	2001 Audited Financial Statements, Auditors Report and Management Report
AS 31/7.3.2*	Report on 2001 Budget Variance and Virement of Funds
AS 31/7.3.3*	Report on Assets and Inventory written off for the year ended 31 December 2001
AS 31/7.4.1*	Financial Accounts for the 6-month period to 30 June 2002
AS 31/7.4.2*	Member Country Contributions
AS 31/7.5	Summary of New Project Proposals
AS 31/7.6.1	EU Lome IV Second Protocol SOPAC Project
AS 31/7.6.2	EDF 9: Regional Support
AS 31/7.7	Report on Implementation of Corporate Plan 2002-2004 & Business Plan 2002
AS 31/7.8	Proposed New Overall Organisation Structure
AS 31.7.9	SOPAC – SPC Collaboration
AS 31/8.1	2001 Annual Report Summary
AS 31/8.2	CROP Summary Record and Report
AS 31/8.3	Second SPC/SOPAC/SPREP Colloquium
AS 31/8.4	STAR Chair Report
AS 31/8.5	SOPAC Ministerial Level meeting “Pacific Consultation on Water in Small Island Countries”
AS 31/8.6	Pacific High Level Consultation Investing in Adaptation
AS 31/8.7	SOPAC Sustainable Development Strategy
AS 31/8.8	World Summit on Sustainable Development
AS 31/8.8 Suppl. 1	World Summit on Sustainable Development
AS 31/8.9	Draft Gender Policy
AS 31/9	Director's Annual Report: Part 2 – Work Programme Report 2001-2002 and; Part 3 – Draft Work Programme and Budget for 2003

AS 31/9.1.1	SOPAC-Japan Co-operative Deep-Sea Minerals Programme
AS 31/9.1.2	Pacific Islands Regional Ocean Policy and Proposed Ocean Forum in 2003
AS 31/9.1.3	Intergovernmental Global Ocean Observing System Meeting (I-GOOS)
AS 31/9.1.4	Managing Environmental Vulnerability in Pacific Island Countries : Addressing day-to-day land and coastal resource management practices
AS 31/9.1.5	Upgrade of Offshore Seismic Reflection Data Holdings at the SOPAC Petroleum Databank
AS 31/9.2.1	Regional Energy Meeting (REM2002) Outcomes
AS 31/9.2.2	Status of Pacific Islands ICT Policy and Strategic Plan
AS 31/9.2.3	ADB ICT Assessment Workshop
AS 31/9.2.4	Energy Sector Developments
AS 31/9.2.5	Energy for Sustainable Development – Pacific's Energy Future
AS 31/9.2.6	UN ESCAP Initiatives in the Pacific Region
AS 31/9.3.1	International Community Risk Conference – May 2003
AS 31/9.3.1 Suppl.1	International Community Risk Conference – May 2003
AS 31/9.3.2	The role of CHARM and its advocacy: towards mainstreaming risk management practices in national development planning
AS 31/9.3.3	Upgrade on environmental vulnerability and the EVI – project
AS 31/10.1*	Director Position
AS 31/10.2*	SOPAC/SPC/SPTO Headquarters “Pacific Village”
AS 31/10.3*	CROP Remuneration Implementation Update
AS 31/10.4*	Staffing Policy Issues
AS 31/10.5*	Status of Ratification of SOPAC Constitution
AS 31/10.6*	Status of MOU's with other organisations
AS 31/11.1*	Reserve Fund Ceiling
AS 31/11.2*	Funds Generated by Income Earning Activities
AS 31/11.3*	Appointment of Auditor
AS 31/11.4*	Business Plan 2003 for Implementation of the Corporate Plan 2002-2004

*** Restricted distribution to Council only.**

APPENDIX 8

LIST OF ACRONYMS

AAPG	– American Association of Petroleum Geologists (Tulsa, USA)
ACP	– Africa, the Caribbean and the Pacific countries of the Lome Convention
AOPC	– Atmospheric Observing Panel for Climate
ACTEW	– Australian Capital Territory Electricity and Water Corporation
ADB	– Asian Development Bank
ADCP	– acoustic doppler current profiler
ADITC	– Australian Drilling Industry Training Committee
AGC	– Atlantic Geoscience Center (Canada)
AGSO	– Australian Geological Survey Organisation
AIDAB	– Australian International Development Assistance Bureau
AMSAT	– Australia Marine Science & Technology
ANU	– Australian National University
AOSIS	– Alliance of Small Island States
APAN	– Asia Pacific Area Network
APEC	– Asia-Pacific Economic Commission
APPEA	– Australian Petroleum Production Exploration Association
APPL	– Application of Petroleum Prospecting Licenses
ARGO	– Array for Real-time Geostrophic Oceanography
ARGOS	– A satellite location and data collection system (CNES/NOAA)
AS	– Annual Session (SOPAC)
ASEAN	– Association of Southeast Asian Nations
ASLR	– accelerated sea-level rise
ATP	– authority to prospect
AUD	– Australian Dollar
AusAID	– Australian Agency for International Development
AUSLIG	– Australian Surveying and Land Information Group
AVHRR	– Advanced Very High Resolution Radiometer
BAC	– Climate Alert Bulletin
BGR	– Bundesanstalt für Geowissenschaften und Rohstoffe (Germany)
BGS	– British Geological Survey
BIO	– Bedford Institute of Oceanography (Canada)
BRGM	– Bureau de Recherche Géologiques
CalCOFI	– California Cooperative Fishery Investigation
CalTech	– California Institute of Technology

CAR	– Communities At Risk
CBD	– Convention of Biological Diversity
CCCC	– Climate Change Carrying Capacity
CCAMLR	– Commission for the Conservation of Antarctic Marine Living Resources
CCOP/SOPAC	– Committee for Coordination of Joint Prospecting for Mineral Resources in South Pacific Offshore Areas (now SOPAC)
CD-ROM	– Compact Disc Read Only Memory
CEA	– Commissariat à l'Energie Atomique (Atomic Energy Commission), France
CEO	– Centre for Earth Observation
CEOS	– Committee on Earth Observation Satellites
CFTC	– Commonwealth Fund for Technical Co-operation
C-GOOS	– Coastal-Global Ocean Observing System
CHARM	– Comprehensive Hazards and Risk Management
CIDA	– Canadian International Development Agency
CISNet	– Coastal Index Site Network
CLIVAR	– Climate Variability and Predictability
C-MAN	– Coastal Marine Automated Network
CMM	– Commission for Marine Meteorology
CNES	– Centre National d'Etudes Spatiales (National Center for Space Studies)
CNMI	– Commonwealth of the Northern Mariana Islands
CNRS	– Centre National de la Recherche Scientifique (National Center for Scientific Research), France
COE	– Corps of Engineers (properly USACE) (USA)
COLA	– cost of living adjustment
COM	– College of Micronesia (of FSM)
COMBAS	– a joint Japanese-French project to study active marginal basins in the South-west Pacific (followed the STARMER programme)
COMSEC	– Commonwealth Secretariat (UK)
COOP	– Coastal Ocean Processes Programme
CORA	– Canadian Ocean Resource Associates Inc.
CP1	– Core Project 1, the Global Description of the World Ocean
CPCEMR	– Circum-Pacific Council for Energy and Mineral Resources
CPPS	– Permanent Commission for the South Pacific
CRGA	– Committee of Representatives of Governments and Administrations (of South Pacific Com-munity)
CROP	– Committee of Regional Organisations of the Pacific (formerly SPOCC)
CROP ICT WG	– CROP Information and Communication Technologies Working Group
CSA	– Cambridge Scientific Abstracts (USA)
CSD	– Commission of Sustainable Development (of United Nations)
CSI	– Coastal Regions and Small Islands (of UNESCO)

CSIRO	– Commonwealth Scientific and Industrial Research Organisation (Australia)
CSPOD	– Canadian South Pacific Ocean Development Programme
CTD	– Conductivity/Temperature/Depth Device
DANIDA	– Danish International Development Agency
DBCP	– Data Buoy Cooperation Panel
DDSMS	– Department of Development Support and Management Services (of UNDP)
DFID	– Department for international Development (UK)
DGMWR	– Department of Geology, Mines and Water Resources (Vanuatu)
DGPS	– Differential Global Positioning System
DMA	– Defence Mapping Agency (US)
DMU	– Disaster Management Unit (SOPAC Secretariat)
DO	– Dissolved Oxygen
DOALOS	– (UN) Division for Ocean Affairs and the Law of the Sea
DORD	– Deep Ocean Resources Development Co. Ltd, Japan
DOS	– disk operating system
DSDP	– Deep Sea Drilling Project
DSM	– Demand Side Management
DTM	– Digital Terrain Modelling
EC	– European Community (now EU)
ECU	– European currency unit
EDF	– European Development Fund
EEZ	– Exclusive Economic Zone
EFH	– Essential Fish Habitat
EIA	– Environmental Impact Assessment
EMA	– Emergency Management Australia
EMP	– Ecosystem Monitoring Programme
EMT	– Executive Management Team (SOPAC)
ENSO	– El Niño /Southern Oscillation
ENVISAT	– Environmental Satellite
EPCS	– Electronic Particle Counting System
EPM	– Environmental Programme for the Mediterranean
ESMG	– Earth Science and Marine Geology (SOPAC certificate course)
ESSI	– Earth Search Science Incorporation
EU	– European Union
EUMETSAT	– European Organisation for the Exploitation of Meteorological Satellites
EVI	– Environmental Vulnerability Index
EWG	– Energy Working Group
FADS	– Fish Aggregation Devices (FADS)

FAO	– Food Agriculture Organisation (UN)
FAU	– Finance and Administration Unit (of SOPAC Work Programme)
FAUST	– French-Australia Seismic Transect
FCCC	– Framework Convention on Climate Change
FEA	– Fiji Electricity Authority
FEMM	– Forum Economic Ministers Meeting
FFA	– Forum Fisheries Agency
FFEM	– Fonds Française pour l'Environnement Mondial (French Funds for Global Environment)
FEMS	– Fiji Forest Export Marketing System
FINNIDA	– Finnish Department of International Development Cooperation
FJD	– Fijian Dollar
FLIS	– Fiji Land Information System
FNPF	– Fiji National Provident Fund
FOAM	– Forecast Ocean Atmosphere Model
FOC	– Forum Officials Meeting
FRI	– Fisheries Research Institute
FSM	– Federated States of Micronesia
FSP	– Foundation for the Peoples of the South Pacific
FTIB	– Fiji Trade and Investment Board
GCOS	– Global Climate Observing System
GCRMN	– Global Coral Reef Monitoring Network
GDIN	– Global Disaster Information Network
GDP	– Gross domestic product
GEBCO	– General Bathymetric Chart of the Oceans (IOC-IHO)
GEF	– Global Environmental Facility (World Bank-UNEP-UNDP)
GEOHAB	– Global Ecology of Harmful Algal Blooms
GERIS	– Geological and Earth Resources Information System (PNG)
GEST	– Group for the Export of Services and Technology (of New Caledonia)
GII	– Geophysical Institute of Israel
GIPCO	– GOOS Integrated Panel for the Coastal Ocean
GIPME	– Global Investigation of Pollution in the Marine Environment
GIS	– Geographic Information Systems
GIS/RS	– Geographic Information Systems and Remote Sensing
GIWA	– Global International Waters Assessment
GLI	– Global Imager
GLOBEC	– Global Ocean Ecosystems Dynamics Programme
GLOSS	– Global Sea-Level Observing System
GODAE	– Global Ocean Data Assimilation Experiment

GOES	– Geosynchronous Operational Environmental Satellite
GOOS	– Global Ocean Observing System
EuroGOOS	– European GOOS
NEARGOOS	– North East Asian Region GOOS
MedGOOS	– Mediterranean GOOS
GOSSP	– Global Observing Systems Space Panel
GPA	– Global Plan for Action
GPF	– General Purpose Fund
GPS	– Global Positioning System
GSC	– Geological Survey of Canada
GSJ	– Geological Survey of Japan
GTOS	– Global Terrestrial Observing System
GTQ	– Gas to Queensland Project (Papua New Guinea)
GTS	– Global Telecommunications System (of WMO)
GTSP	– Global Temperature-Salinity Pilot Programme
GTZ	– German Technical Cooperation
HAB	– Harmful Algal Blooms
HAU	– Hazards Assessment Unit (SOPAC Secretariat)
HIG	– Hawaii Institute of Geophysics (of UH)
HLC	– High-Level Consultation
HOTO	– Health Of The Oceans (IOC)
HOTS	– Hawaii Ocean Time Series Station
HPLC	– High Performance Liquid Chromatography
HRD	– Human Resources Development Unit (of SOPAC Work Programme)
HURL	– Hawaii Undersea Research Laboratory (of UH)
IAEA	– International Atomic Energy Agency
IAVCEI	– International Association of Volcanism and Chemistry of the Earth's Interior
IBTS	– International Bottom Trawl Survey
ICES	– International Council for the Exploration of the Sea
ICOD	– International Centre for Ocean Development (Canada)
ICOGS	– International Consortium of Geological Surveys
ICRI	– International Coral Reef Initiative
ICT	– Information and Communication Technologies
ICSU	– International Council of Scientific Unions
ICZM	– Integrated Coastal Zone Management
IDNDR	– International Decade for Natural Disaster Reduction
IEDS	– Integrated Exploration and Development Services Limited (Australia)
IFREMER	– Institut Francaise de Recherche pour l'Exploitation de la Mer (Formerly CNEXO)

IGBP	– International Geosphere-Biosphere Programme
IGNS	– Institute of Geological and Nuclear Sciences (of New Zealand)
IGODS	– Interactive Graphical Ocean Database System
I-GOOS	– Intergovernmental Committee for GOOS
IGOSS	– Integrated Global Ocean Services Systems
IHO	– International Hydrographic Organisation (of IOC/UNESCO) French Oceanographic Research Institute
IHP	– International Hydrological Programme (of UNESCO)
IISEE	– International Institute of Seismology and Earthquake Engineering
IMA	– International Market Allowance
INET	– Internet Conference organised by ISOC
IOC	– International Oceanographic Commission (of UNESCO)
IODE	– International Oceanographic Data and Information Exchange
IOS	– Initial Observing System of GOOS
IPCC	– Intergovernmental Panel on Climate Change
IRIS	– Incorporated Research Institution for Seismology
ISC	– Interim Sub-Committee (of SOPAC Governing Council to deal with future role and direction of SOPAC)
ISM	– Island Systems Management
ISOC	– Internet Society
ISP	– Internet Service Provider
ISPRS	– International Society for Photogrammetry and Remote Sensing
I-SSEP	– Interiors-Science Steering and Evaluation Panel
IT-Pacnet	– Annual meeting of the CROP ICT Working Group
ITIC	– International Tsunami Information Centre
ITSU	– International Coordination Group for the Tsunami Warning System in the Pacific
ITTO	– International Tropical Timber Organisation
ITU	– Information Technology Unit (SOPAC Secretariat)
IUG	– International Union of Geographers
IYO	– International Year of the Ocean (also YOTO)
JAFOOS	– Joint Australian Facility for Ocean Observing Systems
JAMSTEC	– Japan Marine Science and Technology Centre
JCOMM	– Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology
JGOFS	– Joint Global Ocean Flux Study
JICA	– Japan International Co-operation Agency
JNOC	– Japan National Oil Corporation
KIGAM	– Korea Institute of Geology, Mining and Minerals
KMPC	– Korea Mining Promotion Corporation

KOICA	– Korea International Cooperation Agency
KORDI	– Korea Ocean Research and Development Institute
LADS	– Laser Airborne Depth Sounder
LAN/WAN	– Local Area Network/Wide Area Network
LDG	– Less Developed Countries (UN)
LEO	– Long-term Ecosystem Observatories
LITHP	– JOIDES Lithosphere Panel
LME	– Large Marine Ecosystems
LMER	– Land-Margin Ecosystem Research Programme
LMR	– Living Marine Resources
LOICZ	– Land-Ocean Interactions in the Coastal Zone
LOIS	– Large Ocean Island States
LTER	– Long-Term Ecological Research
LUCC	– Land Use and Cover Change Programme
MERIS	– Medium Resolution Imaging Spectrometer
MIMRA	– Marshall Islands Marine Resources Authority
MITI	– Ministry of International Trade and Industry (Japan)
MLML	– Moss Landing Marine Laboratory
MMAJ	– Metal Mining Agency of Japan
MMTC	– Marine Minerals Technology Center (University of Hawaii)
MNRD	– Ministry of Natural Resources Development
MODIS	– Moderate Resolution Imaging Spectroradiometer
MOMAF	– Ministry of Maritime Affairs and Fisheries (Korea)
MONBUSHO	– Ministry of Education and Science (Japan)
MOU	– Memorandum of Understanding
MRD	– Mineral Resources Department (of Fiji Islands)
MRU	– Mineral Resources Unit (SOPAC Secretariat)
MSR	– Marine Scientific Research
NAML	– North American Marine Laboratories Network
NAO	– North Atlantic Oscillation
NASA	– National Aeronautics and Space Administration (US)
NDMO	– National Disaster Management Office (various countries)
NEDO	– New Energy and Industrial Technology Development Organisation (of Japan)
NEMS	– National Environmental Management Strategy (various countries by SPREP)
NGCC	– National GOOS Coordination Committee
NGDC	– National Geophysical Data Center (US)
NGO	– Non-Governmental Organisations
NIO	– National Institute of Oceanography (India)

NIRE	– National Institute for Resources and Environment (of Japan)
NIWAR	– National Institute for Water and Atmospheric Research (New Zealand)
NLTB	– Native Land Trust Board (Fiji)
NMFS	– National Marine Fisheries Service
NOAA	– National Oceanographic and Atmospheric Administration (US)
NODC	– National Oceanographic Data Centre
NOPACCS	– Northwest Pacific Carbon Cycle Study
NORAD	– Norwegian Agency for International Development
NSF	– National Science Foundation (US)
NURP	– National Undersea Research Programme (US)
NZIGNS	– New Zealand Institute of Geological and Nuclear Sciences
NZODA	– New Zealand Overseas Development Assistance
OBS	– ocean bottom seismometer
OCEANOR	– Oceanographic Company of Norway AS
OCT	– Overseas Countries and Territories (which are associated with the European Union)
ODA	– Overseas Development Agency
ODI	– Overseas Development Institute
ODP	– Ocean Drilling Programme
OECD	– Organisation for Economic Cooperation and Development
OEDC	– Ocean Engineering Development Company (Japan)
OJP	– Ontong Java Plateau
OOPC	– Ocean Observations Panel for Climate
OOSDP	– Ocean Observing System Development Panel
OPCs	– Optical Plankton Counters
ORAP	– Ocean Research Advisory Panel
ORI	– Ocean Research Institute (University of Tokyo)
ORMP	– Ocean Resources Management Programme (of USP)
ORSTOM	– Institut Française de Recherche Scientifique pour le Développement en Coopération (formerly Office de la Recherche Scientifique et Technique Outre-Mer) (French Institute of Scientific Research for Cooperative Development)
OTEC	– Ocean Thermal Energy Conversion
PACPOL	– Pacific Ocean Pollution Prevention (Programme)
PORTS	– Physical Oceanographic Real-Time System
PacESD	– Pacific Centre for Environment and Sustainable Development
PAR	– Photosynthetic Active Radiation
PAYE	– Pay as you Earn
PCGIAP	– Permanent Committee on GIS Infrastructure for Asia and the Pacific
PDC	– Pacific Disaster Center

PDF	– Portable Document Format
PDL	– Petroleum Development Licenses
PDO	– Pacific Decadal Oscillation
PDWBC	– Pacific Deep Western Boundary Current
PEACESAT	– Pan-Pacific Education and Communications Experiment by Satellite
PEAMIS	– Pacific Environment Assessment and Management Information System
PESA	– Petroleum Exploration Society of Australia
PET '98	– Pacific Exploration Technology (conference of 1998, Nadi, Fiji Islands)
PIC	– Pacific Island Country
PICCAP	– Pacific Islands Climate Change Assistance Programme
PICES	– North Pacific Marine Science Organisation
PICHTR	– Pacific International Center for High Technology Research
PICISOC	– Pacific Islands Chapter of the Internet Society
PIFS	– Pacific Islands Forum Secretariat
PIG	– Pacific Island Gold
PIRATA	– Pilot Research Array in the Tropical Atlantic
PIREIS	– Pacific Island Resource and Environment Information Service
PIREN	– Pacific Island Renewable Energy Network
PLU	– Publications and Library Unit (of SOPAC Work Programme)
PMEL	– Pacific Marine Environment Laboratory (of NOAA)
PNG	– Papua New Guinea
POC	– Physical Oceanography Committee
POGO	– Partnership for Observation for the Global Ocean
PPA	– Pacific Power Association
PPL	– Petroleum Prospecting Licenses
PNG	– Papua New Guinea
PRC	– People's Republic of China
PRDMM	– Pacific Regional Disaster Management Meeting
PREA	– Pacific Regional Energy Assessment
PREP	– Pacific Regional Energy Programme
PRIP	– Pacific Regional Indicative Programme
PTWC	– Pacific Tsunami Warning Centre
PUB	– Public Utilities Board
PWA	– Pacific Water Association
PWD	– Public Works Department
RAC	– Regional Analysis Centers
RAMP	– Rapid Assessment of Marine Pollution
RAO	– Regional Approving Office (EU)

RB	– Regular Budget
REM	– Regional Energy Meeting
ROC	– Republic of China
ROV	– remotely operated vehicles
RS	– remote sensing
SAPHE	– Sanitation, Public Health and Environmental Improvement (Project)
SAR	– synthetic aperture radar
SBSTA	– Subsidiary Body for Scientific and Technological Advice
SCOR	– Scientific Committee on Ocean Research
SDR	– Special Drawing Rights
SEACAMP	– Southeast Asian Centre for Atmospheric and Marine Prediction
SeaWIFS	– Sea-viewing Wide Field of View Sensor
SEI	– Special Events Imager
SIDS	– Small Island Developing States
SIEA	– Solomon Islands Electricity Authority
SIO	– Scripps Institute of Oceanography (University of California, US)
SIS	– Small Island States
SIWIN	– Small Islands Water Information Network
SLH	– Sea Level Height
SOA	– State Oceanic Administration (China)
SOC	– Southampton Oceanography Centre
SOEST	– School of Ocean and Earth Science Technology (of UH)
SOI	– Southern Oscillation Index
SOOP	– Ship-of-Opportunity Programme
SOPAC	– South Pacific Applied Geoscience Commission
SPC	– Secretariat of the Pacific Community
SPDRP	– South Pacific Disaster Reduction Programme
SPM	– Sustainable Project Management
SPREP	– South Pacific Regional Environment Programme
SPOCC	– South Pacific Organisations Coordinating Committee (now CROP)
SPPO	– South Pacific Programme Office (of UNDHA)
SPREP	– South Pacific Regional Environmental Programme
SPT	– Station Polynesienne de Teledetection (Papeete, Tahiti)
SPTO	– South Pacific Tourism Organisation
SST	– Sea Surface Temperature
STA	– Science and Technology Agency (of Japan)
STAR	– Science, Technology and Resources Network
START	– Global Change System for Analysis Research and Training (IGBP)

SWA	– Samoa Water Authority
TAF	– The Asia Foundation
TAG	– Technical Advisory Group
TAO-IP	– Tropical Atmosphere Ocean Implementation Panel
TCSP	– Tourism Council of the South Pacific
TCWUP	– Tropical Cyclone Warning Upgrade Project
TEMA	– IOC Training, Education and Mutual Assistance programme
TEPB	– Tonga Electric Power Board
TOGA	– Tropical Ocean Global Atmosphere Research Programme
TOPEX	– Typhoon Operational Experiment
ToR	– Terms of Reference
TRITON	– Triangle Trans-Oceans Buoy Network
TWB	– Tonga Water Board
UFP	– Universite Francaise du Pacifique
UH	– University of Hawaii
UK	– United Kingdom
UN	– United Nation
UNCED	– United Nations Conference on Environment and Development
UNCLOS	– United Nations on the Law of the Sea
UNCTAD	– United Nations Conference on Trade and Development
UNDHA	– United Nations Department of Humanitarian Affairs
UNDP	– United Nations Development Programme
UNEP	– United Nations Environment Programme
UNESCO	– United Nations Educational Scientific and Cultural Organisation
UNFA	– United Nations Fisheries Agreement
UNFCCC COP	– United Nations Framework Convention on Climate Change(Conference of the parties)
UNICEF	– United Nations Children’s Fund
UNISPACE	– United National Conference on Outer Space
UoG	– University of Guam
UPNG	– University of Papua New Guinea
USD	– United States Dollar
USGS	– United States Geological Survey
USP	– University of the South Pacific
VISSR	– Visible and Infrared Spin-Scan Radiometer
VMS	– Vessel Monitoring System
VOS	– Voluntary Observing Ship
VPA	– Virtual Population Analysis

VSAT	– Very Small Aperture Terminal
VUW	– Victoria University of Wellington
WAGIS	– Wide Area Geographic Information System
WCRP	– World Climate Research Programme
WERI	– Water and Environmental Research Institute of the Western Pacific (of University of Guam)
WESTPAC	– IOC Sub-Commission for the Western Pacific
WGNE	– Working Group on Numerical Experimentation
WHO	– World Health Organisation
WHOI	– Woods Hole Oceanographic Institution (US)
WIOMAP	– Western Indian Ocean Marine Applications Project
WMO	– World Meteorological Organisation
WPSs	– Work Programme Strategies (SOPAC)
WRU	– Water Resources Unit (SOPAC Secretariat)
WSSCC	– Water Supply & Sanitation Collaborative Council
WSSD	– World Summit on Sustainable Development
WWF	– World Wide Fund for Nature
WWF-SPP	– World Wide Fund for Nature – South Pacific Programme
3 rd WWF	– Third World Water Forum
WWII	– World War 2
WWSSN	– World Wide Seismic Network
XBTs	– Expandable Bathy-Thermographs
YOTO	– Year of the Ocean
YPR	– Yield-Per-Recruit