



PROCEEDINGS OF THE THIRTY-THIRD SESSION

hosted by the
Government of Papua New Guinea in
the Coral Coast, Fiji Islands

17-24 September 2004



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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, Palau, Papua New Guinea, Samoa, Solomon Islands, Kingdom of Tonga, Tuvalu and Vanuatu. American Samoa, New Caledonia and Tahiti Niu 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. Otang, 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. Eleuati, 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. Seaton, 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. Ayn, FSM	A. Macfarlane, UK	L. Bukarau/R. Howorth, TS
TWENTY-SIXTH	Sep-Oct 1997	Nadi, Fiji Islands	B. Rao, FJ	G. Ayn, 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
THIRTY-SECOND	Sep 2003	Alofi, Niue	S. Talagi, Niue	S. Nion, PN	S. Talagi, Niue	L. Bukarau, TS
THIRTY-THIRD	Sep 2004	Coral Coast, Fiji Islands	A. Maino, PN	S. Potoi, Samoa	A. Maino, PN	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 33rd SOPAC Session at the Warwick International Fiji, Coral Coast, Fiji Islands.

OPENING ADDRESSES

OPENING PRAYER by Father Michael Igo Pacific Regional Seminary Suva

God papa, yu strong olgeat na yu bin kamapim olgeta samting long graun. Yu papa bilong olgeta samting na yu soim mipela bikpela laik long mipela. Yu mekim manmeri olsem masta bilong samting blong graun long lukautim na mekim gut ol samting.

Oi emu lalokau toana be Iesu Keriso ese ia ha hedinarai. Iesu ese aonega bona sisba namona ia henimai. Emai aonega be lalokau ese ia biagua bona oi emu aonega bona sisiba

ese tanobada gaudia ibonai ai ura henidia.

Father, we pray to send Your Spirit of Wisdom on each participant here. May this Spirit bring insight and knowledge and guide our thoughts that what we share in this room may bring endless good for Your people in the Pacific. May we be appreciative of all that You have given us through Jesus Christ Your Son and the Holy Spirit, living and reigning with you, One God, for ever and ever. Amen.

OPENING ADDRESS by HE Alexis Maino

High Commissioner of the Government of Papua New Guinea to the Republic of the Fiji Islands at the Official Opening of the SOPAC 33rd Annual Session

Your Excellencies, distinguished Council Members, SOPAC Director and staff of the Secretariat, representatives of international, regional and national organizations including CROP, ladies and gentlemen.

On behalf of Council, I would like to thank you all for being here, particularly all the scientists and technologists who support STAR, the Science Technology and Resources Network supporting SOPAC. The SOPAC Council – STAR relationship provides a unique link between science and policy, and I speak for all my fellow Council members by acknowledging your contributions.

Let me begin by saying that Papua New Guinea is most pleased to be hosting this 33rd annual session of the SOPAC Governing Council. Albeit we are hosting the meeting here in Fiji we hope that we will succeed in giving a strong flavour of both Papua New Guinea culture and geology to the meeting. In this regard I commend to you the information on some of our Birds of Paradise and the three themes for STAR we chose including; (i) minerals, plate tectonics and offshore mining, (ii) hazard assessment and risk management and (iii) water, sanitation and human settlements.

As many of you will know, Papua New Guinea was a founding member of SOPAC back in 1972. Whilst this may seem a long time ago, especially to many new members of Council, the Secretariat and STAR scientists, I am

pleased to note that the first geologist appointed to the Secretariat when it became established in Suva in 1974 is here with us today, Dr Loren Kroenke, now based at the University of Hawaii. I am also pleased to recognise that the person who provided much of the driving force to establish STAR, and who is also a good friend of Papua New Guinea, Dr Kazu Kitazawa from JAMSTEC is also here today.

As Chair of this meeting, and on behalf of my government as a founding member, it would be remiss of me not to recall that the newest member of the Commission. Palau, who joined last year in Niue, is here today at the table for the first time. I welcome the Palau delegation on your behalf. This brings to fifteen, a full complement of independent Pacific Small Island Developing States which are on the SOPAC Council together with three associate members, Australia and New Zealand.

Let me dwell for a while on the question “Why PNG and SOPAC?”, which I feel provides some insight for why we, some 200 delegates including representatives from all 20 SOPAC Member governments are represented here today. From a national, regional and international perspective there are some imperatives.

First a national perspective. The geology of the islands and surrounding ocean waters of my country is diverse. Geologists I am told, would say tectonically that some part of our rocks forms a salient portion of the Australian Plate.

Our location on the northern boundary of the Australian Plate where it is colliding with the Pacific Plate amongst others not only give rise to why our islands are what they are and where they are, but also underpins the very rich and diverse resource base with which we are endowed. Our oil and gas deposits formed when the PNG region was an oceanic environment, and most recently the mineral deposits, especially gold, and geothermal energy resources have formed beneath active volcanoes along the plate boundary. Over half of our export earnings are from these geological resources. Ironically, our geological location, on that plate boundary is also responsible for a great deal of the vulnerability of my country. The active volcanism and earthquakes, together with the related hazards of tsunamis and landslides are a consequence. The physical make up of our islands carved out of the geology, interacts with the atmosphere to give us a pleasant tropical climate which endowes us with surface and subsurface water resources, which we must secure to sustain livelihoods and can turn into renewable hydroelectric energy. Over geological time this climate has in conjunction with weathering of our rocks, produced very fertile soils which now support a vital agriculture and forestry economy. Agriculture and forestry are to become more important as we seek to sustain the livelihoods of our 5 million population and diversify our economic base. Over half of the Pacific Islands population of 9 million live in my country.

Since independence in 1975 we have tried to develop our national capacity to support and manage the geo-related aspects of our development. Our national geological survey and human capacity building initiatives such as in the Geology Department of the University of PNG and Mining School of the University of Technology, have grown but have not been sufficient. Hence our active engagement over the past thirty years in SOPAC (formerly CCOP/SOPAC) and CCOP the geoscientific organization of East and Southeast Asia. CCOP the Committee for the Coordination of Offshore Prospecting, dating from the early seventies, when the Law of the Sea was being drafted, highlights the developmental importance we attach to the offshore marine environment of our Exclusive Economic Zone. Currently the attention is focused on the fish, and in particular tuna resources. But the economic geological and biological resource potential of the seabed and in particular the submarine hydrothermal vent areas associated with submerged pieces of that plate boundary are yet to be assessed and are likely to be huge. We

have one of the first private sector engagements in the Manus Basin looking at this potential. But we simply do not have satisfactory national capacity to carry out the necessary work and hence our membership of SOPAC as one of the partnerships we have actively explored to help us. This partnership underscores the regional geoscientific efforts we have engaged in to support our national development.

Internationally, we subscribe to many global multilateral agreements specially environmental ones such as the Law of the Sea I have already mentioned. Sadly, the responsibilities that these agreements bring have been a burden as much as they have brought benefits. Nonetheless we remain committed, confident that the benefits will flow, to the global agenda such as currently underway with the 10-year review of the Barbados Programme of Action for Small Island Developing States and the preparations for the Second World Conference on Disaster Reduction. Both these global activities are underway as I speak and in which the SOPAC Secretariat is playing a key role on behalf of all Council members, not just PNG. This is a smart use of our collective regional pool of resources rather than each having to commit significant and scarce if at all national time and money.

Delegates, I have dwelt for some time on the question, why PNG and SOPAC, and in the process I hope I have underscored some of the obvious reasons for why we need a regional organization such as SOPAC, to provide the scope of services and support. Let me turn to some perhaps less obvious critical rationale for SOPAC both now and in the future. Our Leaders have recently launched a new Vision, to be progressed through the development and implementation of a Pacific Plan to embed deeper regional cooperation. For the many of you here today who are not readily familiar with this new Vision, I will paraphrase. Leader's wish, *...to have a Pacific region as one of peace, harmony, security and economic prosperity, so that all of its people can lead free and worthwhile lives; a region that is respected for the quality of its governance, and the sustainable management of its resources, and seek partnerships with our neighbours and beyond to develop our knowledge, to improve our communications and to ensure a sustainable economic existence for all...*

Pacific Island countries, amongst Small Island Developing States generally, share a unique responsibility for good governance for a very large part of the planet. As 90 percent of their sovereign territory is ocean and as signato-

ries to the United Nations Convention on the Law of the Sea, countries must manage their ocean resources wisely and sustainably for the good of their peoples and global partners.

The large ocean, small islands and peoples emphasises the unique context of Pacific Island Countries and provides a fitting context to the Leader's vision. This context is embedded in one of SOPAC's three key strategic work areas; the Ocean and Islands Programme. This characteristic accounts for many of their vulnerabilities which in turn provide economic, environmental and social challenges to sustainable development. This situation is particularly underscored in low-lying islands and atolls.

Whilst my country is amongst the largest land area and most populated in the region, we recognise that the Pacific Ocean is the largest single physical feature on the Earth. It comprises nearly one half of the Earth's ocean space, which in total occupies nearly three quarters of the surface of our planet. It is the engine room of the planet; as such the Pacific Ocean is the storeroom of much of the incoming solar radiation that drives life on Earth. The daily and longer-term interactions between the ocean surface and the lower atmosphere in turn drive our weather and climate, and over time have determined the fertility of our soils and a large part of our land-based resource potential.

Our small, widespread and often isolated islands are situated in the middle of this global energy flux. The coastlines provide the single interface between the ocean, atmosphere and land. Our small islands have long coastlines per unit land area thus commonly provides the focus for social and economic development. Social and economic development require safe and secure access to water, energy and information and communication technologies all key work areas of the SOPAC Community Lifelines Programme. These unique circumstances account for much of the vulnerability of Pacific Island Countries. Building resilience to these vulnerabilities is another key work area of SOPAC: the Community Risk Programme. It is vital we fully understand these ocean, atmosphere, land interactions as for example our exposure to climate change, climate variability such as ENSO events, and extreme weather events is increasing. Effective early warning will only come from this better understanding translated into public awareness programmes.

Sustainable development must be accepted as

overarching and international best practice at this time. It requires the integration of its three components or pillars - economic development, social development and environmental protection - as interdependent and mutually reinforcing. Fundamentally, interdependence and mutually reinforcing requires an integrated, holistic way of thinking and doing development. As such sustainable development gets away from the "silo mentality" which in the past, thinking and doing by sectors promoted. In SOPAC these three pillars are respectively: (i) economic pillar- Community Lifelines Programme; social pillar- Community Risk Programme; environment pillar- the Ocean and Islands Programme.

Sustainable development promotes a "big thinking" programmatic, as opposed to a project-based, approach to development. Programmes which of necessity are multi-stakeholder, and cross traditional institutional boundaries. Whilst there may be identified issues that are truly and exclusively either economic, social or environmental, many overlap two pillars whilst indeed sustainable development is the issue where all three pillars overlap. Likewise in SOPAC where governance and security are cross cutting all programmes, and using geoscience to contribute to sustainable development is embedded in the goal of the Commission.

In summary, I hope I have in some way addressed the question why PNG and SOPAC, first over thirty years ago, and also why now the reshaped SOPAC is a finely honed regional tool assisting both my country and our Pacific island neighbours, in pursuit of the new global paradigm of sustainable development. SOPAC also stands ready to contribute to realising the Forum Leaders new vision for the region through participating in the development and implementation of the Pacific Plan, so that all our people can lead free and worthwhile lives.

Delegates, I wish to close by highlighting that before us is a busy agenda for Council all issues are important though I am sure some will naturally assign greater importance to some items as national needs dictate. I will endeavour as your Chair to manage the meeting in order to ensure we remain focused on the collective key items. On behalf of my Government, I congratulate the SOPAC Secretariat for facilitating PNG's flavour and beautifully organising the meeting, and I wish you all well for a successful outcome.

Thank you

REMARKS by Mrs Sisilia Talagi

Secretary to Government, Niue; National Representative of Niue to SOPAC and Outgoing Chair as read by Deve Talagi

Honored Guests, Distinguished Representatives, Donor Representatives, Country Delegates, Director of SOPAC and Staff of the Secretariat, Ladies and Gentlemen

Firstly, I would like to extend the sincere apologies of the outgoing SOPAC chair, Mrs Sisilia Talagi, for not being able to attend this SOPAC Session due mainly to other pressing commitments of government.

On behalf of the outgoing chair, the SOPAC member countries and all of us present in this Council Session, I wish to thank HE Alexis Maino for his opening statement to Council.

But I'm proud to read the following prepared statement on her behalf:

.....On behalf of the Government and People of Niue, I would like to convey warm greetings to you all.

The year of Niue's chairmanship has been a mixture of opportunities and challenges.

First and foremost is the challenge to the Council's decision on the appointment of the Director of the organization. This was very difficult to counter in light of the many implications either way, at the time the challenge was put. But I was thankful for the way that it has allowed us all to get on with our every day business as well as allow the organization to function with integrity.

One of the major follow-up actions, which was an opportunity missed, and that we were not able to be resolved out of session, was the review of the Constitution which dealt with Executive appointments. Whilst the Council, in session, was adamant for some changes, I understood from the Secretariat that the divergence in views prohibited any advancement, out of session, on the matter. Therefore this is one of the issues that must be resolved, in session, at this current Council meeting.

The second challenge which confronted the Chair personally, was the unprecedented devastation that was inflicted by Cyclone Heta on Niue, in early January. The reaction to this event took precedent, and clouded my aim at working with the SOPAC Secretariat, during Niue's chairmanship of the Council, to advance on some issues.

The Cyclone Heta event brought issues to the

fore, that I felt Niue would offer a lot to any regional or international fora for Disasters. The event even tapped and drew on all the resources available to one during the response and the recovery process after a disaster. While a lot of offers of assistance were extended to Niue from the region, after the event, the assistance by the CROP agencies took time to materialise, compared with the immediate mobilisation of bilateral assistance.

I must emphasise that the region's cyclone warning centre must be better resourced, or if not, then the PICs must have a second option, to link to Hawaii or NZ that are way way better resourced to assist the Pacific Island countries.

However, I must thank SOPAC for the technical assistance extended to Niue, from which a report is due.

We should also thank the SOPAC Secretariat for the work they have done during the past year. The success of any organization usually confirms that the right people have been appointed to the key positions, who have the right aptitude to see the Pacific region advanced in every aspect of environmental protection, security and sustainable development, as well as the Millennium Development Goals.

The follow up actions to the EPG exercise last year, no doubt will have a bearing on the future work of the organization.

The organisation's input to the Pacific Plan, should assert itself as one of the regional agencies with an important role, because it addresses matters that touch the very basic human security.

SOPAC's leading role in the development of the Environmental Vulnerability Index is something to be proud of, and to have continuing support.

I would also like to thank and acknowledge the support of the donors and development partners, in assisting the development of Pacific Island Countries, through SOPAC.

Last, but not least, I would like to take this opportunity to wish the incoming chair all the best during his term of chairmanship.

Thank you all. Fakaue lahi.

OPENING ADDRESS by Ms Cristelle Pratt

Director of the SOPAC Secretariat at the Official Opening of the SOPAC 33rd Annual Session

1. Chair of the SOPAC Governing Council and distinguished members of Council, Excellencies, Heads of Delegations, Heads of CROP and Representatives of international, regional and national organisations, Ladies and Gentlemen.
2. On behalf of the SOPAC Secretariat, good morning and a warm welcome to this the opening of the 33rd Annual Session of the SOPAC Governing Council, which is being hosted by the Government of Papua New Guinea.
3. Papua New Guinea last hosted an Annual Session of the SOPAC Governing Council in 1987 at home in Lae. Since then, our membership has increased to twenty and our lead responsibilities have expanded considerably to include amongst others energy, water and sanitation, and disaster risk management.
4. Chair, it would be remiss of me not to mention, at this juncture, the great challenges and hardships that your country has had to face following the devastation wrought by Cyclone Heta. SOPAC responded, under a collaborative CROP initiative to provide support in post-damage assessment and I assure you that we will continue to provide technical support to Niue to mainstream disaster risk management practices.
5. SOPAC, this past year has also been filled with challenges, although not nearly of the magnitude that your country has had to face, Chair.
6. SOPAC has, since February, had to get use to a new Director. Fortunately my predecessor Alf Simpson left behind a robust and healthy Secretariat and it was he that embraced and championed the change toward a strategic programme approach. I would like to take this opportunity to acknowledge this. As well, the Secretariat has a complement of highly skilled and dedicated technical professionals that ascribe to a performance culture that I believe should be encouraged. So with those as givens, my challenge is to maintain relevance, improve delivery and seek efficiencies.
7. Since the 32nd Annual Session, aside from delivery against its annual work programme and drafting a new corporate plan and programme strategies, which will be considered by Council at this Session, SOPAC has also provided support to member countries on a number of important global initiatives, which have implications for all of us. They include the 12th Meeting of the Commission on Sustainable Development, which considered water and sanitation [clearly a priority for our region], the Barbados + 10 Review process and the 2nd World Conference for Disaster Risk Reduction. We will continue to provide support to member countries up until the two mentioned world conferences are held in January next year, as well as toward their preparations for the 13th Meeting of the Commission on Sustainable Development, which will continue its considerations of water and sanitation.
8. At the regional level the Secretary General of the Pacific Islands Forum, who is with us today, invited SOPAC to assist in preparatory work required by the Forum Leaders, for the development of a framework for the Pacific Plan as well as to assist in completing an assessment of the current state of our regional cooperation.
9. Chair, the challenge for next year will be to ensure that there is a Pacific Plan. That it addresses real priorities and issues; that it is developed through wide consultation with all stakeholders; and, that we as a regional organisation are proactive throughout its development.
10. The bigger challenge beyond will be to ensure that the Pacific Plan is implementable and that the Leaders vision of a region where its people can lead free and worthwhile lives, is achievable.
11. For this we will need to find and embrace new ways of working together, as well as pragmatic mechanisms to address the priorities that are identified.
12. Chair, Excellencies, Distinguished delegates and colleagues I thank you for your attention and wish every success to forthcoming deliberations of the SOPAC Governing Council.

SUMMARY RECORD OF THE THIRTY-THIRD SOPAC SESSION

FORMAL OPENING SESSION

1. OPENING

1. The Thirty-third Session of the South Pacific Applied Geoscience Commission (SOPAC¹), was held on the Coral Coast, Sigatoka, Fiji Islands, from 17th to 24th September 2004. It's Council Sessions including the joint session with its Technical Advisory Group (TAG) and preceding two-day scientific meeting of its Science, Technology and Resources Network (STAR) were all held at the Warwick International Fiji. The 2004 STAR Meeting is the 21st meeting of the group.

2. The Governing Council meeting was called to order by Mr Deve Talagi, representative of Niue on behalf of Mrs Sisilia Talagi, Secretary to Government and Outgoing Chair of the SOPAC Governing Council. Her statement was a reflection on the challenges and opportunities of the year – highlighting the 'missed opportunity' of being unable to resolve, out of Session, the Council decision to review its rules and procedures on "executive appointments"; and the personal challenge of the unprecedented devastation of Niue by Cyclone Heta. Her statement is tabled in full in this volume.

3. The opening prayer was offered by Father Michael Igo, Pacific Regional Seminary, in the three main languages used in Papua New Guinea.

4. His Excellency, Alexis Maino, Papua New Guinea High Commissioner to Fiji, gave the Opening Address on behalf of the Government and people of Papua New Guinea; in which he wished for a successful outcome of the Governing Council deliberations. The High Commissioner welcomed Palau, the newest and 20th member of SOPAC, which was represented for the first time at this Governing Council. He further acknowledged the presence at the Session of Dr Loren Kroenke and Dr Kazuhiro Kitazawa who he credited as being instrumental in the establishment of the SOPAC Secretariat and the STAR Group, respectively. The High Commissioner went on

to highlight the diverse nature of the geology of the islands and sea area of Papua New Guinea, and sketched a short history of his country's attempts at national capacity building to support and manage the geo-related aspects of Papua New Guinea's development – all this to answer the question, "Why PNG and SOPAC?" He also looked to the future, specifically to the Pacific Plan, which is a vision of the Pacific leaders to forge even deeper regional cooperation, given the large ocean and small islands context of Pacific island countries. He declared that SOPAC was ready to contribute to realising the Forum leaders' vision for the region through participating in the development and implementation of the Pacific Plan; so that all the Pacific's peoples could lead free and worthwhile lives. The High Commissioner's address is tabled in full in this volume.

5. The Director of SOPAC, Ms Cristelle Pratt, welcomed all the delegates to the SOPAC Governing Council meeting, making special mention of the many changes that had occurred within SOPAC in the intervening years from when the Government of Papua New Guinea last hosted an annual session in 1987. She acknowledged her predecessor's contributions that left a robust and healthy Secretariat, and the complement of highly-skilled and dedicated technical professionals. She recognised that her challenge was to maintain relevance, improve delivery, and seek efficiencies. Her remarks are tabled in full in this Proceedings volume.

6. Delegates from the following member countries were in attendance: American Samoa (Associate), Australia, Cook Islands, Federated States of Micronesia, Fiji, Guam, Kiribati, Marshall Islands, Nauru, New Caledonia (Associate), New Zealand, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. A full list of participants is appended as Appendix 1.

7. Australia Marine Science and Technology (AMSAT), British Geological Survey (BGS), Geoscience Australia, Georgia Institute of Technology, Institute of Geological and Nuclear Sciences (IGNS), Institut de Recherche pour le Développement (IRD), JAMSTEC, Japan Oil, Gas and Metal National Corporation (JOGMEC), Korea Institute of Geoscience and

¹ A comprehensive list of ACRONYMS is included as Appendix 8 of this Proceedings volume

Mineral Resources (KIGAM), Korea Ocean Research and Development Institute (KORDI), Landcare Research, Metropolitan Fire and Emergency Services, National Institute of Water and Atmospheric Research (NIWA), Natural Hazards New Zealand, Nautilus Minerals Ltd, Pacific Power Association, Taiwan (ROC), The Asia Foundation, The Australian Bureau of Meteorology, The Pennsylvania State University, UNDP, University of California, UNESCO-IOC, University of Hawaii, USA/Pacific Tsunami Warning Centre, Victoria University of Wellington; attended as observers and supporters of SOPAC.

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

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

2. ELECTIONS

10. On behalf of the Outgoing Chair, Mr Deve Talagi expressed deep gratitude to his fellow Governing Council members and the Secretariat for their support and assistance during Niue's tenure as Chair of the SOPAC Governing Council.

2.1 Chairs and Vice-Chair of SOPAC

11. In accordance with the Rules of Procedure, HE Alexis Maino, Ambassador of Papua New Guinea to Fiji, assumed the Chair of the SOPAC Governing Council on behalf of the Government of Papua New Guinea; and the representative of Samoa, was appointed Vice-Chair of SOPAC.

2.2 Chairs of STAR and TAG

12. Council accepted STAR's nomination of Professor John Collen of Victoria University of Wellington to continue as Chair of STAR and Joe Buleka of Papua New Guinea, along with Lameko Talia of Samoa as co-Vice Chairs.

2.3 Appointment of Rapporteur

13. Ms Lala Bukarau was appointed Rapporteur.

3. AGENDA AND WORKING PROCEDURES

3.1 Adoption of Agenda

14. The Governing Council adopted the provisional agenda as presented in AS33/3.1 Rev 2. The approved agenda is attached in Appendix 2.

15. They also accepted the draft working schedule (AS33/3.1/Info1), working procedures (no paper), and noted the list of conference room documents (AS33/3.1/Info3 Rev).

3.2 Appointment of Drafting Committee

16. An open-ended drafting committee was appointed comprising Federated States of Micronesia, Fiji, Papua New Guinea, Samoa and Tuvalu as the core group to oversee the production of a Summary Record of Proceedings. According to the Rules of Procedure, Samoa was appointed Chair of the Drafting Committee.

3.3 Appointment of Sub-Committees

17. While no sub-committee was appointed, it was noted that the review of the Rules of Procedure on Executive Appointments out-of-session by a Council sub-committee had not progressed. It was hoped that a resolution would be found through further out-of-session discussions, among concerned member countries, already begun in the margins of this Council meeting.

4. REPRESENTATION

4.1 Designation of National Representatives

18. The Chair invited responses from all member country delegates to confirm the information given in paper AS33/4.1 (Designation of SOPAC National Representatives) that was circulated. The amended full list is attached as Appendix 3.

5. STATEMENTS

19. Council agreed to the Chair's suggested procedure to hand in written statements to the Secretariat to be tabled in full in the Council's 33rd Session Proceedings. Most member-country delegations made short interventions

specifically acknowledging donor support; and highlighting the positive contributions of the SOPAC Work Programme toward their national development.

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

5.1 Statements from Member Countries

21. These statements are tabled in full in Appendix 4, Part I.

5.2 Statements by CROP Organisations

22. These statements are tabled in full in Appendix 4, Part II.

5.3 Statements from Supporting Governments and International Agencies

23. These statements are tabled in full in Appendix 4, Part III.

5.4 Statements from National Institutions

24. These statements are tabled in full in Appendix 4, Part IV.

JOINT COUNCIL TECHNICAL ADVISORY GROUP SESSION

6. ISSUES COMMON TO ALL PROGRAMMES

6.1 SOPAC Reports

6.1.1 2003 Annual Report Summary

25. The Director presented conference room paper AS33/6.1.1, the cover note to the SOPAC Annual Report Summary for 2003, indicating its early production in the first quarter of 2004 enabled maximised dissemination of it well before the Pacific Islands Forum in early August 2004.

26. Council accepted the 2003 Annual Report Summary and agreed to use it in promoting the work of SOPAC.

6.1.2 Summary Report of 2004 Donor Support

27. 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 further member-country input from the Cook Islands, Kiribati, Nauru, Vanuatu and Fiji, for bilateral projects.

28. Council accepted the report and acknowledged, with pleasure, the strong support from donors and requested that the Secretariat write to all development partners thanking them for their assistance.

6.1.3 Review of Country Profiles

29. The Director reported on the progress of the review of the SOPAC country profiles, as presented in paper AS33/6.1.3.

30. Council noted the progress with the review of the member-country profiles and requested the Secretariat secure funding on an ongoing basis to complete revision of four country profiles per year on a rolling basis, with progress to be reported under the annual business plan.

6.1.4 SOPAC Work Programme and the MDGs

31. The Deputy Director presented paper AS33/6.1.4, updating Council on the activities undertaken by the Secretariat in support of the Millennium Development Goals (MDGs), in particular the goal most relevant to SOPAC activities, MGD7.

32. Council heard of the significant effort required for reporting on international targets, given that availability of data on sectors like water and energy in the region and within countries was not as strong as it ought to be. Much work was being done by the CROP/UN MDG Working Group to set in place a mechanism whereby the information base for countries and the region might be strengthened to ensure that reporting obligations on interna-

tional targets do not become burdensome for the Secretariat and for member countries.

33. Cook Islands expressed strong support for SOPAC assistance in reporting on progress with MDGs which is currently being undertaken privately in the Cook Islands, urged the Secretariat to lend this support to members as a national activity.

34. Council noted the contributions made by the Secretariat for the regional report on MDGs and other international obligations relevant to SOPAC's work, and participation in the development of relevant indicators and targets. Council further urged the Secretariat to continue to support members in their reporting on MDGs and that these activities be reported in future under the relevant work programmes.

6.1.5 International Meeting on SIDS, Mauritius, January 2005

35. The Deputy Director presented paper AS33/6.1.5, the report to Council on Secretariat activities in support of members' preparations for the International Meeting on SIDS, to be held in Mauritius during 7-14 January 2005.

36. Council was advised on the reasons behind the postponement of the Mauritius meeting to January 2005 from its originally-set date of August 2004, and the other meetings and negotiations that had transpired in preparation for it.

37. New Zealand encouraged member countries to see Mauritius as a milestone towards sustainable development, a beginning rather than an end of a process, and that they saw the national sustainable development outcomes as a means for delivering benefits to those on the ground.

38. Marshall Islands reported that the same item was discussed at the SPREP annual meeting and encouraged both SOPAC and SPREP to continue to assist member countries in preparation towards the Mauritius meeting. He also took the opportunity to request the assistance of the donor community, to enable member countries to participate in the Mauritius meeting.

39. Council welcomed and encouraged the continuation of the Secretariat's ongoing participation to support members in the preparations/negotiations for the International Meeting on SIDS to be held in Mauritius, 10-14

January 2005, particularly through the PIFS Missions in New York.

6.1.6 Report on SOPAC Activities Concerning Climate Change, Sea-Level Rise, Climate Variability and Extreme Weather Events

40. The Deputy Director presented paper AS33/6.1.6, citing these phenomena to be very close to the heart of what SOPAC is all about.

41. Council noted the obvious synergies of the sea-level rise and related phenomena with the Ocean and Islands Programme and the South Pacific Sea Level and Climate Monitoring Project. Council further noted the meetings and contributions by the Secretariat to roundtable talks on the issues at hand; and its participation in ad hoc working group meetings.

42. In relation to the second phase of PIREP, Marshall Islands encouraged full cooperation and collaboration between SOPAC and SPREP with the understanding that SOPAC is being mandated and tasked with responsibility for renewable energy, and SPREP for climate change.

43. Tuvalu also suggested greater collaboration between the two organisations to ensure more effective implementation of activities. It was also suggested that Council carefully consider the recommended name change to *Climate Change, Sea Level Rise, Climate Variability and Extreme Weather Events* to ensure that it does not limit potential opportunities for funding or activities under the Kyoto Protocol and UNFCCC and suggested that it would be preferable to keep the original title of *Climate Change Framework*.

44. Australia sought Council feedback on what key benefits the member countries see coming from allocating further resources to the feasibility for a Regional Financing Facility for Adaptation given the limited discernable returns so far on already expended resources.

45. Council shared the view that more work remains to be done on the concept of a Regional Financing Facility for Adaptation and encouraged the Secretariat to take an active role in any future work to ensure that the analysis and reporting on the original concept be completed.

46. SPREP reported that the proposed second phase of Pacific Islands Renewable Energy Project (PIREP), which is to be called the Pa-

cific Islands Greenhouse Gas Abatement through Renewable Energy Project (PIGGAREP), is a climate change project of theirs and is a continuation of almost ten years of collaboration between UNDP, the GEF and SPREP on building the capacities of PICs to deal with the challenges of climate change. SPREP further advised Council that it would continue to execute the current and next phase of the project, in full consultation with the CROP Energy Working Group, the project's Country Teams and the Roundtable on Climate Change, Sea Level Rise and Climate Variability. This will also be done in accordance with the advice SPREP has given on the project to the FOC; the outcome of the multipartite review meeting for PIREP; and the endorsement given by the SPREP meeting. (The full text of the SPREP representative's intervention is an attachment to the SPREP statement.)

47. Tonga recommended that SOPAC should continue to focus on energy issues.

48. The Secretariat welcomed the comments from Council and it was noted that the regional responsibilities were clear for climate change and for energy and that there was opportunity to strengthen and clarify partnership in the implementation of PIREP Phase II on this basis.

49. Council supported the inclusion of extreme weather events within any future work programme of the Climate Change Framework. Furthermore, Council agreed to support the name change of the framework to Climate Change Framework, on the understanding that this would include work on sea-level rise, climate variability and extreme weather events.

50. Council in considering the current progress with the review of the Climate Change Framework encouraged the Secretariat to continue to actively participate and contribute to the finalisation and endorsement of the revised framework through participating in future meetings of the Ad-Hoc Working Group on Climate Change.

51. Council acknowledged the lead role that SOPAC plays with respect to energy policy and development, and that other CROP agencies were also undertaking work that linked to some of these energy activities. Council urged donors and partners to support a collaborative approach among CROP agencies and other institutions in the development and implementation of energy programmes and projects within the region noting specifically that with regard to PIREP Phase II, SPREP has confirmed

that this is primarily a climate change project and SOPAC will be engaged in the development and implementation of the project's renewable energy activities.

52. Council supported the Secretariat's efforts in establishing and successfully promoting the energy and water Pacific Partnership Initiatives and urged the Secretariat to explore opportunities to secure additional new partnership initiatives.

6.2 CROP Summary Report

53. The Director presented the Summary Record of the meeting of the Council of Regional Organisations of the Pacific (AS33/6.2), held in early July in Vanuatu, and attended by all the Heads of the CROP organisations.

54. Samoa expressed concern at the number of working groups the Secretariat was involved in. Not wishing to undermine nor discredit the work of these working groups, Samoa's concern was that resources used up in these working groups might be detracting from meeting the needs and requirements of the member states.

55. The PIFS representative added that the new CROP charter had provisions for the chair of various CROP working groups to be rotated among CROP organisations and this could exacerbate the situation that concerned Samoa.

56. The Director, reassured Council that the Secretariat remained mindful of their obligations to the member states and that it reviewed carefully the purposes of working groups and that SOPAC participate only in those working groups with strong links to the SOPAC Work Programme. The activities of a working group were also, time-bound and task oriented, and that the groups were dissolved as soon as their tasks were completed.

57. Council noted the Summary Report of the 2004 CROP Meeting, acknowledging that items of relevance to SOPAC would be raised under appropriate agenda items. Council further supported the Secretariat's co-hosting the 2005 CROP Meeting with the Fiji School of Medicine.

6.3 STAR Chair's Report

58. The STAR Chair addressed the joint Council/TAG session, and presented his report (AS33/6.3) on the 2004 STAR Session that

was held at the Warwick Hotel, Coral Coast, Fiji from 17 to– 19 September [see Appendix 5 in this volume]. He began by providing a background to the role of STAR for newcomers.

59. He also informed Council that the 21st STAR Session (of 2004) was divided into three themes –

1. Mineral policy, plate tectonics and off-shore mining.
2. Hazard assessment and risk management.
3. Water, sanitation and human settlement.

60. During the meeting fifty-four scientific papers and two longer talks were presented orally and twenty-six others displayed research results on posters. Abstracts of all papers are published in SOPAC Miscellaneous Report 576.

61. Furthermore, he highlighted a recurrent theme of the STAR Sessions in the past few years, and that was the clearly applied direction to much of the research results presented, which ensured the provision of high-quality technical advice to member countries.

62. The STAR Chair was also impressed with the large volumes of quantitative data that are becoming rapidly available from a range of monitoring and remote sensing systems, recognising that incorporating up-to-the-minute information into research and policy would be a continuing challenge of the future.

63. In 2004, about half of the papers presented at STAR were from scientists based within the SOPAC region, the majority of which was on Papua New Guinea, giving a glimpse of the fascinating geology of the host country alluded to at the beginning by the Chair of Council. Overall the STAR Chair observed genuine global research with a strong Pacific base.

64. Council expressed its deep appreciation for the report and guidance delivered by the STAR Chair.

65. Papua New Guinea on behalf of the Tsunami Working Group requested that the TAG/ Council recognise the need for assessing technical and monitoring needs for national and regional networks for tsunami warning.

66. Council adopted the STAR Chair's report and working group reports with their associated recommendations.

6.4 SOPAC/EU Project Report

67. The Secretariat drew Council's attention to the significant size and cross-cutting nature of the EU-funded Vulnerability Reduction Project hosted at SOPAC; clearly evident in the voluminous size of the summary (only) reporting on the Project included in the meeting documentation. It was suggested to the meeting that to provide an effective report on progress of work within the Project, that it be presented within the programme reporting where the key results areas were best aligned.

68. Council accepted that the reporting along with comments or input from TAG and STAR would be made accordingly under the three technical work programme agenda items.

7. OCEAN AND ISLANDS PROGRAMME

7.1 Report on the Ocean and Islands Programme

69. The Programme Manager Ocean and Islands, referred Council to papers AS33/7.1, AS33/7.2 and pages 16-25 of AS33/14.3, relating to the proposed Draft Work Plan and Budget for the Ocean and Islands Programme for 2005.

70. The Secretariat outlined the structure of the presentation as comprising a brief overview of the Ocean and Islands Programme, a review of work progress for the 2003-2004 reporting period, a summary of emerging issues facing the programme for 2004 and beyond, and the proposed work plan and budget for 2004-2005.

71. Council was reminded of the Programme's goal and the three component areas as outlined in the Ocean and Islands programme summary comprising *Resource Use Solutions, Monitoring Physical and Chemical Change in Ecosystems, and Ocean Governance*.

72. The Secretariat reviewed the progress and achievements of the Ocean and Islands Programme by component and highlighted key achievements:-

73. Under *Resource Use Solutions* a description of progress on the following activities was provided: Phase II of Stage 2 of the Japan/SOPAC Cooperative Deep Sea Minerals Programme in the EEZ's of Niue and Kiribati; technical reporting on resource assessment surveys in Marshall Islands and Federated

States of Micronesia; development of the Pacific Islands Regional Maritime Boundaries Information System [PIRMBIS] with the recruitment of a dedicated officer on the project; transcription of geophysical data in the SOPAC Petroleum Data Bank, particularly with data from Tonga; and capacity building under the Certificate in Earth Science and Marine Geology Course.

74. For the *Monitoring Physical and Chemical Change* component, the Secretariat described progress on the following activities: the deployment of two oceanographic monitoring buoys in Penryhn and Manihiki Lagoons, Cook Islands, which provide near real-time collection of oceanographic and meteorological data, and a cost-benefit analysis of technical interventions in Manihiki; the appointment of a Pacific Islands - Global Oceanographic Observation Systems (PI-GOOS) Coordinator; an I-GOOS forum held in February 2004; the survey of port areas, harbours and adjacent coastal areas of Rarotonga, Cook Islands; and maintenance and calibration of SEAFRAME sites completed for all beneficiary States of the South Pacific Sea Level and Climate Monitoring Project, under Phase III.

75. For the *Ocean Governance* component, the Secretariat described progress on the development of the Marine Scientific Research Cruise Co-ordination Database, with the input of Fiji data, and the convening of the Pacific Islands Regional Oceans Forum organised by CROP at the Marine Studies Campus of the University of the South Pacific in February 2004 to develop an Integrated Strategic Action Framework for implementation of the Pacific Islands Regional Ocean Policy.

76. The SOPAC/EU Project Leader, commented on the areas of the Ocean and Islands Programme relating to the SOPAC/EU Project, noting the major activities and tasks of the SOPAC/EU Project that link with the Ocean and Islands Programme, particularly in the sustainable development of coastal areas through the identification of alternative sources of aggregates. The Secretariat specifically mentioned the appointment of staff to key positions under this Project.

77. The following activities of the SOPAC/EU Project relating to the Ocean and Islands Programme were also mentioned: marine survey work was completed around Tongatapu and Niuafu'ou islands (Tonga), around Savai'i and Upolu and within the Apolima Straits (Samoa), and in Tuvalu (currently underway); aggregate

surveys were completed in Tongatapu, in addition to development of dredging guidelines; and an initial reconnaissance survey of aggregate resources in Ghizo (Solomon Islands).

7.2 Issues Arising in the Ocean and Islands Programme

78. The SOPAC Resource Economist gave an overview of resource economics and the contribution that it can make to SOPAC through application to the three SOPAC technical programmes, to provide a context for Council. She pointed out the importance of resource economics to connecting technical information to positive economic net benefits, using the example of a recent cost-benefit analysis of project interventions implemented to assist the black pearl industry in Manihiki Lagoon, Cook Islands; stressing the need for effective implementation of resource management plans to ensure that outputs of project interventions achieve their intended outcomes.

79. Other planned applications of resource economics across SOPAC work programmes included: seabed mapping for aggregate assessments in the Marshall Islands; economic impact assessments of natural disasters; and cost-benefit analyses of Disaster Risk Mitigation measures.

80. The Secretariat presented paper AS33/7.2 on the issues arising in the Ocean and Islands Programme.

81. The Secretariat sought Council's consideration and guidance on the following issues: Pacific Islands Regional Ocean Policy; marine scientific research; mineral resources development; capacity building; maritime boundary delimitation; South Pacific Sea Level and Climate Monitoring Project; Programme resources; and ensuring effective outcomes.

82. The Secretariat outlined the proposed Work Programme for 2005, referring to AS33/14.3 pages 16-25, noting the change of wording from *Ocean Governance* to *Natural Resources Governance* in the 2005 Programmes and Strategies document AS33/11.2.

83. Nautilus Minerals Limited commended SOPAC for its work on improving the digital Marine Scientific Research database, and raised the question on the availability of rock samples from research cruises - as to whether SOPAC is considering establishing a repository for samples given that under

UNCLOS it is necessary that coastal States be given samples for all MSR conducted in their EEZs. He recommended that samples be kept in a common or regional repository, citing several examples of the loss of valuable samples based on current practice. The Nautilus representative suggested that the United Nations environmental guidelines mentioned in 3.2.1, be treated with caution, as they were formulated without input from industry. He further stated that only Papua New Guinea and New Zealand had mineral policies enabling investment; suggesting that member states consider the New Zealand mineral policy as a model. Nautilus was of the opinion that the current practice of mineral assessments mostly undertaken by donor/aid programmes was unsustainable.

84. The Secretariat responded indicating that the establishment of a regional repository would have significant resource implications and would require direction from Council. It was also noted that most MSR had been undertaken through bi-lateral agreements and countries would have to determine how they wished to proceed. In terms of mineral policy initiatives, the Secretariat mentioned that this was constrained by funding, but hoped to address these issues in the upcoming year.

85. The Marshall Islands expressed its appreciation for the work undertaken by SOPAC and in particular the mapping efforts for alternative sources of aggregates in Majuro Lagoon, and the identification of a sunken ship which has now become a tourist attraction. Marshall Islands requested that SOPAC look into the potential for mapping the whole of Majuro Lagoon.

86. Tonga commended the Ocean and Islands Programme and EDF 8 work implemented in Tonga and requested further training in the use of the MapServer and GIS for their IT staff. Tonga also requested that the data acquired under the maritime boundaries delimitation project be provided to Tonga to enable them to carry out an independent assessment of these data, and begin processing their potential claim to an extended continental shelf beyond 200 nautical miles.

87. The Intergovernmental Oceanographic Commission commented on the importance of the use of resource economics in SOPAC's work programmes, highlighting how this work has been extensively used in GOOS applications in country activities. The IOC applauded the track taken by SOPAC and noted that it was timely that SOPAC look at this issue. He

highlighted the work undertaken in the Cook Islands which was the first activity implemented under the Pacific Islands GOOS, and noted that SOPAC's cost benefit analysis showed the importance of improved management through data collection and monitoring to improve management decisions. The IOC informed the Joint TAG/Council Session that it is involved in helping Mauritius plan for the BPoA+10 and in promoting the importance of the work carried out in the region. The IOC suggested that SOPAC explore the potential of having a side-presentation at Mauritius combining the technical and cost-benefit analysis slants to the work, in order to highlight the benefit of resource economics and its use in the Manihiki Lagoon, Cook Islands as an example for SIDS. The IOC noted that the Perth office of GOOS would help support such an initiative.

88. AMSAT highlighted their partnership with SOPAC in the South Pacific Sea Level and Climate Monitoring Project. This programme was funded by Australia and has been ongoing since 2001. This Project is aimed at improving the understanding of sea-level rise and climate change and involves member countries, SOPAC, SPREP, PIF, USP, Geoscience Australia, CSIRO and Bureau of Meteorology, Australia. AMSAT reiterated the importance of the SeaFrame stations, which have been installed in several countries and noted the STAR recommendation that consideration be given to SeaFrame as a potential tool in tsunami monitoring. Advised data archives are held at SOPAC, in-country and at the Hawaii centre.

89. With regard to the request by Tonga for data on maritime boundaries, the Secretariat responded that SOPAC would be happy to provide a full set of all information held by SOPAC pertaining to Tonga. The Secretariat also advised of the upcoming MarZone workshop, which provided countries with the opportunity to access data held under PIRMBIS. The Secretariat thanked the IOC for their offer to help promote SOPAC outputs in relation to PI-GOOS at Mauritius in 2005.

90. USP commended the Certificate in Earth Science and Marine Geology Programme and informed Council that it had been running since 1977. Through SOPAC's continued support this training programme has been strengthened and now contributes to a University qualification. It was suggested that it may be timely for Council and the Secretariat to review this programme to further strengthen it for the benefit of members.

91. Papua New Guinea expressed its support for all seabed/resource-mapping activities, which is the responsibility of the Department of Geology and Mines. In responding to comments on rock samples Papua New Guinea stressed that their Mining Act ensures that all exploration samples collected must be provided to the local geoscience survey repository. However as some samples require specialist treatment, it encouraged the development of a close relationship with partners to ensure the samples are analysed and all related data provided.
92. Furthermore, Papua New Guinea indicated that during consultations within country it had been agreed that consideration be given to the holding of the proposed Marine Boundaries Workshop in Papua New Guinea.
93. Samoa sought feedback from the Secretariat on Samoa's coastline data and maritime delimitation base points. An indication on the availability of results of the recent seabed mapping and coastal survey by KIGAM was also requested. Samoa also inquired about the possibility of SOPAC conducting a survey for a safe boat channel in the Aleipata area for tourism purposes and advised that a proposal would be submitted to SOPAC.
94. Tuvalu extended their appreciation for the survey currently being undertaken in-country. Tuvalu requested that a regional capacity building programme to provide local training in the processing of data from the South Pacific Sea-Level Rise and Climate Monitoring Project to ensure that countries are able to utilise this information better. Tuvalu also mentioned that they have some queries relating to maritime boundary data, particularly with respect to when validation of their full dataset would be available.
95. Vanuatu expressed its appreciation for all Ocean and Islands Programme work carried out, and went on to query what the resource implications would be on membership contributions should a Minerals Adviser be secured.
96. Kiribati acknowledged the support of the SOPAC Ocean and Islands Programme, and queried when Activities 1.2.3 (Assessment and market study of Gypsum on an ongoing basis for Kiribati), 1.2.5 (Establish and maintain a regional deepsea mineral database), 1.2.7 (Survey of remnant phosphate deposit on Banaba Island), 1.3.5 (Assessment of aggregate resources of North and Southeast Tarawa Lagoon), 1.6.1 (Regional Maritime Boundaries Project), and 2.3.2 (South Pacific Sea Level & Climate Monitoring Project) were to be carried out.
97. Nautilus asked if costs were an issue for the establishment of a regional repository for rock samples and if SOPAC would allow a private company to support such an initiative. He felt a central repository would be more efficient, and help ongoing studies and knowledge development.
98. New Zealand commended the Secretariat on the use of resource economics in determining the benefits of its projects. New Zealand however queried whether the Secretariat used this approach in determining the usefulness of the recommended additional staff resources, (such as the minerals adviser) mentioning that a business case for these proposals would be strengthened by a cost-benefit analysis.
99. Tonga brought to the attention of Council that all information and data held for Tonga by SOPAC is still under the sovereignty of Tonga and is only held in trust by the Secretariat.
100. In response to comments by USP, the Secretariat agreed that it was indeed timely to review the Certificate Course in Earth Science and Marine Geology given the need to secure its long-term sustainability. The Secretariat also indicated that it had already provided Samoa with maritime boundary datasets and would be happy to follow up with identifying any gaps. For Tuvalu the maritime delimitation boundaries data was currently undergoing independent quality review and the Secretariat would communicate all relevant information to the Tuvalu authorities upon completion of a review, and discuss future options.
101. The Director in response to Vanuatu added that the securing of any additional staff would require additional budgetary support. In following up on New Zealand's suggestion to utilise a cost-benefit analysis approach to proposals for recruitment of new positions, the Secretariat agreed to review these positions, and will endeavour in future meetings to provide business cases to support requests for additional resources. In response to Nautilus Minerals Limited, SOPAC would support funding from a private partner for a repository for Marine Scientific Research, but it was important to remember that in that case access would be open for all, and access outside of the country concerned needs the express permission of the coastal state.

102. With regard to the numerous requests for additional work, the Deputy Director advised Council on the existence of a buddy system that would be of assistance to countries trying to address specific project related issues.

103. The BGS Advisor stressed to Council that the use of new technology in the acquisition of data would give rise to issues of storage, management and access to this information, which will require increasing resources especially personnel to process and manage the data. It was suggested that this issue might require the formulation of a working group if it is to given due consideration.

104. JAMSTEC noted the change in the composition of attendance and the smaller numbers of Marine Scientific Research representatives. JAMSTEC indicated that samples/data collected in their surveys is freely available as required by UNCLOS for marine scientific research. JAMSTEC also advised that it is cooperating with USP and SOPAC in training young scientists thus encouraging capacity development in interpretation and utilisation of data for country's benefit. JAMSTEC requested Council to continue its support for Marine Scientific Research. JAMSTEC also expressed its concern for the loss of research samples they had provided to countries advising adequate care in their maintenance.

105. Council further:

- a. Acknowledged progress made on the finalisation of the Pacific Island Regional Ocean Framework - Integrated Strategic Action (PIROF-ISA), as part of efforts to implement the Regional Ocean Policy and urged the Secretariat to be fully involved in the process towards implementation of aspects of the PIROF-ISA that are relevant to SOPAC's Work Programme, and report on the progress of implementation on an annual basis.
- b. Encouraged the Secretariat to explore future options with Japan for continued cooperation under the current, longstanding, important deep-sea resources research initiative.
- c. Strongly supported initiatives in regard to coordination of Marine Scientific Research and maintenance of relevant databases and noted that additional financial resources are required to recruit an advisor to fulfil the roles and functions required.
- d. Reaffirmed that mineral resource assessment remains a critical, integral part of the SOPAC Work Programme and urged the Secretariat to work closely with donor and other partners during the coming year to secure funding for an Adviser (Mineral Resources), and put a business case together for that position to take to Council at the next SOPAC Annual Session.
- e. Council reaffirmed its support for the Certificate in Earth Science and Marine Geology course and for capacity building in earth science within SOPAC and member countries in general and urged the Secretariat to work closely with the Commonwealth Secretariat and other donors and partners to locate a long-term sustainable funding source for such activities. It noted close links with USP and their support for such activities agreeing that a review of the course be undertaken.
- f. Noted progress made to date on maritime boundaries delimitation and PIRMBIS, as well as on extended continental shelf issues and encouraged those members who have the potential to submit claims for an extended continental shelf to remain mindful of the fast approaching timeline of 2009.
- g. Encouraged the development of a capacity building component in the fourth phase of the South Pacific Sea Level and Climate Change Monitoring Project, with the aim of building the capacity of in-country experts in data analysis and processing. Council further noted Australia's offer to circulate a strategy paper on the future Phase IV to all participating countries and SOPAC as soon as it is available from AMSAT.
- h. Recognised the emerging importance of resource economics in the monitoring, evaluation and cost-benefit analysis of project interventions toward more considered decisions for the planning, development and management of their land and ocean resources.
- i. Approved programme management activities toward strengthening the human and institutional resource requirements for effective delivery of the Ocean and Islands Programme.

8. COMMUNITY LIFELINES PROGRAMME

8.1 Report on the Community Lifelines Programme for 2004

106. The Secretariat introduced the Community Lifelines Programme outlining that the presentation would have three parts, namely, Part 1 – Work Programme Reporting – 2004 and overview of the Pacific Islands Energy Policy and Strategic Action Planning (PIEPSAP) Project, Part 2 – Issues Arising – 2004, and Part 3 – Work Programme and Budget 2005, where opportunities for discussion would be provided at the end of each component within Part 1 and following Parts 2 & 3. The Secretariat highlighted that in making the presentation the EU activities within the Community Lifelines Programme and the PIEPSAP Project would be presented by the respective Team Leaders.

107. The Secretariat provided an overview of the Community Lifelines Programme, noting the Goal of the programme to “Improve community access to energy, water and sanitation, and information and communication technologies for sustainable livelihoods”; the three component areas Component 1 – Resource Assessment, Development and Management; Component 2 – Asset Management; and Component 3 – Advocacy and Governance within Community Lifelines; and the composition of the Community Lifelines Programme staff (22 in total) inclusive of the EU and PIEPSAP staff members.

108. The relevant papers and information for this session were: Report on the Community Lifelines Programme for 2004 Paper AS33/8.1; Issues Arising in the Community Lifelines Programme Paper AS33/8.2; and Approval of 2005 Work Plan and Budget Paper AS33/14.3 (pages 26-44).

109. The Secretariat reported on the Programmes activities for 2004, referring to Council Paper AS33/8.1, highlighting the key activities and achievements within the three component areas including partners within these activities and acknowledged the various donor commitments and financial support to the Programme from Australia, New Zealand, France, Japan, Taiwan (ROC), UNEP, UNESCO, ESCAP, SIDA, DFID, ADB, WHO, World Bank and EU.

110. Component 1 – Resource Assessment, Development and Management, activities included the installation of a 20kW wind turbine

and associated wind energy education programme, biomass and ocean resource assessment; feasibility of coconut oil as a bio-fuel, ongoing publication of the Island Climate Update (ICU) bulletin, hydrological training, and through the EU, work on groundwater in Tonga, Vanuatu and Solomon Islands.

111. Component 2 – Asset Management, activities included development and construction of a sanitation park, ICT support to PICs and Missions, and through the EU, setting up and establishing National Information Centres, acquisition of satellite imagery and training in GIS and remote sensing.

112. Component 3 – Advocacy and Governance within Community Lifelines, include regional policies and strategic action plans, Pacific energy/water partnership initiatives, CROP Working Groups, climate change and adaptation, CSD, and education and training in water, energy and ICT. The Secretariat also presented an overview of the Pacific Islands Energy Policy and Strategic Action Planning [PIEPSAP], with its objectives and activities, noting that it is an integral component of the Community Lifelines Programme, and that it is based on a menu of options that would provide the flexibility to cater for individual country requirements.

113. Geoscience Australia queried whether SOPAC had a policy on spatial data infrastructure (SDI), particularly given that GIS is increasingly being used throughout the region.

114. The Secretariat in noting the recommendation by a STAR Working Group that an SDI for the region be developed indicated that a draft regional SDI would be developed as a model for consideration by countries. The Secretariat further noted that the SOPAC interpretation of the Spatial Data Infrastructure effectively mirrors the Island Systems Management process and that the establishment of any infrastructure is being carried out with training and capacity building to ensure effective data management.

115. The Secretariat in response to the Solomon Islands query confirmed that they planned to install their MapServer early next year following the installation of MapServers in Tuvalu and Samoa, later this year.

116. Tonga congratulated the Secretariat on the good work done in the area of ICT and advised that they were ready for advanced training in GIS and remote sensing and that this be prioritised.

117. Cook Islands thanked the Secretariat for the paper and presentation and noted their requirement for training in the following areas: image rectification, differential GIS, SDI, IT upgrading, tabular data; the need for satellite imagery for Aitutaki, further advising that the GIS and remote sensing training would support and assist with disaster management and disaster recovery.

118. Kiribati congratulated the Secretariat for the good work and training carried out in country. He noted that several stakeholders were unavailable for the initial training in Kiribati and requested therefore, that further training be provided where the preferred timing would be October 2004.

119. The Federated States of Micronesia acknowledged the use of GIS as a tool for land-based management and suggested that as the greater part of most countries are coasts and ocean that the GIS tool also be used for coastal and lagoon management.

120. Tonga in response to the Federated States of Micronesia query confirmed that they were intending to produce power from wind energy but were still exploring the potential of both wind and wave energy resources at this stage.

121. Samoa in support of the Programme encouraged SOPAC and other CROP agencies to make best use of the presence of the PIF Group in New York as a means of assisting the Pacific in its advocacy to highlight regional issues globally including leveraging additional resources for the region. Samoa in addition noted the importance of the PDF-A project proposal for the "Integrated Water Resources Management" and its endorsement and submission to the GEF for funding consideration.

122. Samoa further requested that the Secretariat maintain communication with all stakeholders to ensure that all potential users of the MapServers can effectively use this tool. Samoa further noted the need for support in the hydrological sector, with regard to water supply leak detection, and noted their interest in the use of GIS and remote sensing for the water utility. Samoa also queried if it was possible to extend work on rainwater harvesting options to the outer islands of Apolima and Manono.

123. The Secretariat responded noting that countries have the prerogative to decide where to locate the ICT infrastructure and that identification of a country intern was a critical

component in the overall implementation of this component of the EU Programme.

124. Papua New Guinea, in noting that they had faced a similar problem to Samoa, in relation to the location of the MapServer, was pleased to confirm that the installation of the MapServer and appointment of an Intern had significantly boosted SOPAC's profile and delivery under the project.

125. The Secretariat, in response to Papua New Guinea's request for funding support from SOPAC for furthering the earlier work in Lae, suggested that this be discussed as a work programme item.

126. The Secretariat, in response to Vanuatu's stated disappointment at not being invited to the Leadership Seminar for Pacific Island Water Managers held in Hawaii, confirmed that the invitations were sent out directly to utilities by the East-West Center. The Secretariat further agreed that with future initiatives and partnerships of this nature that the Secretariat was aware of, country representatives would be informed about any such workshops or meetings.

127. Tuvalu in acknowledging the commencement of the PIEPSAP Project welcomed and encouraged the additional support that could be provided through the proposed menu of options for the development of energy policy and strategic action plans for countries. Furthermore Tuvalu reminded the Secretariat of the need to remain aware of the ongoing international work and negotiations on climate change, in particular CDM, and that the Secretariat should collaborate with SPREP on climate change issues relating to energy.

128. The Secretariat acknowledged the rationale and desirability of establishing a co-operative, collaborative arrangement with SPREP and other relevant partners with respect to climate change issues so as to develop and establish synergies where possible.

129. Council accepted the report on the implementation of the 2004 Work Plan activities for the Community Lifelines Programme.

130. Council acknowledged the progress made with the integration of the energy, water and information and communication technologies.

131. Council accepted the input and comments from TAG and STAR Delegates with respect to the content and delivery of the 2004 Work Plan activities for the Community Lifelines Programme.

8.2 Issues Arising in the Community Lifelines Programme

132. The Secretariat referring to Council Paper AS33/8.2 – Issues Arising in the Community Lifelines Programme highlighted to Council new and emerging issues that are of relevance to the Community Lifelines Programme. These being:

- a. 4th World Water Forum, 2006 – Following the success of the 3rd World Water Forum (3WWF) and the subsequent signing of a Memorandum of Understanding with the Caribbean Environmental Health Institute (CEHI) the Pacific region jointly concurred that Caribbean should take the lead role in the preparations for and in representing the island states at the 4th World Water Forum. Participation from the Pacific will be based on the need and determined closer to the Forum.
- b. Commission on Sustainable Development – SOPAC, during 2004, continued to monitor and contribute through the New York Missions to the activities and debate on water, sanitation and hygiene. Specific note should be made of the United Nations “Water for Life Decade” (2005-2015) that will build on CSD12 & CSD13 with the objective of meeting the MDG water and sanitation related targets, and CSD14 & CSD15 (2006 and 2007) where the thematic cluster includes energy for sustainable development, industrial development, air-pollution/atmosphere and climate change.
- c. Pacific Partnership Initiatives – Include the following: Pacific Islands Climate Update (ICU) Bulletin, Hydrological Training Workshop, Sanitation Park Project, Pacific Islands Energy Policy and Strategic Action Planning (PIEPSAP) Project.
- d. GEF Water Proposal – The development and submission of a PDF-A proposal to the Global Environment Facility for funding a project on “Sustainable Water Resources Management in Pacific Island Countries”. It is envisaged that this will lead to a full-sized project for Pacific Islands.
- e. Pacific Islands Renewable Energy Project (PIREP) – Phase II – As follow up to the PIREP I Project is currently being designed. It is understood that the second phase, will, through the widespread and cost-effective use of renewable energy resources and application of feasible renewable energy technologies to reduce the growth rate of GHG emissions from fossil fuels.

- f. CROP Energy Working Group (EWG) – SOPAC currently adopts the position of Chair of the CROP-EWG and actively contributes to the working group activities.
- g. Pacific Islands Energy Policy and Plan (PIEPP) – Responsible for the coordination of the review of the PIEPP.
- h. Regional Energy Meeting 2004 (REM2004) – Noted the proposal to host the REM2004 in November/December 2004 in Madang, Papua New Guinea.
- i. Staff – Appointment of a Water Engineer through the Australian AVI programme, a Project Officer – Water Quality and a temporary graphic artist. Although the appointments in the water sector address the immediate past issue of less than desirable staffing levels there still remains the need to consider the requirements for the longer-term.

133. Tonga sought clarification from the Secretariat on the recommendation seeking to strengthen partnerships with the Caribbean Environmental Health Institute with particular reference to the 3WWF where benefits to the Pacific from the association appeared to be minimal and the potential domination of these initiatives by other partners at the expense of the Pacific.

134. The Secretariat, in acknowledging Tonga’s concern agreed to be mindful of past problems and within their ability ensure Pacific visibility in the promotion of these initiatives as well as protect the interests of the Pacific.

135. The Republic of the Marshall Islands congratulated the Secretariat on the presentation and expressed their appreciation for the work of the Community Lifelines Programme and suggested to Council that any recommendations made by Council with respect to the proposed Phase II of the PIREP Project should reflect the need for collaboration between regional organisations and should recognise the responsibility of SOPAC for regional energy matters and the responsibility of SPREP for climate change matters.

136. Tonga also supported the view of the Republic of the Marshall Islands and noted the need to ensure that the wording of the recommendation did not suggest to donors that funds should be channelled into only one organisation and recognised SOPAC’s primary responsibility in energy. Furthermore, Tonga stressed the need for close collaboration be-

tween SOPAC and SPREP, as well as other partners.

137. SPREP reminded Council of their comments made in relation to the proposed PIREP Phase II under Agenda Item 6.1.6 and that the recommendations with respect to the PIREP Project should be consistent and if necessary cross-referenced.

138. Tuvalu noted their support for recommendations on the issues relating to the Commission on Sustainable Development and Pacific Partnerships.

139. Pacific Islands Forum Secretariat brought to Council's attention that Pacific Leaders have continually encouraged regional organisations to work together resulting in the establishment of CROP. In reaffirming that SOPAC was the Chair of the CROP Energy Working Group, reinforced the need for all countries to continue to reiterate the desirability for all regional organisations to collaborate.

140. New Zealand supported the recommendations as presented and noted that they considered partnerships as important for investment both within and outside the region with support aligned around Pacific regional strategies so as to achieve better harmonisation and maximise benefits. Furthermore, New Zealand expressed a desire to see working groups become more effective and the Secretariat to remain engaged.

141. The Secretariat responded to the interventions made in relation to the proposed recommendations contained in the paper on issues and provided acceptable modifications to the meeting where the following recommendations were accepted as amended by Council:

- a. Council, in recognising the benefits to its Members and the region from the Secretariat's contribution to and participation in the 3WWF, support the recommended approach of the Secretariat in partnering with the Caribbean Environmental Health Institute (CEHI), with CEHI taking the lead with preparations and promoting the island countries at the 4WWF in 2006. Furthermore, Council supported the involvement of the Secretariat in the 4WWF proper, bearing in mind the need to ensure that the interests of the Pacific islands countries are protected in SIDS initiatives.
- b. Council encouraged the Secretariat to continue to engage in the follow-up activities of the WSSD through the CSD, and in par-

ticular those events that relate to energy and water, including the provision of advice and guidance to the PIF Group in New York during 2005-2007.

- c. Council commended the Secretariat on the progress made in establishing projects under the Pacific Partnerships Initiative of the WSSD, and encouraged the Secretariat to be proactive in securing further partnerships so as to strengthen and enhance the overall programme delivery and support to its members, ensuring that members are invited and can participate fully in new partnerships.
- d. Council endorsed the development of the project on Sustainable Integrated Water Resources Management in Pacific Island Countries and encouraged the Secretariat to facilitate its implementation through the Pacific Missions in New York and GEF National Focal Points.
- e. Council directed the Secretariat to remain actively engaged in the work of the CROP Working Groups relevant to the core work programme areas of the Secretariat.
- f. Council noted the opportunity to strengthen the Secretariat's capacity to deliver on water related activities and urged the Secretariat to fill the Water Adviser position in the EDF9 Project as soon as possible whilst recognising that the EDF 8 Project Senior Water Adviser is the Project Manager. Council further acknowledged that the GEF Project on Sustainable Integrated Water Resources based upon the Regional Water Action Plan will also permit further enhancement of the Secretariat's capacity to support members on water-related issues.
- g. Council noted and supported SOPAC's proposal to convene a Regional Energy Meeting (REM2004) in December 2004 so as to provide the opportunity for consultation on the PIEPSAP Project; consult on the revised PIEPP; present current, new and emerging regional energy programmes and projects, including PIREP - Phase II and the ESCAP Training Needs Assessment Proposal; and discuss energy technological updates and future capacity building in renewable energy technologies.

Work Plan & Budget 2005 - Community Lifelines Programme

142. The Secretariat referring to Council Paper AS33/14.4 (pages 26-44) outlined the key activities proposed for 2005 in the three com-

ponent areas of the Community Lifelines Programme and highlighted new and potential activities that included the following:

- a. PIEPSAP – Policy & Strategic Action Planning (3 years – \$US1.8m – Danish/EU);
- b. ADB support to the Pacific RAP and the Dialogue on Water and Climate (~US\$100k);
- c. Taiwanese (ROC) support to the Water, Sanitation & Hygiene activities (~US\$80k);
- d. Sustainable Integrated Water Resources Management – GEF (PDF – A&B) (US\$15m);
- e. GEF Project – Transportation Sector – GEF (PDF-A);
- f. Resource Assessment – Biomass (FAO, Samoa); and
- g. Regional Programme in GIS/RS support to Utilities (\$\$\$).

143. American Samoa as Chair of the Pacific Water Association brought to the attention of Council that unaccounted-for-water is the biggest obstacle to development and water management. The PWA is looking forward to developing a partnership with SOPAC and other stakeholders through a programme that will ensure that water utilities are able to address this issue and become more sustainable.

9. COMMUNITY RISK PROGRAMME

9.1 Report on the Community Risk Programme for 2004

144. The Director introduced the Programme Manager for the Community Risk Programme; the Project Team Leader of the SOPAC/EU Project; and Dr Langi Kavaliku, leader of the High Level Advocacy Team for the Community Risk Programme.

145. The Secretariat referred Council to papers AS33/9.1, AS33/9.2, the supplementary paper attached to AS33/9.2 and pages 44-48 of AS33/14.3, relating to the proposed Draft Work Plan and Budget for the Community Risk Programme for 2005.

146. In providing an overview of progress for 2004 the Secretariat first highlighted the programme goal and its components. The Secretariat reminded Council that the delivery of Community Risk Programme activities is essentially built around strategic partnerships with a range of organisations that have an interest and commitment to engage in long-

term national capacity building in the Pacific. This means that the Community Risk Programme can manage the regional coordination function with a small core group of technical staff at the Secretariat and utilise the majority of available donor funds on capacity building activities through the cost effective use of partner organisations. The Secretariat noted the addition of a new staff member to the Community Risk Programme – Noud Leenders, Risk Analyst, funded by the Dutch Government through UNDESA.

147. The Secretariat noted the challenge for the Community Risk Programme with such a large country membership to find an equitable balance in order to build capacity across the region, and highlighted SOPAC's response to this challenge by developing regional initiatives that can benefit all member countries.

148. The Secretariat went on to draw Council's attention to several disaster events that have occurred around the region including Cyclone Heta. These events reinforced the need to build more resilient communities.

149. The key achievements made in the three components of the Programme – strengthening resilience to disasters; mitigating the effects of hazards; and mainstreaming risk management were summarised and included the following:

- a. Disaster risk management training –
 - strengthening of the SOPAC partnership with The Asia Foundation/Office of U.S. Foreign Disaster Assistance (TAF/OFDA), and integration of the TAF/OFDA regional disaster risk management training programme into SOPAC in 2004.
- b. Environmental Vulnerability Index (EVI) –
 - progress made with the EVI in expansion of the EVI database and a refined EVI presented to the 10-review of the Barbados Programme of Action Preparatory Committee in New York in April 2004.
- c. Disaster Management Planning Guide –
 - support of the New Zealand Ministry of Civil Defence and Emergency Management with the development of a regional framework for disaster management planning, which is currently a draft document that will be taken through extensive consultation with National Disaster Managers and trialled in selected member countries in 2005.

d. Yokohama Strategy and Plan of Action for a Safer World –

- review of the Yokohama Strategy and Plan of Action and the Preparations for the Second World Conference on Disaster Reduction to be held in Kobe, Japan in January 2005, and acknowledged the support from Australia and New Zealand toward this global initiative.

e. Partnership with USP –

- project funding provided by Australia for a SOPAC project in partnership with the University of the South Pacific, to investigate and report on the economic impact of natural disasters on development in the Pacific.

f. Draft Pacific Regional Position Paper for Kobe –

- key areas of consideration for the regional action plan: governance; hazard identification, assessment and monitoring and early warning systems; enhanced knowledge management; risk reduction; and strengthening preparedness for effective response.
- The Secretariat thanked the Government of Papua New Guinea for allowing Eric Ani, the NDMO Director, to carry the flag for all of the regional disaster managers throughout the International Strategy for Disaster Reduction (ISDR) discussions in Geneva leading up to the Kobe Conference.

g. Disaster awareness –

- partnerships with the ISDR Secretariat in Geneva, Emergency Management Australia and TAF/OFDA, in actively supporting a range of public awareness initiatives.

h. Reviewing disaster management arrangements –

- strengthening of disaster management arrangements with particular mention of a review in Vanuatu, and plans for similar reviews in Niue and the Cook Islands by the end of 2004, where possible with partnerships with EMA from Australia, and the Ministry of Civil Defence and Emergency Management New Zealand. The Secretariat encouraged national representatives to support these reviews, as they will provide a benchmark for future disaster risk man-

agement capacity building needs, and encourage relevant national stakeholders to participate on the review team in order to ensure a high degree of national ownership of the outcomes.

- currently four member countries are either receiving or about to receive significant support for national disaster risk management related activities – Kiribati, Papua New Guinea, Samoa, and Tonga. The Solomon Islands also has a major capacity building project in the pipeline. The Secretariat indicated that it will work closely with national projects to ensure, where appropriate, they integrate with agreed regional priorities, such as CHARM, the regional training programme and the regional action plan.

150. The Secretariat went on to outline key activities for the 2005 Proposed Work Plan and Budget and highlighted the importance of the upcoming 12th Pacific Regional Disaster Managers Meeting to be held in Lae, Papua New Guinea, 7-9 June 2005. The Secretariat encouraged donor colleagues to support selected member country representation to this important international conference.

151. Activities of the SOPAC/EU Project that fell within the Community Risk Programme were then summarised and included:

a. Research fellowships –

- research into hazards in Fiji; and
- coastal erosion, hazards and risks in Kiribati (to 2006).

b. Support for training in landslide assessment.

c. Project risk assessment in Niue – document the impacts of Cyclone Heta, development of a model and assessment.

152. The Secretariat went on to present several cross-cutting issues of the SOPAC-EU Project that spanned all aspects of the SOPAC work programmes and addressed mainly the key output areas of strengthening the capacity of ACP states. Key achievements included:

- a. All national consultations were undertaken and work plans endorsed;
- b. In-country consultations were also undertaken in Fiji;
- c. In-country interns were identified and secured in 6 countries;

- d. Regional equipment holdings – 6 global positioning, computer hardware support for interns;
- e. Development of awareness material; and
- f. Linkages between NSA, NGO and other organisations have been made by the Project

153. The Secretariat then introduced Dr Langi Kavaliku, the leader of the High Level Advocacy team.

154. Dr Kavaliku outlined some of the key achievements his team had made in raising the profile of comprehensive hazard and risk management (CHARM) in the Pacific. He advised that the team has had mixed success following consultation with 6 countries. Meetings with the Prime Ministers and Ministers from these countries have established good dialogue. Several issues have arisen and include the limits on country resources, multiple responsibilities and difficulties in accepting the new comprehensive approach of doing things. Integration of the SOPAC work programmes also needs strengthening, greater collaborative efforts between CROP organisations are needed and more knowledge of the resource economics of disasters is critical for the future success of the advocacy team.

155. Dr Kavaliku appealed to donors to support additional country participation at the upcoming global Disaster Reduction Conference to be convened in Kobe. Papua New Guinea and Fiji will be leading the Pacific team to get recognition of Pacific issues. The presence of other countries will help to visibly raise the profile of Pacific issues. Dr Kavaliku on behalf of the High Level Advocacy team and SOPAC expressed appreciation to all donors including Australia, New Zealand and Asia Foundation for their support.

156. Vanuatu acknowledged the support of SOPAC and Australia in the establishment of disaster management infrastructure and the need to maximise the benefits of this. Vanuatu stressed the need to address risks in Pacific Island countries because of their small size, large surrounding ocean and isolation. It is in view of these that the Community Risk Programme plays an important role in supporting countries efforts to achieve sustainable development. Vanuatu emphasised the need for countries to seriously consider the disaster risk management approach being advocated by SOPAC and ensure that this process runs in parallel with other initiatives.

157. In reinforcing the importance and need for training and capacity strengthening,

Vanuatu acknowledged SOPAC and TAF/OFDA training initiatives and urged for their continuation and support. Focusing on the risks of tsunamis in the Pacific, Vanuatu urged Council to consider recommendations to establish a regional initiative to support early warning. Vanuatu also expressed the continuing need for the High Level Advocacy team, given the changing political climates, and to ensure the fast track integration of CHARM in the region.

158. The Asia Foundation advised Council that in reviewing their training programme for the Pacific the US Government has decided to extend this programme for another 4 years. Programme funding channelled through SOPAC will also provide support for the High Level Advocacy team.

159. Following discussions on the need for greater collaboration SPC reminded Council that it is also active in the area of disaster mitigation. SPC highlighted the cross-cutting nature of disasters that impacted across boundaries demanding the need for more effective collaboration among CROP technical experts.

160. PNG expressed their appreciation for the Community Risk Programme and encouraged SOPAC to continue to prioritise efforts to address the issue of tsunamis in the region. PNG also expressed the need to utilise AMSAT tidal data for tsunami warning systems and urged that this data be readily provided to countries.

161. Noting Council's discussion on the importance of addressing the need for early warnings of potential tsunamis the UNESCO Tsunami programme advised Council of their experience and capacity in this area and offered to partner the region in their efforts to develop a tsunami early warning capability.

162. Dr Kavaliku acknowledged the support from the Asia Foundation for the High Level Advocacy team. He went on to reiterate the importance of the upcoming global conference in Kobe and the need for the Pacific to have greater visibility at the conference to ensure that Pacific issues are given appropriate consideration.

163. The Director advised Council that at the recent Heads of CROP meeting the issue of the need for greater regional organisation collaboration was discussed (AS33/6.2 paragraph 42). SOPAC Council recognised the CROP Heads resolution, "to better coordinate their assistance to member countries in their immediate response activities to extreme natural and human-induced events. Further, that

an early task of the new PIFS unit will be the improved responsiveness of the CROP to such extreme circumstances and acknowledgement of SOPAC's role and responsibilities for disaster risk management, which includes preparedness and mitigation aspects of such events."

164. The Secretariat brought to Council's attention the recommendations of the STAR working group on tsunami warnings and the need for a regional tsunami warning centre and indicated that strong Council support for this recommendation is noted. The Secretariat also recognised STAR comments and recommendations and indicated that these will be factored into future Community Risk Programme planning.

165. Niue expressed its appreciation for the disaster assessment work undertaken by SOPAC following Cyclone Heta, which involved documentation of impacts and development of a model. This model only covered part of the west coast of Niue and requested if it is feasible for SOPAC to extend this model to cover the whole of the west coast of the island. Niue also requested that the report be presented to government as soon as possible as some of the reports recommendations could be useful in the reinstatement programmes underway.

166. The Secretariat responded indicating it would be visiting Niue in two weeks and will endeavour to make the report available then. Also as the extension of the EU EDF 9 Project includes Niue, SOPAC will endeavour to incorporate the extension of the model in these activities.

167. Tuvalu recognised the significant amount of work undertaken in the development of the EVI culminating in its presentation at a meeting in New York chaired by HE Sopoanga, however, Tuvalu expressed significant concerns with the EVI. Advised that after consultation with experts in Australia and New Zealand, Tuvalu found there were serious problems with rating all vulnerability indicators on the same scaling, as not all were on the same scale of magnitude e.g. fertilisers and cyclones. He noted the problems with the lack of data, some questionable calculations of risk e.g. dry periods, scientific validity of some indicators, e.g. biological isolation and the absence of critical indicators e.g. sea-level rise. Tuvalu noted that the EVI significantly downplays the risk for many Pacific Island countries and that this would have serious implications for those seeking donor funding for adaptation and risk management, e.g.

Niue rated 150 least vulnerable, whereas Singapore rated the second most vulnerable. Because of these serious implications, Tuvalu suggested that the EVI should not be presented at the international meeting on the review of the Barbados Programme of Action in January 2005. He suggested that SOPAC should refocus the work of the EVI to becoming an evaluation tool for individual countries to assess their own risk based on their own scale of vulnerabilities, and that a comparative numerical approach between countries was not appropriate.

168. The Federated States of Micronesia requested assistance from SOPAC with a baseline study for the development of an oil spill pollution contingency plan and procedures for removal of wrecks as well as current shipping movements. In response the Secretariat indicated that SPREP is responsible for addressing this issue and they may wish to pursue this matter directly with SPREP.

169. In response to comments by Tuvalu, the Secretariat highlighted that the development of EVI was initiated in response to calls made in the Barbados Programme of Action. In partnership with New Zealand, United Nations Environment Programme, Ireland, Italy, Norway with Member countries have supported this work since 1998. The EVI represents the first attempt to develop such a tool and as such is not perfect and is open to scientific critique. Advised that to obtain independent scientific review and to ensure the best product possible the Secretariat is convening an Expert Think Tank in early October. The Secretariat urged that the information from Tuvalu's experts be made available to the EVI Think Tank or invited their participation at the upcoming Think Tank.

170. The Secretariat reported that there was a positive response to the EVI when it was presented in New York in April 2004.

171. As a partner in the development of the EVI, the University of the South Pacific highlighted to Council the consultative process involving University scientists and students that had been undertaken by SOPAC. USP underscored the importance of the EVI and its value as a first attempt to develop a tool for providing guidance to countries on environmental vulnerability issues.

172. The Cook Islands supported the comments made by USP and registered their support for the EVI, going on to indicate that the EVI is a valuable starting point and a useful tool.

173. Marshall Islands while expressing appreciation for the significant amount of work done on the development of the EVI by the Secretariat indicated that Council should be mindful of the potential implications on donor funding. Marshall Islands acknowledged the need to continue to move forward with this activity and encouraged further work on the EVI for regional usage. Papua New Guinea supported this comment and suggested Council take note of Tuvalu's concerns.

174. In supporting the EVI, Fiji acknowledged the importance of the EVI development process and its usefulness as a management tool for country use. Fiji was mindful of the outstanding work still to be carried out and the need for continuing support to do this.

175. Tuvalu indicated to Council that it supported the use of the EVI as a national tool. It went on to suggest that each country needed to refine the EVI to focus on their particular vulnerabilities rather than it being used as a tool for comparison between countries.

176. The Secretariat agreed that the strength of the EVI is in national application and encouraged countries to refine the tool to suit their own circumstances. The Secretariat went on to indicate that having a common EVI framework is also useful and this does not constrain a country's ability to customise the EVI for their own purposes.

177. NIWA suggested to Council that they may wish to recommend that the upcoming EVI Think Tank consider what is presented at Mauritius and that it may be useful to only present examples of the EVI rather than a country ranking.

178. Council accepted the report on the 2004 Work Plan for the Community Risk Programme, with some reconsideration of work with respect to the EVI.

9.2 Issues Arising in the Community Risk Programme

179. New Zealand sought clarification from the Secretariat on which plan was referred to in recommendation 6 before Council. New Zealand also requested feedback from Council as to what Council members felt were going to be the expected outcomes from Kobe and whether additional benefits could be achieved by either individual representation or a smaller group attendance at Kobe.

180. Tonga and Vanuatu indicated that they supported individual representation at Kobe.

181. Australia informed Council that both Australia and New Zealand had received requests from SOPAC to fund regional participation at the Kobe conference. However, in this request it was not clear what this representation would be and whether a preference was for particular countries or individuals. Australia therefore sought from Council whether countries need to be individually represented or if a group could be mandated to represent the region.

182. Federated States of Micronesia indicated that it is likely the country will send their own delegation.

183. The Secretariat responded to New Zealand and highlighted that the Kobe meeting does not exist in its own right and is only a step on the road to where the region wants to go. Countries can respond individually on what their expected outcomes of the Kobe meeting may be, however, it was expected that the real outcomes of the meeting would be realised after the meeting. The objectives and expected outcomes are embedded in the Draft Pacific Regional Position Paper, which was prepared in June in consultation with national disaster managers and other stakeholders. It is expected that these long-term outcomes will be realised through finalisation of the Pacific Regional Action Plan for Disaster Risk Reduction 2005-2015.

184. Australia sought clarification from the Secretariat as to the expected participation at the upcoming 12th Pacific Regional Disaster Managers Meeting to be convened in Papua New Guinea. The Secretariat responded indicating that it will be actively promoting this meeting and it is expected to be well attended and to receive strong political support.

185. Council endorsed the Draft Regional Position Paper for the Second World Conference on Disaster Reduction, and following the Kobe Conference for this document to be finalised as the Pacific Regional Action Plan for Disaster Reduction 2005-2015 for consideration by the 12th Pacific Regional Disaster Managers Meeting in Lae, Papua New Guinea in June 2005 and progress to be reported to Council at its next meeting.

186. The Cook Islands indicated that the outcomes of Kobe would empower NDMOs around the Pacific and provide them with a mechanism for reducing vulnerability.

187. Council noted the action taken on the outstanding issues from the 2003 meeting record.

188. Council supported the shift of focus by the Secretariat from the development of a draft regional policy for communities at risk to a regional action plan for disaster risk reduction.

189. Council strongly urged Members to actively participate in the Second World Conference for Disaster Reduction to be held in Kobe, Japan, 18-22 January 2005 in order to seek support for the region's needs and encouraged donors to support the Secretariat's requests for funding in order to facilitate and coordinate this participation.

190. Council encouraged the Secretariat to refocus its work on the EVI towards assisting individual countries to assess their own vulnerabilities without arriving at an index for comparative purposes among countries. Council suggested that this refocusing work be completed before the EVI is presented at any future international meetings.

191. Council noted the improved Community Risk Programme management arrangements and welcomed the development of new partnership initiatives as well as the development of the Integrated Risk Reduction Planning Guide.

192. Council supported the application of the Disaster Management Planning Guide through National Disaster Committees and Council provided support to CHARM national training initiatives.

193. Council endorsed the Community Risk Programme support to National Disaster Risk Management Projects to ensure consistency with agreed regional priorities.

194. Council endorsed the full commitment of the Secretariat to the coordination and organisation of the 12th Pacific Regional Disaster Managers Meeting, and expressed thanks to the Papua New Guinea Government for offering to host this important regional activity in 2005.

195. Council endorsed the Draft Pacific Regional Position Paper for the Second World Conference on Disaster Reduction, and following the Conference for this document to be finalised as the Pacific Regional Action Plan for Disaster Risk Reduction 2005-2015 for consideration by the 12th Pacific Regional Disaster Managers Meeting in Lae, Papua New

Guinea in June 2005, and progress to be reported to Council at its next meeting.

10. PROGRAMME REVIEW MONITORING AND EVALUATION

196. The Director presented paper AS33/10 and its supplementary which followed up on the procedures agreed to by Council at the SOPAC 32nd Session in Niue last year for appointing Technical Advisory Group and STAR scientists who could participate in providing independent and unbiased evaluation of the past and future work programmes of the SOPAC Secretariat. The paper provided background information to assist Council in appointing the 2005 programme monitoring and evaluation groups (PMEGs) for the technical work programmes; and the supplementary paper presented the nominees to the three programme monitoring and evaluation groups as compiled by the STAR Chair in conjunction with the Secretariat Director, as per Council's instruction in 2003.

197. With a number of member country representatives at this Council meeting unfamiliar with the Council decision in Niue regarding the PMEGs, a number of points of clarification were necessary to update them on the reasons for the cost implications (about F\$10,000 per PMEG); the inspiration behind the idea, which was the re-engagement of the STAR and TAG scientists in meaningful dialogue on the SOPAC Work Programme; and the scope of work that was envisaged for the PMEGs which was to evaluate for Council the Secretariat's implementation of the previous year's work programme and to consider what was planned for the following year.

198. Australia welcomed the concept of an independent evaluation of the SOPAC Work Programme and asked if a terms of reference existed for the work that the PMEGs were supposed to do.

199. New Zealand, echoed Australia's question on a PMEG terms of reference, further querying whether in-country assessments were also to be undertaken and the level of PMEG involvement in them.

200. Papua New Guinea reminded Council of their view expressed last year on the PMEGs' cost implications that would be a constraint on the SOPAC budget and expressed the hope that SOPAC remained focussed.

201. Marshall Islands was mindful of the concern expressed in an earlier agenda item by Samoa that the additional work not divert staff time from the implementation of the SOPAC Work Programme.

202. Samoa noting the budgetary implications of the PMEG concept wondered whether Council was expected to approve all nominations as presented, or whether the PMEG nominations would be limited to three per team.

203. The Secretariat brought Council members up to date on the decision and procedures agreed to in Niue last year, where the budget allocation in the 2005 Budget was to cover the travel and per diem of PMEG members while at the Secretariat, and that there was no allocation for fees which was in accordance with the STAR Chair's assurances in Niue that STAR scientists would provide their time serving on PMEGs, gratis.

204. Council also heard that it was anticipated that after a trial period, the PMEG process would lead to a more informed and robust debate than has been apparent at recent Joint Council/TAG meetings, whilst at the same time fulfilling an independent monitoring and evaluation role for the delivery on SOPAC's work programmes. The Secretariat was of the view that this process can only be good for SOPAC.

205. The Secretariat acknowledged Council's concern on the absence of a clear terms of reference for the work of PMEGs, and offered that the terms of reference used by the monitoring and evaluation team that worked on reviewing project initiatives of the former Disaster Management Unit of the Secretariat, would be a satisfactory starting point for building up a ToR for the PMEGs.

206. Tonga expressed the view that the cost implication was a big one and he felt that PMEGs were only going to be doing what the SOPAC Directorate should be doing.

207. The Director reassured the meeting that the Directorate was in no way trying to absolve itself of their rightful responsibilities of oversight of the implementation of the SOPAC Work Programme, but that it was for the good of the organization and there was a need to re-engage the STAR and TAG scientists in work programming as they were an important aspect of SOPAC. The PMEGs were expected to independently qualify the SOPAC Work Programme and report to Council in Session as a way of verifying whether the Secretariat's

work was scientifically and technically credible, and it was felt that Council might derive a degree of comfort from this independent valuation of work carried out on their behalf. Advised that the Secretariat has always found the professional interaction with STAR scientists within and out of session as extremely valuable for carrying out work in member countries.

208. Council then heard a submission from the STAR Chair on the role of the STAR and TAG scientists that was enshrined in the SOPAC Constitution, and the group's growing discontent that there wasn't proper opportunity for them to provide appropriate input that they had come to SOPAC meetings for. He felt that the symbiosis between the STAR scientist and Council was a good one and needed to be preserved, and his own work as STAR Chair would be less onerous if other STAR scientists were given the opportunity to study the work programmes on the approaches to the annual meetings rather than the presently rushed manner in the margins of SOPAC Council meeting.

209. Council heard a further submission from the BGS advisor, reinforcing the STAR Chair's comments, adding that though STAR scientists have generally funded their own way to SOPAC meetings for the "public good", but that it was now becoming increasingly difficult for some of them. The advisor considered it their professional duty to contribute their knowledge to SOPAC, given that the Pacific has been a huge and complex laboratory in which many of them grew up practising their science.

210. In response to Kiribati's question on whether the cost implications would affect member-country contributions, the Secretariat replied that based on the 2005 allocations, there were none, but that should costs in future become exorbitant, then the Secretariat will certainly explore other avenues for raising the necessary funds.

211. Fiji expressed support for the PMEG concept, admitting that they generally did not have the time to evaluate work programme papers before leaving to attend SOPAC Council meetings and Fiji would certainly derive comfort from having the PMEG provide them with an independent evaluation.

212. Marshall Islands observed that new ideas always generate more questions needing answers but he was confident that the concept was for the good of the SOPAC and lent it his support.

213. Cook Islands recapped on the discussion, reminding Council that it had given the PMEG concept the green light last year, and that the only problem left was to resolve what they were to do and he urged the Secretariat to expedite the crafting of a suitable terms of reference for circulation to Council members. On whether the PMEG may encroach on Council's responsibilities; he pointed out that he as a member of Council was comfortable in the knowledge that he was in the driver's seat of the organization and reminded his fellow Council members that they were in same position as he. He was completely confident that the PMEG was good for SOPAC.

214. Having reassured themselves that despite the cost implication the exercise was only for the good of SOPAC, and that it would offer Council members some degree of comfort that there was an independent and unbiased evaluation of the organisation's past and future work programmes being carried out on their behalf; Council endorsed the membership of the PMEGs for 2005 and gratefully acknowledged STAR scientists' willingness to participate, noting that each PMEG will include no more than three persons.

215. Furthermore Council looked forward to receiving PMEG reports at the 2005 Annual Session, noting that each PMEG team would appoint its own Convenor. The agreed composition of the PMEGs for 2005 will be drawn from the following nominees:

- a. Ocean and Islands Programme -
 - David Tappin (British Geological Survey)
 - Garry Greene (Moss Landing Marine Laboratory US)
 - Joe Buleka (Geological Survey of PNG)
 - William Erb (UNESCO/IOC Perth Office)
 - David Garton (Georgia Tech)
- b. Community Lifelines Programme -
 - Sam Taufao (SPC, Noumea)
 - Kifle Kahsai (USP)
 - Andrew Matthews (NIWA, New Zealand)
 - Utu Abe Malae (American Samoa Development Bank)
- c. Community Risk Programme
 - Joanne Laurence (EMA, Australia)
 - Wally Johnson (Geoscience Australia)

- Stan Goosby (Pacific Disaster Centre, US)
- Hugh Cowan (IGNS, New Zealand)

d. In addition ex-officio members of each of the PMEGs would be:

- Chair of STAR, (Professor John Collen, VUW, NZ)
- Director/Deputy Director (Secretariat)

216. Council noted, with appreciation, the STAR and TAG scientists' offer to provide the time they will spend on serving on these PMEGs, gratis.

217. The Chair expressed the gratitude of Council to the STAR scientists for their contributions to the Joint Council/TAG Session of the SOPAC 33rd Session and wished them a safe journey home; a sentiment that was echoed by acclamation from the rest of Council.

GOVERNING COUNCIL POLICY SESSION

11. DIRECTOR'S ANNUAL REPORT

11.1 Introduction

218. The Director presented her report to council under Agenda AS33/11.1. She noted that the technical work programming issues were covered during the last two days at the joint TAG/Council Session.

219. She highlighted that the Corporate Plan and Work Programme Strategies provided the Secretariat with the strategic directions for the organisation in the longer term, whilst the accompanying Business Plan, responded to the Corporate Plan and Programme Strategies, as part of its operational framework over a shorter time period.

220. In addition, the meeting noted that the annual Business Plan was a barometer to gauge the overall performance of the Directorate, both in terms of technical work programme delivery and the strategic management of the Secretariat. A paper had been circulated to Council representatives, which highlighted the Secretariat's ability to deliver on the work programmes.

221. The Director further highlighted Secretariat work undertaken at the corporate level that included the review of the SOPAC Integrated Corporate Risk Management programme; the performance management system for staff, which are linked to the pro-

gramme outputs; the reviews of the guidelines for ICT, Library and Publications; and the Financial Regulations. She also highlighted that Council needed to consider the draft Corporate Plan and Programme Strategies for 2005 to 2009.

222. Council was assured that the Secretariat was committed to visiting all membership before the next annual session.

223. The Director reported to Council that the Executive Management Team (EMT) held regular meetings during the year to monitor and evaluate the Secretariat's day-to-day operational performance.

224. She noted that the PMEG mechanism agreed to by Council would provide SOPAC members with a level of comfort and confidence on the quality of performance in relation to the Secretariat's work programme delivery.

225. She also highlighted the need for regional collaboration amongst CROP organisations and non-government organisations to achieve regional priorities, including the Pacific Plan, as well as collaborative efforts to engage at the global level with regard to WSSD partnerships and through the CSD, the Mauritius Meeting, and the 2nd World Conference on Disaster Risk Reduction.

226. She also drew attention to two priority actions under the 2004 Business Plan, which included the need to develop a robust communications strategy and plan for the Secretariat; and the protection and valuing of human capital through the human resources management system.

227. The Director reminded Council that the Secretariat has emerged from a transitional phase into an established programme environment, and assured Council that the Secretariat is mindful of its responsibilities to the membership.

228. She concluded her introductory comments and pointed out that her progress report was against the 2004 Business Plan for the Directorate.

11.2 SOPAC 2005-2009 SOPAC Corporate Plan and Programme Strategies

229. The Director introduced paper AS33/11.2, the draft 2005-2009 SOPAC Corporate Plan and Programme and Strategies, for Council consideration.

230. Council was provided with some background on the review of the 2002-2004 Corporate Plan, which had been conducted by an independent consultant engaged by the Secretariat. The review was led by the consultant in discussion with member countries, the Secretariat and other partners. The review presented to SOPAC contained nine recommendations. The Secretariat reviewed this report and provided comments on relevant recommendations for Council consideration.

231. The nine recommendations highlighted in the consultant's report included suggestions that a plan with a five-year life expectancy be produced; that the Corporate Plan be amalgamated with the Programme Strategies with a smaller fact sheet produced to summarise the merged documents. The consideration for the improvement of the performance indicators for the programme strategies, including a statement of progress against the higher-level objectives were also suggested in the consultant's report.

232. The Director highlighted to Council that the recommendation relating to the annual Business Plan suggested that it was not a key planning document for the membership, however, it was an important record card for the Directorate, to assess the operational performance. She assured Council that the Directorate would in future continue to liaise with the Chair to discuss the progress and performance of the Secretariat against the annual business plan.

233. Council noted that the only change was to rename the Corporate Services Programme to Corporate Services due to its service/support nature rather than as a technical programme.

234. The SOPAC Director presented a brief summary of the draft 2005-2009 Corporate Plan and Programme Strategies to Council. She articulated the four strategic directions as outlined in the draft 2005-2009 Corporate Plan and Programme Strategies: Sustain Clear Comparative Technical Advantage, Institute Good Corporate Governance, Develop Effective Strategic Management, and Support Sustainable Development in Pacific Islands Countries. Council also noted that the SOPAC key work programmes have direct links to the strategic directions and the overall vision.

235. The Director highlighted that the SOPAC work programmes each have three component areas and various outputs to be delivered against the purpose. She noted that the key indicators against the outputs have been de-

terminated for the period 2005-2009, with outcomes to be realised by 2009. She emphasised that the Secretariat would need to deliver against the outputs, whilst the Secretariat in partnership with Council would ensure the delivery of outcomes. She provided an example of the application of resource economics, that was presented at the STAR Session, to illustrate the difference between the Secretariat's delivery of SOPAC outputs; as opposed to the higher-level outcome that could only be realised with member countries' commitment and was beyond the Secretariat's control.

236. Council noted cross-cutting elements of capacity building, governance and advocacy; priority setting, outcomes and outputs and means of delivery; and the reporting, monitoring and evaluation mechanism.

237. Cook Islands thanked the Secretariat for the review of the Corporate Plan. In supporting the recommendations as presented in the paper the Cook Islands went on to reinforce the role of the Council and its importance in guiding the way forward and directing the Secretariat.

238. Australia commended the Secretariat on what was an evident collaborative effort to produce a revised draft and the reporting on work programme against indicators. In addition, change was suggested for the title, in light of the amalgamated Corporate Plan and Programmes Strategies documents.

239. In expressing their support for the recommendations, the Marshall Islands expressed its appreciation to the Secretariat for responding to Council's request to review the Corporate Plan. Papua New Guinea shared the sentiments of other Council Members.

240. The Director welcomed the encouraging comments from Council. The Secretariat indicated that the title for the document should reflect both its corporate and delivery dimensions and reminded Council that it is a document for the whole organisation.

241. New Zealand commended the Secretariat for its work in reviewing the Plan, but suggested that review processes need more involvement. New Zealand encouraged countries to participate in the PMEGs as well as independently monitor and evaluate the effectiveness of SOPAC's work in their respective countries. New Zealand also sought clarification on how the new combined Corporate Plan and Programme Strategies document would affect the Business Plan - would the Business Plan

be presented to Council or is it a Plan prepared in consultation with the Chair?

242. The Secretariat responded that the Business Plan is the corporate operational plan linking the Corporate Plan and Strategies to annual corporate and technical work programme delivery. As this was an operational plan it is expected that the most efficient mechanism for its preparation is in consultation with the Chair, with the Director's Annual Report including progress against this.

243. Australia suggested that the title should reflect the plan's primary strategies. In support of comments made by New Zealand on PMEG, Australia reinforced the need for involvement of member states to ensure that the Secretariat is contributing to outcomes and sustainable development in countries.

244. The Director suggested the title for the document be "Corporate and Programme Strategies".

245. Tonga supported Australia's suggestion for a title change and suggested "The SOPAC Roadmap".

246. Cook Islands did not have a problem with any title, recognising that what was important was the effective delivery of services.

247. Council welcomed the positive review of the progress with implementation of the Corporate Plan for 2002-2004, and supported the Secretariat's responses to the review recommendations, as reflected in the 2005-2009 SOPAC Corporate Plan and Programme Strategies.

248. Council noted that the annual Business Plan reporting on the Corporate Plan will be communicated, as agreed, by the Director to the Chair, prior to each Annual Session, with copies made available to the membership on request.

249. Council accepted the simplified title "SOPAC Strategic Plan" and endorsed the '2005-2009 SOPAC Corporate and Programme Strategies'.

11.3 Leader's Pacific Plan

250. The Director introduced paper AS33/11.3 and its supplement; providing some background information to the papers. Council was reminded of comments made by the Secretary General of the Pacific Island Forum Secre-

tariat that there would be actions and decisions in this plan that would be of direct relevance to SOPAC.

251. Marshall Islands expressed its support for the continuing involvement of the Secretariat in the development of the Pacific Plan.

252. Tuvalu also supported the continuing involvement of SOPAC however requested that SOPAC ensure that all aspects of climate change, climate variability, sea-level rise for which SOPAC has responsibility is reflected in the Plan.

253. New Zealand thanked the Secretariat for its explanation on the Secretariat involvement and requested the Secretariat provide some general comments on the Pacific Plan.

254. Samoa in welcoming the Leaders' initiative agreed that the Plan would contribute to shaping the region's long-term future, and conveyed its full support for engagement in the process. Samoa further reinforced a statement made by the Forum Secretary General on ownership of the Plan which Samoa felt should be a product of in-depth and wide consultations right from the initial stages of its design through to implementation. Samoa felt the aspect of 'ownership' was a vital one and must be followed through to ensure that the Plan succeeded in achieving real and long-term sustainable outcomes.

255. Papua New Guinea also supported SOPAC's involvement in this important regional initiative. Papua New Guinea went on to note that any associated costs should be included in the 2005 Work Plan and Budget.

256. Australia also lent their support for SOPAC's ongoing participation in the development of the Pacific Plan as it was considered essential that not only countries but regional representative's also participate. SOPAC's involvement would also help to ensure practical results for the countries.

257. The Marshall Islands requested the Secretariat to continue to advise members of their ongoing involvement and advise of outcomes from this process.

258. The Pacific Islands Forum Secretariat informed Council of the sector analysis that was being developed on the Pacific Plan. He suggested that Council may wish to consider this and ensure that issues arising from a gaps analysis are fed back to the Pacific Islands Forum Secretariat.

259. On security issues within the Pacific Plan, Tuvalu encouraged SOPAC to emphasise the vulnerability of Pacific Island countries with respect to climate change and other hazards.

260. Tonga supported the view expressed by Tuvalu, but stressed the need to also account for grassroots views and not just consult with member countries.

261. SPREP congratulated the Chair on his election and also passed on good wishes to the Director. SPREP went on to inform Council that the SPREP Governing Council also considered this agenda item and similar issues were raised that focused on ownership and involvement by the community. SPREP acknowledged the involvement of the SOPAC Deputy Director in the preparation of the Pacific Plan, citing it as an excellent example of CROP collaboration. SPREP went on to commend the Pacific Plan to Council, acknowledging it as the first comprehensive plan to address the needs of the region.

262. In responding to comments made by Tuvalu, the Secretariat indicated that the main responsibility of SOPAC in the issue of climate change was adaptation and SOPAC, in partnership with SPREP, who has primary responsibility for climate change, was to ensure Tuvalu's concerns as well as all other important issues are reflected in the Plan.

263. The Secretariat went on to provide Council with an overview of the Plan highlighting the four basic themes - economic growth, sustainable development, governance and security. The Pacific Plan needed to be developed within a sustainable development framework, and SOPAC expected the themes of governance and security to be cross-cutting and that the outcome of addressing these would be economic growth. It was in this context, particularly, that SOPAC will have a key role.

264. Advised that the work required of the taskforce in developing the Pacific Plan was enormous, however, a lot of work had already been done in the region in preparation for the World Summit on Sustainable Development, Barbados Programme of Action+10 and the 2nd World Conference on Disaster Reduction. It was expected that outcomes from these global initiatives would have regional implications. The region also had established and approved regional policies and plans. This regional planning documentation will provide a basis for the amalgamation and rationalisation into a stra-

tegic framework for the regional plan. However, the real challenge would be to find a practical and more efficient way of working. Issues such as collaboration and consultation are key and that a communication strategy is critical for the development and implementation of the Plan. Ownership by countries and the region of the Pacific Plan was essential as it would be the guiding document for the next ten years.

265. The Secretariat suggested to Council that the results of the sector analysis could be made available and concurred with the Pacific Islands Forum Secretariat in requesting countries for feedback on gaps. The taskforce is to meet at the end of October and has agreed to follow up on the gaps analysis.

266. Council noted the developments with regard to the Leaders' Pacific Plan and directed the Secretariat to participate over the coming year as may be requested by the Secretary General in the work of the task force to ensure SOPAC's contribution to the development of, and role in, the implementation of the Pacific Plan is optimised.

12. FINANCIAL REPORTS

267. The Deputy Director introduced the Manager Corporate Services and informed Council that the Secretariat's reporting of the audited financial statements would be by exception, rather than a detailed presentation, given the voluminous nature of documents before Council.

12.1 Financial Report 2003

12.1.1 2003 Audited Financial Statements, Auditors Report and Management Report

268. The Secretariat proceeded with the reporting beginning with paper AS33/12.1.1, suggesting to Council that a reduced version of the Audited Financial Statements be presented to Council in future rather than the full version, to cut down on the volume of paper currently being presented (e.g. the 2004 statements are about 200 pages).

269. The Secretariat also explained that a review of the Financial Regulations was underway and would address a number of issues that included the reporting format.

270. While acknowledging the review of the Financial Regulations, New Zealand hoped the review would take into account the treatment of Fixed Assets; a concern shared by the Cook Islands. The Secretariat responded in the affirmative.

271. In response to a request by Tonga for surplus equipment, the Secretariat explained that board of surveys were done on an annual basis and that if there was surplus equipment, Tonga's request may be entertained, although the Secretariat acknowledged that generally surplus or written-off equipment was usually obsolete and unusable and was reluctant to dump them on member states.

272. Council noted and accepted the 2003 Audited Financial Statements, Auditor's Report and Auditor's Management Letter; and agreed to a truncated, and well summarised presentation of the audited accounts, provided the full version continued to be available to members on request.

12.1.2 Report on 2003 Regular Budget Variance and Virement of Funds

273. The Secretariat presented Paper AS33/12.1.2.

274. Council noted and accepted the Report on the 2003 Budget Variance and Virement of funds.

12.1.3 Report on Assets and Inventory written off for the year ended 31 December 2003

275. The Secretariat introduced the paper and drew Council's attention to a couple of corrections to the attachment - the market values and amounts received for the Asset ID numbers 980024 and 990012 should read as zero.

276. In response to the Kiribati query on the current procedures for writing off assets and whether Council's endorsement was required; the Secretariat responded that write offs were only done if assets were either beyond repair or obsolete and that the write offs were approved by the Directorate.

277. The Republic of Marshall Islands sought clarification on the great number of assets that were shown as 'damaged by lightening'. The Secretariat explained that they had all been damaged by one particularly severe event but

that these assets could be replaced because they were insured. Fiji confirmed they had indeed suffered similar damage from the same strike but that their equipment was, unfortunately, uninsured.

278. Council accepted the report on assets and inventory written off for the year ended 31st December 2003.

12.2 Report on 2004 Accounts to 30 June

12.2.1 Financial Accounts for the 6-month period to June 2004

279. The Secretariat introduced paper AS33/12.2.1, advising Council that these accounts were not audited and that the explanatory notes were based on exception reporting.

280. Council noted and accepted the report on the 2004 Accounts to 30 June.

12.2.2 Membership Contributions

281. The Secretariat introduced paper AS33/12.2.2 and the supplementary paper that was being circulated at the beginning of the presentation of the agenda item that updated the Status of Membership Contributions, given that the paper before Council gave the update as at 30 June.

282. New Zealand drew Council's attention to the recommendation by the Auditors whereby guidelines be developed on ways to deal with the membership contributions in arrears; and that this be covered in the review of Financial Regulations.

283. Marshall Islands encouraged the Secretariat to continue liaising with member countries with arrears to make necessary effort to meet their excess contribution.

284. Those member countries most seriously affected by this setback, reassured Council of their sincere commitment to honouring their obligations to the SOPAC Council and the Secretariat was urged to continue with the necessary follow up with these members.

285. The Secretariat informed Council that it had received positive feedback from those member countries with arrears.

286. Cook Islands echoed New Zealand's comments on the development of the guidelines and hoped that the review of the Financial

Regulations would be done promptly so that Council could comment on the review before the next Annual Session. Cook Islands also welcomed Guam back into the fold, noting that it had been some time since they attended an annual session.

287. Samoa urged member countries with outstanding arrears to settle their debts as this affected the organisation's cash flow and could in turn affect the delivery of the Work Programme.

288. Palau asked to be informed about the criterion that was being used to assess the contributions.

289. The Secretariat explained that they used the same formula as that of the Pacific Islands Forum whereby there were 3 categories of full membership. SOPAC had a fourth category Associate Membership. The Secretariat also drew Council's attention to Table 4 of Paper AS33/14.3, showing the categories and the percentages used.

290. Council received the status of the membership contributions report; and the assurances of those within their midst that were committed to honouring their obligations to SOPAC.

13. ESTABLISHMENT AND ADMINISTRATION

13.1 Rules of Procedure for Executive Appointments

291. After an informal exchange of views for which no record was taken, Council agreed that henceforth, the Deputy Director be appointed by the Director in close consultation with a Council-approved subcommittee. Council then considered and agreed to new Rules of Procedure for Director Appointment and Rules of Procedure for Deputy Director Appointment and these are included as appendices to the Proceedings of the 33rd Session (this volume).

13.2 Deputy Director Position

292. The Director presented paper AS33/13.2, and informed Council that the current incumbent's first term as Deputy Director expires in March 2005.

293. Council reviewed and approved the job description, terms and conditions of employ-

ment and job advertisement, for the Deputy Director position, as contained in the "Information Package for Deputy Director Appointment", attached to the paper. The Chair called for nominations for the Deputy Director Appointments Subcommittee with the understanding that the constituency of the sub committee would be open-ended. The agreed initial Deputy Director Appointments Subcommittee to assist the Director will be: New Zealand, Federated States of Micronesia, Cook Islands and Papua New Guinea.

294. The Director expressed hope that once members committed to being on the Appointments Sub-Committee they would commit to it for the entire process for consistency's sake.

295. Council also noted that in order to allow a smooth transition into the new arrangement the Director is likely to utilise an interim arrangement.

13.3 SOPAC Staff Remuneration – CROP Remuneration Review Report

296. The Deputy Director presented paper AS33/13.3, providing Council with an overview of the CROP process to harmonise remuneration. This review process had been underway for the last few years, culminating in the CROP Remuneration Review Report.

297. The Secretariat referred to the attachment to paper AS33/13.3 with its sixteen recommendations, which went to the Forum Officials Committee in Apia.

298. The Secretariat reminded Council that it was seeking endorsement of recommendations 1-14, and noted that the Working Group had further work to do in consideration of education and housing allowances, and hoped to bring this issue to close by the Budget FOC.

299. The Secretariat referred Council to the Attachment, describing the principles of harmonisation, and commended the text to Council for consideration.

300. The Secretariat highlighted some aspects from the document, including:

- a. The salaries of SOPAC support staff were found to lie within the upper quartile of the Fiji market, and therefore no recommendation for change to support staff salary was made.
- b. The implications on the SOPAC budget of an annual salary rise of 4 % as stimulated

by the Australian Public Service have led to the decoupling of SOPAC professional salaries from the APS market.

- c. The recommendation to introduce Special Drawing Rights (SDR) as a buffer for salaries against exchange rate fluctuations restricted to within ± 5 % of the original salary value.
- d. The recommendation that three reference markets should be used to track CROP salaries on an annual basis: Australia, New Zealand and Fiji.
- e. Staff regulation 13e, which states that a fixed term appointment of three years is renewable, but when any professional staff has served in the same position for a continuous period of six years, it shall be mandatory for that position to be re-advertised.

301. New Zealand requested that recommendation 2, be amended by the addition at the end of the paragraph of the phrase "including the use of exit surveys", to reflect the high turnover in CROP agencies, which makes staff retention a poor indicator of job satisfaction. New Zealand informed Council that the CROP Harmonisation Working Group had concluded that an important element of the collection of staff retention data in future would be the use of exit surveys, which would give a more accurate picture of the reasons for staff leaving.

302. Cook Islands registered its support and endorsement of the recommendations and approved New Zealand's suggestion for exit surveys. Cook Islands suggested that further work was needed with regard to education and housing allowances.

303. Marshall Islands expressed gratitude for the work of the Secretariat and New Zealand with regard to the remuneration review. Marshall Islands reminded Council that further work was needed on the issues that remained unresolved and supported the recommendations.

304. Samoa expressed its support of the FOC decision and that it should be adopted. Samoa furthermore commented that whilst it appreciated the difficulty at times to secure replacement for a professional technical position with SOPAC, due largely to the specialised and highly technical nature of the post, it was only under these special circumstances that an incumbent should be re-appointed after having already served two, three-year terms with SOPAC. Samoa further elaborated that under such special circumstances, if an exception

is given, it should be granted for only 3 years and not another 6 years. Furthermore, Samoa referred to the SOPAC Staff Regulations, which would need to be revised accordingly to accurately reflect SOPAC's policy on the extension of its personnel beyond 6 years.

305. Kiribati supported all the recommendations, and that the issue of housing and education allowance for professional staff be given further consultation by the Working Group. Kiribati requested that housing for professional staff be linked to the post, rather than the country from which the incumbent originated.

306. Tuvalu supported the recommendations, particularly decoupling the link for SOPAC salaries from the Australian Public Service, and the use of the Australian, New Zealand and Fiji markets, and setting a ceiling and floor for Special Drawing Rights.

307. Tuvalu cautioned that the six-year rule exceptions for highly-specialised staff could lead to certain staff becoming "indispensable" to SOPAC, which is undesirable. Tuvalu encouraged SOPAC to further engage in the harmonisation process.

308. Papua New Guinea expressed their general support for all recommendations. Papua New Guinea suggested that junior staff for technical positions 'under-study' their seniors with a view to assuming the post in later years, on expiry of contracts under the six-year rule, to enable capacity to be built in specialist technical areas. Papua New Guinea further expressed their desire that housing and education allowances should be attached to positions, rather than where the incumbent is recruited from.

309. With reference to the interventions on the six-year rule, New Zealand noted that the FOC Harmonisation Working Group would be reconvening on 5 October to consider a recommendation to the Budget FOC on implementation of the rule. It invited countries with particular views on the issue that could not participate in this Suva-based meeting, to convey these directly to New Zealand as Chair.

310. The Secretariat noted paragraph 2 of the text on harmonisation, highlighting that each CROP agency choose a particular strategy that suited its own organisation, but must report on deviations from CROP common practice. The Secretariat therefore requested a clear indication from member countries with regard to this issue.

311. The Marshall Islands advised Council that countries should also remember that this

initiative was tasked to the FOC and therefore Countries can also take their concerns directly to FOC or to the Chairman of the Review Committee.

312. Council endorsed recommendations 1-14 of the CROP Harmonisation Working Group noting that in regard to housing and educational allowances for professional staff, further work was needed.

313. In so doing, Council approved:

- a. The salary scales for professional and support staff for 2005 (Attachment 2).
- b. The Secretariat participate fully in the reconvened CROP Remuneration Working Group to: (i) explore options for cost sharing among CROP; (ii) conduct an annual review and analysis of the data received for the reference markets and present the analysis and recommendations' and (iii) compile and analyse staff recruitment, and retention information across CROP on an annual basis, with exit surveys
- c. That the Secretariat engage in future deliberations with regard to the Housing and Education Allowances for professional staff.
- d. The 6-year rule for professional staff positions continue to apply as in the Staff Regulation 13(e), and Council will consider this issue again following FOC's further work.
- e. That the approved recommendations of the Working Group Report and the CROP Harmonisation and Remuneration Guiding Principles and Strategies be included in an Annex to the Staff Regulations.

13.4 Reappointment of Contract Staff since 32nd Annual Session

314. The Secretariat, in accordance with Staff Regulation 13e, reported on two professional staff positions for which Secretariat staff were reappointed beyond a six-year contract: Makereta Kaurasi-Manueli as Accountant and Robert Smith as Senior Adviser- Marine Geophysics.

315. The Marshall Islands expressed its support for the recommendation.

316. Papua New Guinea noted its acceptance of the recommendation and went on to make an observation that the composition of the Secretariat staff still did not reflect the membership. Papua New Guinea suggested that this could be addressed with the wider advertise-

ment of available positions in all SOPAC Member Countries.

317. Australia commented on the report provided to Council and suggested that information such as marital status should be excluded.

318. Marshall Islands suggested to the Secretariat that any upcoming position advertisements should be circulated to SOPAC National Representatives in all member countries and that they be responsible for advertising.

319. Tonga expressed some concern on the criteria used to select staff, particularly in relation to junior staff. Tonga went on to request for a look at ways to better involve and provide opportunities to member country junior professionals.

320. The Secretariat advised Council that the SOPAC staff list is included in Annex 1 AS33/14.3. The Secretariat indicated that the staff composition does not fully reflect its membership but the Secretariat does employ several professionals from around the region. In promoting greater Pacific professional development the EU Project is establishing country interns in all participating countries with the expectation that these staff will spend time at the Secretariat and work with Project professional staff. SOPAC continues to explore other ways and opportunities to support professional development of member country personnel.

321. The Secretariat reminded Council that previous decisions by Council accepted that publication of SOPAC positions at national level was a national responsibility. The responsibility of the Secretariat, was agreed to be at the level of Internet and regional publications, and distribution to National Representatives.

322. Cook Islands concurred with the comments expressed by member countries and sentiments raised by Tonga and Papua New Guinea. The Cook Islands indicated that this was an ongoing issue and he was extremely pleased to note that, despite the slow progress, the Secretariat continues to address this issue as effectively as possible and the recent appointment of a Cook Island national to the Secretariat was cited as a case in point.

323. Council noted the reappointment of Makereta Kaurasi-Manueli as Accountant and Robert Smith as Senior Adviser, Marine Geophysics.

13.5 Secretariat Integrated Corporate Risk Management Plan

324. The Director introduced paper AS33/13.5.

325. Council was reminded that the Integrated Corporate Risk Management Plan had been endorsed at the 32nd Annual session of Governing Council and that the intention of the paper currently before Council was to provide it with a level of confidence that, through the Directorate, its Secretariat had identified, assessed and, are managing its priority risks. Council was also made aware that this would in future be reported under the annual Business Plan.

326. Nauru questioned the security of the building complex and site where the Secretariat was located and whether this was encompassed in the risk management plan.

327. At the suggestion by the Republic of Marshall Islands, Council was briefed by Fiji on the Pacific Village. Fiji informed Council that all the completed paperwork for the Pacific Village complex was with the Ministry of Finance for approval. He envisaged that finance clearance of all the paperwork would be completed by year-end. The projected cost for the construction of the Pacific Village is FJ\$45 million.

328. Marshall Islands expressed gratitude for the development of a comprehensive plan and sought the meeting's views on considering it as a living document and its potential to be used as a model for the region.

329. The Secretariat noted the interventions by the membership and the Director that the risk management plan was indeed a living document, that it be annually assessed and updated and reported on under the Annual Business Plan.

330. Council reviewed the Integrated Corporate Risk Management report and urged the Secretariat to implement the suggested risk improvement actions for the following priority risks: Disaster Recovery & Business Continuity, Risk Financing, Membership Contributions, Security of Premises, Secretariat's Staff Interests, Emergency Evacuation, Fire Protection, Data Backup and Security of Information Technology.

13.6 Review of ICT, Library and Publications Guidelines

331. The Secretariat provided Council with an update on the review of the Secretariat ICT, Library and Publications Guidelines, and noted the Guidelines attached to AS33/13.6. The review of the ICT, Library and Publishing processes at the Secretariat had been listed as an activity of the Business Plan for the past two years. It was completed during the past year. The Secretariat also highlighted that the guidelines are mainly for internal use and that the Secretariat continues to adhere to best practice.

332. Marshall Islands expressed gratitude to the Secretariat for its ICT, Library and Publications services, and supported endorsement of the recommendation.

333. Tuvalu thanked the Secretariat for its assistance in ICT and the Federated States of Micronesia along with Vanuatu expressed similar sentiments.

334. USP thanked SOPAC for the extensive use of the SOPAC library by staff and students of the University. USP reminded professional staff of all CROP agencies that they had reciprocal rights to the University library with its extensive Pacific Collection.

335. Council noted the revised ICT, Library and Publications Guidelines.

13.7 Review of Financial Regulations

336. The Secretariat presented paper AS33/13.7, advising Council on the Terms of Reference for an external review of the Financial Regulations and the documentation of the financial operations and processes.

337. The Secretariat noted that the review of the Financial Regulations, which is over ten years old, had been listed as an activity of the Business Plan for the past two years. The Secretariat mentioned that the external auditors in their Audit Closing Reports highlighted the need to amend the Financial Regulation 17b (relating to the acquisition of fixed assets), as it did not comply with international accounting standards. The Secretariat outlined plans to incorporate procedures for reporting to Council, and matters relating to insurance, equipment, staff, infrastructure, public liability, contracts and tender into the revised Financial Regulations.

338. In response to Tuvalu's request for the Terms of Reference for the review, which he pointed out was not attached to paper AS33/13.7; the Secretariat reported that the auditors had been tasked with drawing up a detailed Terms of Reference, which would comply with international and Fiji accounting standards.

339. Australia suggested that the language of the recommendation in the paper be changed to reflect Council endorsement of the review rather than the Terms of Reference.

340. Marshall Islands sought the advice of the Secretariat on whether it would be possible to circulate the Terms of Reference document to member countries before the next Annual Session.

341. The Secretariat clarified that the Terms of Reference would be developed as soon as possible, and circulated for comment and response out of Session, so as to allow the review of Financial Regulations to be completed in time for reporting back to the 2005 Council meeting.

342. Council endorsed a review of the Financial Regulations and that a detailed Terms of Reference be developed as soon as possible, circulated to members for comment, that a review be carried out during 2005, and the review report together with the recommended revised Financial Regulations and supporting Procedures Manual be submitted to the next Session.

14. 2004 WORK PROGRAMME AND BUDGET

14.1 Reserve Fund Ceiling

343. The Secretariat presented paper AS33/14.1 as a reporting requirement by Council to annually review the ceiling on the Reserve Fund. The Secretariat advised Council that after taking into consideration the assumption and based on the 30 June 2004 Accounts, that it would cost F\$261,480 to close the Secretariat, should it cease operations. Based on this and after taking into consideration Council's decision at its last meeting, it recommended that the Reserve Fund Ceiling remain at F\$400,000.

344. Cook Islands commented that this was an issue, which had been discussed at several Annual Sessions. Cook Islands further stated that the Reserve Fund Ceiling level

should remain at \$400,000 given that it was unlikely that the Secretariat would cease operations.

345. Nauru sought clarifications as to whether the unspent funds under Regular and Extra Budgets would remain with the Secretariat, should it cease operations. The Secretariat responded that this would only occur if donors gave their approval.

346. The Republic of Marshall Islands enquired as to the application of the interest on unspent funds. The Secretariat pointed out that this interest was ploughed back into the core Budget and indicated where in the 2005 Work Plan and Budget income derived from invested funds was accounted for.

347. The Council agreed that the Reserve Fund Ceiling remain at F\$400,000.

14.2 Appointment of Auditor

348. The Secretariat presented paper AS33/14.2 on the appointment of the auditor for the 2004 and 2005 SOPAC financial statements, as a requirement under the Financial Regulations. The Secretariat advised Council that the three Suva-based international auditing firms were invited to tender for the audit and based on this tender process, recommended that the current auditors, Ernst & Young, be appointed to carry out the audits of the 2004 and 2005 SOPAC financial statements.

349. The Council assessed the audit tenders and concurred with the Secretariat recommendation, approving the appointment of Ernst & Young to audit the SOPAC 2004 and 2005 financial statements.

14.3 Approval of 2005 Work Plan and Budget

350. The Deputy Director presented paper AS33/14.3 and summarised the work plan process and dialogue which took place prior to preparation of the 2005 Draft Work Plan and Budget. The Deputy Director also referred to the presentations by Programme Managers earlier in the meeting, which provided an overview of the work carried out by the respective work programmes.

351. New Zealand, whilst appreciative of the work done by the Secretariat to reduce the unsecured funds (or over programming) to an overall 15% of the 2005 Draft Work Plan and Budget, sought clarifications on how the Sec-

retariat would fund these activities and made particular reference to the high level of unsecured funds in the Community Lifelines Programme. New Zealand also expressed concern on the use of New Zealand extra budgetary funds for Corporate Services. She considered their membership contributions enough input into that area. Her preference was for New Zealand extra budgetary funds to be utilised for programme delivery.

352. The Secretariat explained that over programming was deliberate to allow it flexibility in delivering other programmes (shown as unfunded activities in the budget) where programmed/funded activities are unable to be carried out, e.g., a marine survey suspended indefinitely, due to vessel unavailability, as was recently experienced at the Secretariat.

353. On the matter of New Zealand funds being used for direct programme activities, the Secretariat would take that on board and make the necessary changes after further consultations with New Zealand.

354. Palau sought clarification on the issue of the membership contributions' categories – as to which small island states qualified as category 3 members. The Secretariat responded that those countries categorised as smaller island states would qualify as category 3 members.

355. Tonga sought clarification from the Secretariat on the Kiribati bilateral funds shown in Table 6 of AS33/14.3 as anticipated source of funds. He wondered how these funds were received by the Secretariat as well as whether the total budget is reflective of cash funds only or did it include in-kind contributions. Tonga also enquired as to what percentage of the total budget was spent on salaries.

356. The Secretariat explained that the Kiribati bilateral funding was for a specific activity in Banaba, which is being funded by the French Government. The funding is both cash and in-kind and is the prerogative of Kiribati, how it is expended, following the work done by the Secretariat. On the issue of the percentage of the salaries, the Secretariat responded that distribution of resources is shown in Table 5 of the paper and the salaries account for 41 % of the total budget.

357. Nauru sought clarification on the 'unknown' under the anticipated sources of funds on Table 6. The Secretariat advised Council that this was the unsecured portion of the budget.

358. The Republic of the Marshall Islands expressed its appreciation for the work done and commented that the presentations earlier by the respective programme managers provided a clear overview on the work being done. He also stated that he went along with the recommendations and requested that the Secretariat continue to look for funds for the unsecured activities.

359. Kiribati concurred with the explanation provided by the Secretariat on Tonga's question regarding the issue of the Kiribati bilateral funds.

360. On the issue of the bilateral funds, Tonga explained that he was seeking clarifications on the mechanism for transfer of bilateral funds as they have potential bilateral projects with the Secretariat for which they will need to transfer funds. The Secretariat explained that the process involved would really depend on what the donor required and was not sure what the World Bank procedures were regarding subcontracted bilateral assistance, for Tonga's case.

361. The Secretariat also advised that in future, they would separate the over-programming activities from the activities with secured funding to further increase the transparency of the budget.

362. Council approved the 2004 Revised Budget of F\$11,300,224 and the 2005 Work Plan and Budget of F\$14,168,775.

15. OTHER BUSINESS

363. The Director presented a number of issues to full Council that were raised at Council's informal session at the beginning of the meeting, which included many but not all Council members at this Session. She made short presentations on the following and invited the membership for their comments on them:

- a) Future Arrangements for SOPAC Annual Sessions.
- b) Amendments and Review of the Agreement Establishing SOPAC.
- c) International Geological Congress 2012.

364. Referring to the informal session of Council earlier in the week, the Director outlined a possible future arrangement, which she suggested would result in cost efficiencies, and enhance programme delivery. The sug-

gested arrangement was to convene a full session bi-ennially and a Council-only meeting in intervening years.

365. With reference to the Amendments and Review of the SOPAC Agreement, the Director suggested that the significant organisational changes and the recently amended rules of procedure for executive appointments may warrant Council to consider a comprehensive review of the Agreement.

a) Future Arrangements for SOPAC Annual Sessions

366. Council members were generally appreciative of the rationale behind the changes that had been mooted by the Director, and were supported by some key STAR scientists.

367. Council concurred with Samoa and Nauru's suggestion for the Secretariat to prepare a detailed paper on the proposed Annual Session arrangements and for the paper to be presented at the next Council Session.

368. At Tonga's expressed concern about holding Annual Sessions every two years, Cook Islands clarified that the change suggested by the Director was not to stop annual meetings, but rather to have full Council meetings (with accompanying STAR Session) every alternate year, whereas Council would meet every year. Cook Islands further expressed their appreciation of the format of the Annual Session this year, and encouraged the continuation of the holding of informal sessions.

369. The Marshall Islands welcomed any new initiative with regards to the arrangements for Annual Sessions; if it would improve the current structure of the annual meeting.

b) Amendments and Review of the Agreement establishing SOPAC

370. The Secretariat sought guidance from Council on the potential for a future review of the Agreement establishing the Commission.

371. The Marshall Islands, while endorsing the review of the Agreement establishing SOPAC, requested and proposed for consideration of a name change for the organization - a name that would truly reflect its membership. He went on to advise the Council that it would be an opportune time, since other regional organisations had changed their names. Marshall Islands also reminded Council of

their earlier suggestion that Council might wish to consider following SPC's approach of offering a subsequent term to the incumbent CEO, without the need to advertise the position. He also advised that SPREP Council is currently considering adopting this approach. He further suggested that the offer of a second and final three-year contract would be incumbent upon a written expression of interest by the current CEO to a second term and subject to their satisfactory performance of the current term, which is to be measured and agreed to by Council. The expression of interest would need to be furnished to Council three months prior to the meeting of the Governing Council.

372. Cook Islands also endorsed a review of the Agreement establishing SOPAC.

373. Council agreed that the Secretariat begin the process of a comprehensive review of the Agreement establishing SOPAC and in particular prepare a paper on Article 1 with a view to a name change of the organisation.

c) International Geological Congress 2012

374. The Director invited Geoscience Australia Advisor, Wally Johnson, to inform Council about item 3.

375. The Advisor from Geoscience Australia informed Council about the successful bid led by the Chief Executive Officer of Geoscience Australia, to host the 34th International Geological Congress (IGC) in Australia in 2012 and was seeking SOPAC's early involvement in taking this opportunity to present a comprehensive perspective of Oceania. Council was informed that a key argument that won the bid was the focus on the importance of managing geohazards in the Pacific region, including both sudden impacts (tsunamis, earthquakes) and longer time frame impacts (sea-level rise and climate change). The Advisor later offered the CD presentation that won the bid for the 2012 IGC in Florence, to the Secretariat for viewing and dissemination to people interested in viewing it.

376. Geoscience Australia advised that they would welcome SOPAC input and collaboration in the planning of the 34th IGC, with potential for running some sessions, and organising field trips in the Pacific Island region; and also SOPAC's involvement in a promotional booth on the 34th IGC, to be displayed at the 33rd IGC in Oslo, Norway, in 2008. The Advisor expressed hope that this Congress would in-

crease Geoscience Australia's re-engagement in the Pacific Islands region.

377. Council members enthusiastically embraced the overtures from Geoscience Australia and instructed the Secretariat to keep it informed about the renewed association with Geoscience Australia, and the developments in the IGC undertaking.

378. Cook Islands encouraged SOPAC's involvement in the hosting of IGC with Geoscience Australia.

379. Papua New Guinea expressed interest in further discussions of issues with Geoscience Australia and urged fellow Council members to support the initiative.

380. Marshall Islands and Tonga also welcomed and endorsed the collaboration and association with Geoscience Australia with regard to the 34th IGC.

381. Council noted with appreciation the successful bid of 'Oceania' to host the 34th IGC and endorsed the idea of forming a consortium to host the IGC in 2012 and encouraged the Secretariat to become engaged in any future planning.

16. VENUE AND DATE OF 34TH ANNUAL SESSION

382. Samoa informed Council of its intention to host the next Council Session in Apia, Samoa, probably in October 2005. Samoa further informed Council that the next SPREP Council meeting will also be held in Apia, and that there was a high likelihood that the meetings would be held back to back, but that this was to be determined at a later stage.

383. Council accepted Samoa's offer to host the SOPAC 34th Session with acclamation.

17. ADOPTION OF AGREED RECORD OF PROCEEDINGS

384. Council adopted the agreed summary record of proceedings of the 33rd SOPAC Session subject to amendments.

18. CLOSING

385. The Chair, on behalf of the Papua New Guinea Government, and the Papua New Guinea delegation attending the SOPAC 33rd

Session, expressed his sincere gratitude and appreciation to all Council members for their support and cooperation. He also thanked the Director and staff of the SOPAC Secretariat for their support and assistance in the coordination of the meeting, and the support staff from the Warwick Fiji International Resort.

386. The Chair acknowledged the excellent discussions at the meeting on issues affecting the livelihoods of communities in all Pacific Islands Countries, and expressed his intention that these deliberations should continue. The Chair acknowledged the important contributions of all stakeholders, including SOPAC Member Countries, the SOPAC Secretariat, and all scientists attending the meeting. The Chair wished everyone a safe journey home and looked forward to the next Annual Session meeting in Apia, Samoa in 2005.

387. The Director thanked the host government, Papua New Guinea, for a successful meeting, and the Chair, for his focused and able chairing through a grueling agenda, and looked forward to working with Papua New Guinea over the coming year. The Director thanked all members of the Governing Council for their interventions and participation, which would direct the Secretariat over the next year, and for their policy directions over the longer term. The Director further thanked all Heads and representatives of CROP agencies, and national, regional and international organisations. She thanked the Chair of STAR

and TAG advisors for their valuable scientific contributions, noting the record number of presentations at the STAR session. She acknowledged the conveners of the meetings held in conjunction with the Annual Session: the Pacific Water Association meeting; and the Workshop on Leadership for Pacific Islands Water Managers.

388. The Director assured Council that all decisions and recommendations from the meeting would be addressed over the next year. She thanked the Secretariat staff for their preparations and servicing of the meetings. Finally, the Director thanked everyone for making her first Annual Session an enjoyable one.

389. New Zealand, on behalf of all Council members, thanked the Chair, the Director and the staff of the SOPAC Secretariat for their efforts in making the meeting a success, and acknowledged the success of Cristelle Pratt's first meeting as Director.

390. USP, on behalf of the Council of Regional Organisations of the Pacific, thanked all representatives at the meeting for allowing the University to attend the Annual Session as an integral part of Council, and expressed his hope that CROP agencies would be regarded similarly at USP Council meetings.

391. The Chair brought the 33rd Annual Session of the SOPAC Governing Council to a close at 10.45 am, Friday, 24 September 2004.

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APPENDIX 1

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APPENDIX 2

AGENDA

SCIENCE, TECHNOLOGY AND RESOURCES NETWORK (STAR) SESSION

The themes for the STAR Session will be: "Mineral policy, plate tectonics & offshore mining; Hazard assessment & risk management; Water, sanitation & human settlement"

OPENING SESSION OF GOVERNING COUNCIL

1. OPENING
 - 1.1 Information Circular [AS33/1.1]
 - 1.2 Programme for Official Opening
2. ELECTIONS
 - 2.1 Chair and Vice-Chair of SOPAC (No Paper)
 - 2.2 Chairs of STAR and TAG (No Paper)
 - 2.3 Appointment of Rapporteurs (No Paper)
3. AGENDA AND WORKING PROCEDURES
 - 3.1 Provisional Agenda [AS33/3.1Rev]
Draft Working Schedule [AS33/3.1/Info 1]
Working Procedures [AS33/3.1/Info 2]
List of Conference Room Documents [AS33/3.1/Info 3Rev]
 - 3.2 Appointment of Drafting Committee (No Paper)
 - 3.3 Appointment of Sub- Committee (should any be necessary) (No Paper)
4. REPRESENTATION
 - 4.1 Designation of SOPAC National Representatives [AS33/4.1]
5. STATEMENTS (The intention is that these statements be tabled for inclusion in the Proceedings, and not presented verbally in full)
 - 5.1 Statements from Member Countries (No Papers)
 - 5.2 Statements by CROP Organisations (No Papers)
 - 5.3 Statements from Supporting Governments and International Agencies (No Papers)
 - 5.4 Statements from National Institutions (No Papers)

COUNCIL – TECHNICAL ADVISORY GROUP (TAG) SESSION (MEMBER COUNTRIES AND OTHER DELEGATES DISCUSS THE SOPAC TECHNICAL WORK PROGRAMME)

6. ISSUES COMMON TO ALL PROGRAMMES
 - 6.1 SOPAC Reports
 - 6.1.1 2003 Annual Report Summary [AS33/6.1.1]
 - 6.1.2 Summary Report of 2004 Donor Support [AS33/6.1.2]
 - 6.1.3 Review of Country Profiles [AS33/6.1.3]
 - 6.1.4 SOPAC Work Programme and the MDGs [AS33/6.1.4]
 - 6.1.5 International Meeting on SIDS, Mauritius January 2005 [AS33/6.1.5]
 - 6.1.6 Report on SOPAC Activities Concerning Climate Change, Sea Level Rise, Climate Variability and Extreme Weather Events [AS33/6.1.6]
 - 6.2 CROP Summary Report [AS33/6.2]
 - 6.3 STAR Chair Report [AS33/6.3]
 - 6.4 SOPAC/EU Project Report [AS33/6.4]
7. OCEAN AND ISLANDS PROGRAMME
 - 7.1 Report on the Ocean and Islands Programme for 2004 [AS33/7.1]
 - 7.2 Issues Arising in the Ocean and Islands Programme [AS33/7.2]

8. COMMUNITY LIFELINES PROGRAMME
 - 8.1 Report on the Community Lifelines Programme for 2004 [AS33/8.1]
 - 8.2 Issues Arising in the Community Lifelines Programme [AS33/8.2]
9. COMMUNITY RISK PROGRAMME
 - 9.1 Report on the Community Risk Programme for 2004 [AS33/9.1]
 - 9.2 Issues Arising in the Community Risk Programme [AS33/9.2]
10. PROGRAMME REVIEW MONITORING AND EVALUATION [AS33/10]

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. DIRECTOR'S ANNUAL REPORT
 - 11.1 Introduction
 - 11.2 SOPAC 2005-2009 SOPAC Corporate Plan and Programme and Strategies [AS33/11.2]
 - 11.3 Leader's Pacific Plan [AS33/11.3]
12. FINANCIAL REPORTS
 - 12.1 Financial Report 2003
 - 12.1.1 2003 Audited Financial Statements, Auditors Report and Management Report [AS33/12.1.1]
 - 12.1.2 Report on 2003 Regular Budget Variance and Virement of Funds [AS33/12.1.2]
 - 12.1.3 Report on Assets and Inventory written off for the year ended 31 December 2003 [AS33/12.1.3]
 - 12.2 Report on 2004 Accounts to 30 June
 - 12.2.1 Financial Accounts for the 6-month period to June 2004 [AS33/12.2.1]
 - 12.2.2 Membership Contributions [AS33/12.2.2]
13. ESTABLISHMENT AND ADMINISTRATION
 - 13.1 Rules of Procedure for Executive Appointments [AS33/13.1]
 - 13.2 Deputy Director Position [AS33/13.2]
 - 13.3 SOPAC Staff Remuneration – CROP Remuneration Review Report [AS33/13.3]
 - 13.4 Reappointment of Contract Staff since 32nd Annual Session [AS33/13.4]
 - 13.5 Secretariat Integrated Corporate Risk Management Plan [AS33/13.5]
 - 13.6 Review of ICT, Library and Publications Guidelines [AS33/13.6]
 - 13.7 Review of Financial Regulations [AS33/13.7]
14. 2004 WORK PROGRAMME AND BUDGET
 - 14.1 Reserve Fund Ceiling [AS33/14.1]
 - 14.2 Appointment of Auditor [AS33/14.2]
 - 14.3 Approval of 2005 Work Plan and Budget [AS33/14.3]
15. OTHER BUSINESS
16. VENUE AND DATE OF 34th ANNUAL SESSION
17. ADOPTION OF AGREED RECORD OF PROCEEDINGS
18. CLOSING

APPENDIX 3

DESIGNATION OF NATIONAL REPRESENTATIVES

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APPENDIX 4

STATEMENTS BY DELEGATIONS

PART I: STATEMENTS FROM MEMBER COUNTRIES

AUSTRALIA

Australian marine geoscience surveys of interest to SOPAC: 2004 and 2005

Kenn Plateau off northeast Australia (Neville Exon, GA: 3-28 May, 2004) – RV Southern Surveyor SS 05/2004 [www.marine.csiro.au/nationalfacility/voyagedocs/2004]

This large, poorly known marine plateau lies east of the Cato Trough, and its eastern third includes the Bellona seamount chain, and is French/New Caledonian territory. Sydney University and New Caledonian (Yves Lafoy) representatives took part. A seismic and swath-mapping survey provided information for a seabed sampling programme. The plateau consists of a number of continental basement blocks separated by east or northeast trending sedimentary troughs. The plateau separated from Australia in the Late Cretaceous (~90 Ma) and moved northeastward until the early Eocene (~52 Ma). Hot spot traces formed two chains of north-south seamounts in the Oligocene and Miocene, and these chains form the eastern and western plateau margins. The main sedimentary sequences appear to be: Cretaceous and Paleocene siliciclastics; Paleocene and Eocene chalks; Oligocene and younger chalks and oozes.

New Hebrides arc-backarc system (Richard Arculus, ANU: 2-27 June, 2004) – RV Southern Surveyor SS 06/2004 [www.marine.csiro.au/nationalfacility/voyagedocs/2004]

This cruise successfully undertook high-resolution swath-mapping, to highlight regions of volcanic and hydrothermal activity in arc and adjacent backarc (Coriolis Troughs) basins, and collected volcanic and water samples. Extensive samples were collected of the magmas that form the arc edifices and floors of the Vate and Futuna Troughs, some of the youngest back-arc basins in the world. Participants came from

Australia, New Zealand and Vanuatu.

Hunter Fracture Zone system (Leonid Danyushevsky, University of Tasmania: 2-26 October, 2004) – RV Southern Surveyor SS 10/2004 [www.marine.csiro.au/nationalfacility/voyagedocs/2004]

This cruise is designed to investigate the petrology of the young spreading crust of the southernmost South Fiji Basin, where oceanic crust is being recycled after being subducted at the Hunter subduction zone.

Tofua Arc system (Richard Arculus, ANU: 27 October – 23 November, 2004) – RV Southern Surveyor SS 11/2004 [www.marine.csiro.au/nationalfacility/voyagedocs/2004]

This cruise is designed to study hydrothermal plume activity and petrology in the northern Tofua Arc of Tonga.

Torres Strait (Andrew Heap, GA: 8-28 October, 2004) – RV James Kirby

A repeat survey to measure the movement of sandwaves next to Turnagain Island and the effects (if any) on the distribution, abundance and survival of seagrass in Torres Strait. A second objective is to map the seabed and benthic habitats and measure turbidity. Data collected will be: high-resolution swath bathymetry and backscatter, water samples, currents from waves and tides, near-bed suspended sediment, surface grab samples and shallow cores. Oceanographic data will be used to validate a regional ocean model for the region being developed in-conjunction with CSIRO.

Mellish Rise off northeast Australia (Neville Exon, GA: 26 November – 22 December, 2004) – RV Southern Surveyor SS 12/2004 [www.marine.csiro.au/nationalfacility/voyagedocs/2004]

This large, poorly known marine plateau lies north of the Kenn Plateau, and part of it is French/New Caledonian territory. Sydney University and New Caledonian representatives will take part. A seismic and swath-mapping survey will provide information for a seabed sampling programme. The plateau probably consists largely of continental basement. It trends northeast, with the Louisiade Trough to the northwest and the South Rennell and Bampton Troughs to the southeast.

Fraser Island canyons off northeast Australia (Ron Boyd, University of Newcastle: 7-25 January, 2005) – RV Southern Surveyor SS 1/2005 [www.marine.csiro.au/nationalfacility/voyagedocs/2004]

Large quantities of sand are transported north along the New South Wales and Queensland coast forming sand islands. Fraser Island is the most northerly sand island and, north of it, the continental shelf narrows and the remaining sand makes its way to the abyssal plain via submarine canyons. Boyd has extensively studied the shallow water part of the sand transport system, and intends to study the deeper part of the system on this cruise, using profiling and sampling techniques.

Gulf of Carpentaria (Peter Harris, GA: 23 February – 18 March, 2005) – RV Southern Surveyor

A survey to extend mapping work undertaken in the southern Gulf in 2003. The main aim of the survey is to investigate and map seabed habitats in the southern Gulf with particular emphasis on reef-like structures. These structures have taken on more importance after the discovery of previously unknown patch coral reefs in the southern Gulf in 2003. Data collected will be: high-resolution swath bathymetry and backscatter, sub-bottom profiles, water samples, currents from waves and tides, near-bed suspended sediment, surface grab samples, underwater video footage, and shallow cores. The data will be used in support of regional marine planning and the production of the northern Regional Marine Plan.

Arafura Sea (Graham Logan, GA: 16 April – 16 May, 2004) – RV Southern Surveyor

This survey is to explore the nature and distribution of possible natural hydrocarbon seeps

and the Late Quaternary history of the Arafura Shelf. The survey is an extension of a survey to investigate hydrocarbon seeps on the Yampi Shelf in 2003 where it was found that biota and habitats associated with seep sites were quite diverse. So the survey is also designed to map seabed habitats, with particular focus on the nature of habitats associated with hydrocarbon seeps. Another major aim of the survey is to understand the Late Quaternary history of the shelf region, and in particular the role the channel system in the north played in the delivery of sediment from the Gulf of Carpentaria to the Timor Trough. We expect that some of the deeper regions will contain a relatively complete sedimentary record that may reflect the environmental changes in the Gulf of Carpentaria and may provide more detail about these changes. Data collected will be: high-resolution swath bathymetry and backscatter, seismic, side scan sonar, underwater video footage, shallow cores, water samples, currents from waves and tides, near-bed suspended sediment, benthic sleds, rock dredges and surface grab samples. The data will be used in support for acreage release and regional marine planning and the production of the northern Regional Marine Plan.

Compiled by Neville Exon and Andrew Heap of Geoscience Australia

COOK ISLANDS

Mr Chairman, Your Excellencies, Distinguished National Representatives, Donor Governments and Agencies, The CROP Agencies and your Representatives, The SOPAC/STAR Community, Ladies & Gentlemen

The Cook Islands is once more pleased to be represented here in Fiji, to participate in this 33rd Annual Session of the SOPAC Governing Council.

The Cook Islands wishes to affirm its strong support and continued support for SOPAC and highly values the work of SOPAC in relation to:

- Energy
- Water & Sanitation
- Coastal, Foreshore and Maritime Management
- Disaster Management
- Information, Communications and Technology
- Marine Resources

- Technical Advice

As it continues to improve the lives of the People of the Cook Islands.

Having regard for the three Programme Areas of SOPAC

- Community Lifelines
- Community Risk and,
- Oceans & Islands

The Cook Islands acknowledges the assistance to date by the Secretariat, in providing the appropriate “tool” in facilitating the respective projects and programmes incorporated in the three focus areas.

The direction of the organisation is with the aspirations of our people in the Pacific in ensuring that sustainability in all sectors are encompassed to improve our qualities of life.

The Cook Islands recognizes and appreciates the many valuable contributions that SOPAC was able to undertake over the past year, for which we express our sincere gratitude.

We would also like to acknowledge with sincere appreciation the continued support of the Donor Governments and Agencies, and the STAR Community in supporting the work of SOPAC. The Cook Islands has benefited from the STAR Community in Marine Resource Development.

Task Profiles

The Task Profiles of the Cook Islands show that some of the tasks are still outstanding and or uncompleted. It is imperative that these are facilitated as they have been aligned with National Development Programmes of the Country. The Cook Islands would welcome an opportunity for further dialogue where appropriate.

Marine Resources

The Cook Islands was fortunate to acquire funding and therefore requested SOPAC to mobilize a SOPAC Team to assist with a number of Lagoon Mapping programmes. This was a result of the successful Pearl Farm Management Exercise undertaken by SOPAC in the last 2 years, this we are very appreciative of and wishes to express our gratitude to SOPAC and the Donor Partners.

The empowerment of the Island Council members have resulted in better management prac-

tices being established and farming management plans have improved the decision making process of the Cook Islands Pearl Industry. Having said that, the main highlight is that, an awareness “Tool” has been very useful.

Foreshore & Coastal Management for Disaster Management Purposes and Infrastructure Development

SOPAC was engaged by the Cook Islands to facilitate the acquisition of data for monitoring of lagoon parameters, pertaining to Foreshore and Coastal Management for a disaster related project. This was conducted as a Fore Reef Slope Mapping for a Wave Up Run Monitoring Project.

The Cook Islands wishes to endorse a further CHARM Process to be carried out in the Pacific as the Advocacy Team Visit was very informative and it is the wish of our Country that this process be accorded urgent attention, as Natural Disasters are on the rise in relation to Climate Change and Variability.

Conclusion

Having highlighted a few of the issues relating to the Cook Islands, Mr Chairman, the Cook Islands would like to join with the other delegations in congratulating you as Chair of Governing Council, and to thank you and your Government for hosting this 33rd Session of the SOPAC Governing Council. We are most confident that under your able guidance and leadership, we will be able to accomplish our aims as approved by Council.

May I also, on behalf of the Government of the Cook Islands, acknowledge the valuable guidance that we have had from the outgoing Chair, in the person of Sisilia Talagi, and that of the Government of Niue. Meitaki Maata

With those remarks Mr Chairman, the Cook Islands looks forward to working with you and the Secretariat in achieving the best for the People of the Pacific.

Kia Orana e Kia Manuia

FEDERATED STATES OF MICRONESIA

Mr Chairperson, Members of Governing Council, Ladies and Gentlemen

Mr Chairman, FSM Delegation at the outset of this Annual Session wishes to join other members around this table to congratulate you in

assuming the Chairmanship of the 33rd Governing Council of SOPAC and convey our government's appreciation to you and your government for hosting this Session here at the beautiful Coral Coast in Fiji. We look forward to working closely with you as you lead us through these proceedings and throughout the year as you lead our organisation.

Mr Chairman, we wish to express our appreciation to the Outgoing Chair, Niue for excellent work over the past year and especially guiding the last Governing Council through difficulty procedures.

It will be remised of this delegation, if we do not at the outset of this Session take the opportunity express our government appreciation to all the donors governments for their generous financial support throughout the past years with which have made possible to implement the work programmes of this organisation and without them would have been difficulty to implement the countries projects. For this, FSM is most grateful to all the donors for their generosity and support as reflected in the increase proposed work programmes and budget for 2005.

Mr Chairman, our delegation wishes to be on record again this year that FSM still concerns about coastal management, small island vulnerability, continued threat of low laying atolls with sea level rise and related climate change issues. Again, we appeal to SOPAC to continue to assist us in these areas. A more detail interventions will be provided as we move along the agenda on different work programmes under the jurisdiction of SOPAC Secretariat

The followings are Work programmes and Budget 2005m and beyond:

- Continental shelf survey/mapping in relation to claim to Continental Shelf Authority (UNCLOS). SOPAC requested to assist in developing TOR, proposal and seeking donors.
- Seawater inundation into taro patches. SOPAC requested to assess problem, particularly in low-lying islands, of seawater intrusion into taro patches, including coastal erosion problems contributing to problems and ways for beach (coast) nourishment to mitigate.
- Development of emergency preparedness/mitigation plan. SOPAC is requested to assist the State of Yap, FSM in completing Emergency Preparedness/ Mitigation Plan and to review plans for Pohnpei, Chuuk and Kosrae with a view to update as necessary.

- GIS Assistance/ Capacity Building for use in Fisheries. SOPAC is requested to assist FSM in acquisition of GIS Software and training on use and maintenance as a tool for coastal zone habitat/ resource assessment and monitoring.
- Bathymetric Mapping. SOPAC is requested to complete bathymetric mapping started for both Chuuk and Yap and to increase area of coverage to include Pohnpei and Kosrae states.

Details of requests have been discussed with Mr Robert Smith, "buddy" for the Federated States of Micronesia. The above are in addition to requested already tabled with SOPA.

It is expected that others will be made and filed during visit of the SOPAC Director (and staff) slated for October 2004.

Mr Chairman, this delegation looks forward to a fruitful discussion in the coming few days as we seek ways on how best to chart out a more practical course of action on the Work Programmes and policy issues for the upcoming year.

FIJI ISLANDS

Chairman, Distinguished Delegates Excellencies, Head of CROP Organisation, Colleagues, Ladies and Gentlemen.

Please allow me at the outset to extend on behalf of the Fiji delegation our acknowledgement to the wise counsel and leadership of the outgoing Chair of Niue during the past twelve months. We do sympathise with the people of Niue.

May I also congratulate the in coming Chair, PNG, for assuming the Chairmanship role and we do look forward to your able leadership in the duration of this meeting.

May we also thank the Government of PNG for hosting this meeting in Fiji which can only contribute positively to Fiji's economy.

We also would like to congratulate Ms Cristelle Pratt, on her assumption on Director for the fine work that has been achieved in the past year. Fiji does offer its full support and commitment to the Director and Secretariat.

Very briefly on behalf of the Fiji delegation I would also like to express our gratitude to our various donors. The Government of Japan has been helping us conduct a baseline environmental and geochemical survey of Southern Viti

Levu. That study has now been completed. Now they are also willing and ready to help us on an offshore addition the study, which were are now expanding to involve other stakeholders in Fiji, they also have assisted us in installing our VSAT system for earthquake monitoring. Now we have a project in the planning stages to reactivate some of the old Japanese-funded VHF stations, again with Japan's help. Fiji is thankful for the marine scientific research into the North Fiji Basin and is hopeful that the cooperation between the two countries and SOPAC would continue. A number of our geological and mining staff have attended training courses in Japan under Japan's international cooperation arrangement.

We also acknowledge the Government of India for the training it has been offering to students and civil servants from Fiji in the field of geoscience.

Australia has offered a place to one of our geologists for the upcoming cruise of RV. Southern Surveyor into the Southern Pacific Ocean as well as providing people to SOPAC for training courses and workshops from which we have benefited.

Fiji's Mining Act was reviewed under Australian aid and is now being drafted by the former First Parliamentary Counsel for New South Wales.

New Zealand have been helping us in managing our Land Information systems as well as the provision of expertise in the field of groundwater investigations.

We are also grateful to the European Union and its member countries for all the help they have giving to Fiji directly and through SOPAC. A new landfill facility is nearing completion for which we are thankful.

Our Seismologist is leaving this weekend to attend a training course in Germany.

We are also thankful to the Government of Papua New Guinea for releasing Dr Graeme Hancock of the World Bank project to come and conduct a mining taxation workshop for our Senators and officials from Government and the private sector.

Of the international and regional organisations we are grateful to the Economic and Social Commission for Asia and the Pacific (ESCAP) for their help in tying up mining policy issues and for the provision of experts in watershed management and other fields.

The World Bank sent a number of missions to Fiji and if anything it helped increase the pressure our Finance Ministry to provide funding from this year for the review of the Mining Act.

We are indeed grateful for all the help we have given and if we have left someone out we apologise.

On other matters, I believe that members and the Secretariat are keen to know when SOPAC could move in the Pacific Village complex on Suva's foreshore. We apologise for the delays. On progress to date all the survey works and drawings have been completed with the recommendations conveyed to the Ministry of Finance for their final decision on the sources of funding. We remain hopeful that funds would be identified and secured sooner rather than later.

Finally, we do look forward to another year of fruitful collaboration with SOPAC and with member countries.

Thank you.

KIRIBATI

Chairman – Thank you for giving me the floor.

Chairman, Director, fellow Council Members, ladies and gentlemen ...

I was prepared to give a long verbal statement, but concerning the time constraint, I will be vey brief.

Chairman, first of all let me thank the Outgoing Chair, Niue, for their chairmanship ... Secondly, I would like to congratulate Papua New Guinea for hosting the 33rd annual meeting and your readiness to accept the chairmanship at this meeting and for the coming year. We wish PNG all the best in this deliberation.

Thirdly, Mr Chairman let me take this opportunity to officially congratulate Cristelle Pratt on her achievement of taking the post as a Director of SOPAC. I am sure the good working relationship between SOPAC and Kiribati will continue under your leadership. We wish you all the best

Chairman, the last but not least, let me acknowledge and thank SOPAC for the series of support that has been undertaken and the continuation of technical support and assistance to Kiribati.

Apart from the implemented and still implemented and yet to be implemented Projects, and Programmes, may I briefly mention few projects Kiribati wishes to ask this Session to support. We had prepared a long shopping list of these projects but I will mention the high priority ones which are as follows:

- 1) Programmes under the Reducing Vulnerabilities: the need of training on MapInfo, GIS and Remote Sensing.
- 2) Programmes under Lifelines: the need for SOPAC to carry out a feasibility study in setting up the National IT unit in Kiribati.
- 3) The need of assistance on Water and Sanitation Projects.

The full details of these programmes and projects will be tables and discussed later at TAG Session.

Chairman, once again I thank you for giving me the floor to present the Kiribati statement.

NEW CALEDONIA

Mr Chairman, distinguished Representatives of Member Governments of the South Pacific Applied Geoscience Commission, Representatives of regional and international organisations, Ms Director, dear Colleagues.

Thank you Mr Chairman for this opportunity to make a statement during the opening session, on behalf of the Government of New Caledonia.

Within the framework of the Nouméa Accord, that came into force on November 8th 1998, New Caledonia, Associate Member of SOPAC since 1991, wishes to maintain its collaboration with SOPAC. In order to neither overload the Secretariat nor diminish the resources of the other member countries, New Caledonia has established an Associate Membership Work Programme with SOPAC for next year.

New Caledonia has recognised potential in terms of mineral resources. The country is one of the key players in the global nickel production as it is estimated to hold at least a quarter of the known world reserves. The country will, in a near future, become one of the world's largest metallurgical producer of nickel. As Nickel mining remains the driving force of the territory's industrial development, environmentally sustainable mining techniques have been developed over the last 25 years. Associated risks and impacts of mining have been minimized, allowing resource to be sustainably developed and managed.

Since 1997, New Caledonia has been involved in mapping superficial geological formations, jointly with the "Bureau de Recherches Géologiques et Minières" (B.R.G.M.). The resulting maps will provide essential information for the two ongoing environmentally-friendly mining projects in New Caledonia.

Offshore, the geological framework of the Western New Caledonia basins needs to be refined. Consequently, the main objectives of the ZoNéCo 11 Multichannel seismic cruise currently in progress will be to confirm : i) the likely thinned continental nature of the three offshore basins, west of New Caledonia Mainland, through a seismic refraction survey : ii) the Bottom Simulating Reflector-like reflector occurrence and extension within those basins.

Finally, Mr Chairman, my delegation wishes the new Director for her continued commitment to ensure that the operation of the Organisation remains of the highest standard.

Thank you Mr Chairman.

PALAU

As newest member of SOPAC family. I though I will just observe the deliberations of this session and learn from the experiences of people around the table, however, when my good friend and colleague from the Republic of Marshall Island reminded me during last nights dinner, I guess one is enough but two is too much.

Once again the Republic of Palau had become a member of other regional organisation (SPREP) without its presence at that meeting.

Honourable Chairperson, SOPAC Director and Staff, Distinguish Delegates, Ladies and Gentlemen.

I feel really honoured for this opportunity to represent the Republic of Palau as a provisional national representative on this special occasion of the 33rd Annual Session.

This is special for Palau, since this is the first time for Palau to attend as a member of this August body. So let me convey my country's most sincere appreciation to the SOPAC Governing Council for unanimously approved for Palau membership to SOPAC last year without Palau's presence.

Palau sincerely apologies for that nonetheless, applaud the Governing Council gesture of Pacific brotherhood's spirit of cooperation and sharing, where wealth and opportunities are generously shared.

Likewise may I also join other speakers in thanking the outgoing Chair, Niue and the Government of Papua New Guinea for hosting this session in this beautiful island of Fiji.

Palau would also like to acknowledge the presence of donor countries, representatives of CROP, international organisations and institutions who are with us in this meeting.

The Republic of Palau although just became a member last year as I mentioned, had in the past provided with numerous technical assistances and workshops by SOPAC and Palau is indebted and would like to express its profound appreciation to SOPAC Secretariat assistance throughout the years.

Palau, Mr Chairman, is fully aware of its limited human and institutional capacities to properly manage its limited resources and therefore, looking forward believing, after observing last few days of STAR presentations, that SOPAC has the capacity, dedication and the commitments to assist the Republic of Palau in achieving Palau's short-comings, fundamental for Palau to achieve sustainable developments.

The capability to understand and implement sustainable development in our small island state, Mr Chairman, require short and long term workshops and trainings and SOPAC have the expertise in this effort.

Palau sets SOPAC as an efficient conduit for the effective transfer of technologies to the island states.

Let me also take this opportunity and express Palau's appreciation to the donor countries and assure that Palau will as soon as possible pay its require dues, fundamental to the health of our organisation.

Finally, let me congratulate the new Director of SOPAC and invite here to visit our region.

PAPUA NEW GUINEA

Introduction

Mr Chairman, your Excellency Alexis Maino, PNG High Commissioner to Fiji, Members of the Governing Council, Distinguished Representatives of Governments and Institutions of member countries, Distinguished Delegates from Donor Governments and Agencies supporting SOPAC, Distinguished Guests, Director and staff of SOPAC Secretariat; ladies and gentlemen. On behalf of the PNG National Rep-

resentative to SOPAC, Secretary Kuma Aua, (OBE), the Government and people of Papua New Guinea, I wish to extend to you all our warmest greetings. We feel honored co-hosting this 32nd Annual Session of SOPAC, grateful and privilege for the favor to host it in Fiji.

Mr Chairman, the Papua New Guinea National Representative to SOPAC, Mr. Kuma Aua, has expressed his sincere apology and offered his best wishes, as he is currently committed to progressing and monitoring the reorganization of the Department of Mining into a statutory authority through to Cabinet and to oversee the work done this month for the government to grant Mining Leases for three new medium scale gold mines.

On behalf of the PNG delegation, historically the largest PNG has ever sent, I wish to express our gratitude to the SOPAC Director and his staff for making it possible for us to co-host this session. Mr Chairman, allow me to introduce the members of my delegation, Kiuke Numoi, First Secretary, PNG High Commission, Amo Mark, Deputy MD, PNG Water Board, Joe Buleka, Director, GSPNG, Lawrence Anton, Chief Seismologists, Nathan Mosusu, Chief Geophysicist, Harry Kore, Senior Legal Officer, Department of Attorney General, Bernard Pawih, Deputy Secretary, Department of Petroleum and Energy.

In retrospect, hosting the session in PNG this week would have coincided neatly with our 29th anniversary of independence celebration. Our inability to convene the session in PNG was anticipated twelve months ago, stemming from the lack of progress on a submission to Government to transform the Department of Mining into Mineral Resource Authority (MRA). As an MRA we would have had the financial resources to convene the 32nd Annual Session in PNG.

Mr Chairman and Distinguished Representatives, on behalf of the National Representative to SOPAC, I am relieved to announce that thirteen days ago on Wednesday the 8th of September, 2004 the Cabinet had approved the establishment of the MRA and instructed the Department of Mining to complete in one month, all necessary administrative and legal documentation to establish both the MRA and a smaller Department of Mining that will maintain Policy Office and Geohazards functions. Fellow Council members, as a result of the approval by the PNG Government for the Department of Mining to become an MRA, I am hopeful of a more active partnership with SOPAC Technical Secretariat in years to come.

Partnership with SOPAC

PNG recognizes that SOPAC is an important regional geoscientific organization and encourages it to remain in tune with member country's needs and donor countries' funding requirements. We have no intention to demand review of allocation of resources to accommodate our elaborate project wish-list, however, I wish to remind SOPAC that annual geological science budget are increasingly becoming constrained, and it is therefore necessary to maintain a relevant regional organization.

Mr Chairman, the recent visit by the Director of SOPAC to Port Moresby, coupled with the introduction of the EU projects to representatives of relevant agencies of our Public Service in PNG and the appointment of country in-tern, has certainly boost SOPAC's profile in the PNG public service. PNG requests that the Director of SOPAC includes annual visits to PNG as an activity. It is our intention to co-partner SOPAC in carrying out projects, as opposed to presenting lists of projects for SOPAC to carry out, thus urge that the Director meets with us annually to discuss execution plans. The establishment of a coordinator for the EU project in PNG (country in-tern) conforms with the idea of a continual SOPAC relevance in the country. We feel that maintenance of SOPAC coordinator in PNG at the conclusion of the EU project is worth considering by our fellow Council Members.

Summary of Geological Resource Sector

Mr Chairman, let me comment on the Geological Sector. The PNG Country Report is divided into the following sectors; Mineral, Geothermal, Petroleum, Geological Survey Projects and SOPAC EDF8 Project.

Mineral Sector

PNG is experiencing an upturn in exploration and related increase in receipt of the worldwide exploration dollar than it had experienced between 2000 and 2001. As late as in August 2003, PNG was ranked second most unfavorable destination for exploration and Mining.

However, recently the trend in applications for exploration licences has changed, with 36 new applications approved for the first quarter of 2004. It is expected that applications would increase to about 43 by the end of the year. This is because the Government has adopted a number of new incentives for investors, includ-

ing the abolition of additional Profit tax, (APT) double deduction of up to 200% of pre-production exploration costs, Ring Fencing of exploration costs up to 25% of a pool of exploration costs provided the tax payable is not reduced by more than 25%. Recent increase in exploration activities has placed a seven exploration licences and prospects at advanced stages, namely:

- Ramu Nickel and Cobalt
- Frieda/Nena Copper and Gold
- Hidden Valley Gold
- Simberi Gold
- Mt. Sinivit Gold
- Wafi Gold
- Golpu Copper Prospect

A mining lease was granted to Highlands Pacific Limited to develop the Kainantu underground gold mine in June 2002. Negotiations continued in 2003 and the Project MOA and Compensation Agreements were executed in December 2003. Construction of this underground mine has commenced production is expected in January 2005.

The construction of the Ramu nickel/cobalt project has been delayed since 2000 because of very high capital cost and low nickel price then, and lack of progress to secure a third joint venture partner. The China Metallurgical Construction Group Corporation (MCC) is expected to form part of the venture and will acquire about 85% interest in the project and will fund the total US\$650 million for the Project.

Mining products maintained their position as the leading primary export commodity of PNG and also remains a significant contributor of about 17 percent to the Gross Domestic Product (GDP). The mineral product exports accounted for 52 percent of total exports in 2003. The focus in mining now in PNG is on efficiency and cost cutting to enhance revenues and production in the future. The production figures for the following operating mines are briefly outlined below:

Ok Tedi - A total of 16 tonnes of gold and 202000 tonnes of copper were produced by Ok Tedi Mine in 2003. However, in 2004, as a result of technical disruptions at Ok Tedi the production of Copper concentrate was significantly reduced for the first half of 2004. As attend June 2004, 108,902 tonnes of Copper, 7,852kg of gold and 17,362 kg of Silver were produced. Reduction in production may be experienced by the mine due to the present EL

Nino impact on the Fly River that is causing shipping and delivery difficulties.

Porgera – Porgera Mine produced 26.5 tonnes of gold in 2003. Total proven and probable mineral reserves at the end of 2003 for Porgera gold mine was 48.85 million tonnes grading at 3.4g/t gold, which equates to 5.391million contained ounces of gold and a projected mine life of 9 years. Production to the end of June 2004 was 15,765 kgs of gold and 2,944 kg silver, which puts Porgera on target to exceed 1million ounces for 2004.

Lihir – The mine produced 18.7 tonnes of gold in 2003. Gold production in the first half of 2004 was affected by a scheduled 10-day plant shut down and an additional 20 day lost as a result of the main oxygen plant failure. However production to the end of June was 8,629kg (dore) of gold, indicating the mine is likely to produce a little over 600,000 ounces of gold for 2004. The high gains are being made in mining and processing operations and from forecasted higher grades.

Misima Gold Mine – A total of 3.762 tones of gold was produced by Misima Mine in 2003 using the stockpiled low grade ore. The Mines closed its operations on 26 May 2004. Current activities on Misima Mine relate to mine closure and rehabilitation.

Tolukuma Gold Mine – A total of 2.522 tonnes of gold mainly was produced by this underground mine in 2003. The mine produced 1.339 kg of gold and 2,647kg of Silver at the end of June 2004. The increased productions were attributed to higher grade, better planning and good mining practices. In 2004 a production of 7000 ounces per month has been the target.

Petroleum Sector

Mr Chairman, Petroleum exploration was at its peak with a total of 40 Petroleum Prospecting Licenses in 1990 but this has been reduced to about 15 PPL. A total of 11 new applications have been received and are at various stages of licence processing. Two exploration wells are currently active and at this time PPL-219 is being tested. The present four producing wells and a gas well are summarized below:

Kutubu Oil Project – Kutubu Oil Project commenced production in 1991 and up to the end of June 2003, over 279,074 MBBLS and 737,131.360 million standard cubic feet (MMSCF) gas has been extracted. The average monthly production figures for July 2004 was at 17732.00 BBLs.

Gobe Oil Project – Gobe Oil Project commenced production in 1998 and has so far produced 434,646 MBBLO and 2,288,161 MSCF gas up to June 2003. Production figures for Gobe during the month of July 2004 was at 11,438.00 BBL.

Moran Oil Project – Moran Oil Project commenced production in 1998 and has produced 20,908 MBBO at the end of June 2003. Production figure for the month of July 2004 was at 12,044 BBLO.

Hides Gas Project – Hides Gas Project exploits a large onshore gas field, which commenced production in 1991 and to date produced 46,727 MMSCF gas with an average monthly production of 447 MCF including sales to Porgera Gold Mine for electricity generation. A small volume of condensate is refined on site as diesel fuel for local consumption.

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. Inter Oil was awarded the contract and engineering design, procurement and construction have been completed. The first oil entered the refinery on 30th of June 2004 with a total output of 32,500 barrels per day. August 12th 2004 has been marked as first time day of shipment of refined products for the local PNG market.

Geothermal Energy

Mr Chairman, the geothermal energy has been listed hereunder separately because of its enormous potential and renewed resource interest in PNG. Foreign organizations have shown some interest in this resource recently and have had some discussions with local industries and Government officials in PNG. GSPNG has taken steps to liaised with external donors and agencies for assistance in funding equipment to explore and document the geothermal resources following a UNDP funded project in 2003 for a review of our existing database on geothermal resources.

Lihir Gold Mine has constructed the first 6MW geothermal plant in PNG to supplement electricity power generation for its mining operations and 35 MW plant is being construction for operations in early 2005 for the future mining operations. A number of Provincial Governments are thinking of investing in this industry and a survey is being planned to tie in the gaps in our records.

Other Projects

The five year World Bank Mining Sector Institutional Strengthening Project aimed at strengthening the institutional capacity of Department of Mining (DoM) and the Internal Revenue Commission (IRC) has progressed well. The technical assistances are provided in the following areas:

1. Policy and Regulatory
2. Exploration and Mining audits
3. Mineral Tenements Management Component
4. Sustainable Development Component
5. Geological Survey and Development of GIS capabilities
6. Capacity Building for Internal Revenue Commission.

This Project will end in September 2005.

Sysmin - EU Grant

A grant of 50 million Euros for institutional capacity upgrade project was signed in July 2002. It was provided as a result of the effect of the 1997 drought on the mining sector. The EU Sysmin Grant will address and provide the assistance in the following main areas:

1. Independent Deep Sea Tailing Placement
2. Building New Purposed-Built Department Building
3. Establishment of Small Scale Mining Vocational Centres
4. Airborne Geophysical Survey of the PNG Highlands and Huon Peninsula.
5. Geological Mapping and Mineral Potential Assessment of the PNG Highlands.
6. Formulation of a Mining Waste Management Policy.
7. Hardware Procurement to DoM
8. Geological and Mineral Resources Information System

Mining Resource Authority (M.R.A.) is one main component and has a bearing on the two main Geological and Geophysical Components that are expected to add new raw data and increase exploration potential to PNG. The process of converting the Mining Department into an Authority was a special condition imposed by the European Union to allow the release of almost 70% of the total Euro 50 million of funds Airborne Geophysical Survey and Geological Mapping and Mineral Potential Assessment. This condition has now been met by the Govern-

ment with the approval on 8/9/04 by Cabinet on the MRA Submission.

PNG has recently formed a Delimitation Working Group to look into the Extended Continental Shelf Proposal. The Working Group meeting has proposed resurvey for the base points and Commonwealth Secretariat has responded and assisted.

Geological Hazards and Monitoring

PNG has received considerable benefit in the past from the assistance of SOPAC in efforts to mitigate the effects of natural disasters. There is a need to increase awareness to save cost in all sectors in order to bring real development to the rural population. It is sincerely hoped that this co-operation will continue and the EU EDF8/SOPAC Project is expected to accelerate disaster awareness and save lives. Funds can be saved by collaboration and real rural development can eventuate and we are eager to advance this project in PNG.

Mr Chairman, PNG has experienced several damaging natural disasters in the recent past. GSPNG has been involved in carrying out assessments and investigations into some of these disasters. However, much work and ongoing observations have been severely constrained by financial difficulties and lack of appropriate equipment. Port of Lae City for example, remained on the SOPAC agenda, awaiting another submarine or terrestrial landslide. SOPAC is requested to assist in the data collection as part of the Lae City Project.

Regional Geoscience Mapping

Chair, GSPNG has conducted Component 5 of the World Bank Project Geological Survey Strengthening in Wau-Bulolo area. This area was originally selected because of the past alluvial gold rush and present high concentration of grass root mining and the fieldwork was aimed at assisting to increase output of gold production and revenue to PNG. Detailed geological mapping and re-interpretation of the geology has been completed and a report is in progress. The report when completed will form part of the databank required in order to lure in investment to PNG. This is part of our Strategic Planning (big picture) to increase exploration and revenue for the country. We hope geological mapping and groundtruthing of the remotely sensed data will increase our exploration potential complimented by aeromagnetic Survey in the near future.

We believe the conversion of the Department into an Authority will see most of our strategic planning work materialising with added funding and human resources, the two main resources areas that the Department and the Government of PNG has suffered for a long time.

Thank you Mr Chairman.

SAMOA

The Samoan Representative briefly addressed Council, congratulating the new Director upon her leadership of her team of staff which she was sure would steer the Secretariat to ably service the needs and priorities of the member countries. She acknowledged the benefits to Samoa of SOPAC assistance highlighting the good applied science, training and capacity-building opportunities in earth sciences and coastal morphological mapping, energy and seabed mapping to name a few. She expressed Samoa's wish for more training in disaster management and hydrology and concluded by thanking the donor community for their contribution to the region and to Samoa.

SOLOMON ISLANDS

Chairman, thank you for the opportunity to make representation of my delegation from Solomon Islands at the opening of this 33rd Annual Session of SOPAC.

I on behalf of my delegation representing the good people of Solomon Islands at this 33rd SOPAC Annual Session would at this outset congratulate you (PNG) on your appointment for chairmanship at this occasion and for SOPAC in the next year cycle. We do look forward to your leadership, guidance and facilitation of deliberation in the next few days of this session and move so for the SOPAC organisation in the next year of Programmes.

I would also like to thank the outgoing Chair (Niue) for the services rendered to SOPAC during the last year period.

To the hosting country, of this 33rd SOPAC Session, Papua New Guinea, I extend my delegations sincere expression of gratitude for catering for this important annual occasion of SOPAC, this year 2004. I note that this occasion should have been hosted in your beautiful country of PNG, but for reasons, you have seen it fit to convene this 33rd SOPAC Session here in Warwick, Fiji.

To the SOPAC Secretariat, I on behalf of my delegation convey our most profound appreciation for the services rendered to the region and move specifically to Solomon Islands during the last year period, although noted to be minimal.

My special thanks is extended to the Director, Ms Cristelle Pratt, within your first few months of assumption of the Directors position had seen it fit to make a visit to us. Solomon Islands in June 2004. I do hope that you witnessed for yourself the situation where we are in now after the troubles of the past years.

Chairman, I am pleased to report to this gathering that the Law and order situation in Solomon Islands had improved greatly and a sense of normalcy had returned. This has been so by the good efforts of the Regional Assistance Mission to Solomon Islands, RAMSI – "Helpem Fren" led by Australia. To you all fellow country delegates of countries who participated in Mission to Solomon Islands, I extend the people of Solomon Islands most profound gratitude for the services and assistance provided. Without the help under the Mission, our future would be unknown.

Chairman, Solomon Islands still considers SOPAC an important regional inter-government geoscience resource organisation. We value very much our association with SOPAC because we view SOPAC's work programmes as complementary to our national goals and programmes in geology, minerals, water, energy, hazards and related environmental geosciences.

Our commitment to SOPAC will and will always be there. This is proven by continual attendance at the SOPAC annual meetings despite the problems and difficulties of the past four years and non-payment of 4 years arrears of annual contributions.

I am to inform that Solomon Islands is committed to fulfil its obligations to pay-up its annual contribution to SOPAC, hopeful before the end of this year.

At this juncture may I take this opportunity to all donor countries organisation and individual scientists/others who had supported SOPAC in whatever form during the last year period. I do look forward to your continual help and support in the next year.

Chairman, thank you and I thank you all for your attention and I wish you all a good, happy and successful 33rd Annual Session.

TONGA

Mr. Chairman, SOPAC Governing Council Members, Representatives of Governments Regional and International Institutions, Distinguished Scientists and SOPAC Advisers, Director and Staff of the Secretariat, Friends and Supporters of SOPAC, Ladies and Gentlemen:

It is indeed a great honour for me and my delegation to be here in the Coral Coast, representing the Government and people of the Kingdom of Tonga in the 33rd Annual Session of SOPAC Governing Council. Your Excellency, we would love it if this “one in a lifetime event” were hosted within the golden shores of Papua New Guinea. This would enable us to see and witness the beauty and friendliness of the “Birds of Paradise”.

However, on this very important occasion, our delegation wishes to join hand in hand with my other colleagues in congratulating Your Excellency on your new appointment as Chairperson of the 33rd Annual Session and further assuming the leadership of SOPAC Governing Council for the next twelve months to come. Mr. Chairman, we have the fullest confidence in your leadership and we trust that Your Excellency’s years of experience in diplomatic activities would guide us smoothly along the “bumpy and boggy road to success.” Further Mr. Chairman, our delegation would also like to offer our most sincere appreciation to Niue as the outgoing Chairperson for her efficient leadership and guidance of the Governing Council over the past twelve months, despite her many commitments to the people and Government of Niue, in trying to recover the whole Island from the devastating effects of “Tropical Cyclone Heta”.

Mr. Chairman, unlike in previous years, the Tongan Delegation has come to this Annual Session with a renewed sense of dedication and commitment to work closely with SOPAC Secretariat in order to carryout some of the activities that had been prioritized and placed under our Tasks Profile for many years. Although Tonga has looked at SOPAC as an important implementation partner for its sustainable development projects, Tonga for many years, has failed to attract the Secretariat’s fullest engagements.

However, over the last twelve months we have sighted a marked improvement on the overall performance of the SOPAC Secretariat on the activities under our Tasks Profile. It is pleasing to report that the commitments made by SOPAC Secretariat to implement activities, identified

under our Tasks Profile as priority areas, were executed at their highest level of achievements as compared to those made over the last five years. It is our wish and hope that the Secretariat will continue providing the same services in years to come so as to restore back our fullest confidence and commitment on the abilities and capabilities of our beloved organization, SOPAC.

Mr. Chairman, I do not intend to prolong my statement any longer, since there will be more appropriate time for me later to raise further issues when we go through each of the meeting’s agenda items, on the next few days of our deliberation. However, it would be remiss on my part, not to thank various donor agencies, scientific organizations, friends and supporters that have generously contributed and continued to provide assistance in some way or another to implementation of SOPAC work programs. Without the sustained support, it would be difficult to expect the Secretariat to fulfill its mandate from the Council.

Last but not the least, my delegation would also like to extend our deepest appreciation to the Director and Staff of the Secretariat for the efforts they have made during the past twelve months. Without your loyalty and dedication, this meeting may not be possible.

‘Ofa atu, Malo ‘aupito.

TUVALU

Mr Chairman, Distinguish National Representatives, Director and staff of SOPAC, Donor Agencies, Ladies and Gentlemen.

Thank you Mr Chairman for the opportunity given to me to present Tuvalu statement at this opening session. Let me firstly extend our appreciation and gratitude to the Government and people of Niue, as outgoing Host Country for their good guidance even at time of disaster. Our prayers and well wishes go to the people of Niue as they are recuperating and recovering from the damages of the cyclone. On behalf of the Government of Tuvalu, I would like to congratulate you Mr. Chairman for your new role in chairing this annual session.

Tuvalu recognizes the ongoing activities carried out by SOPAC which covers a wide spectrum of field. As we meet today, SOPAC chartered survey vessel Turagalevu is *soldiering-on* with the Tuvalu Marine and Field Survey under the EU EDF8 Project. This is a classic example of SOPAC dedication and commitment

to assist its members. For delegates' information, the tasks involve: –

1. Marine Survey

- bathymetric survey of all nine islands of Tuvalu
- seabed bathymetry of risk area (wave surge August 2002) on Funafuti
- surveys of proposed sites for bridge/ causeway on Nanumea & Vaitupu
- survey of proposed ramp site for Niutao

2. Water and Sanitation

- water resource survey on Fualefeke & Tepuka
- advise on water sources on Vaitupu
- advise watertanks on Nui & Nanumaga
- sampling of saltwater/ saline intrusion in Pulaka Pits on Niutao & Nui
- advise(NMDO) on drought back- up” systems for Nukufetau, Niutao, Nanumea & Vaitupu

3. Risk Analysis [NMDO] – emergency (cyclone) communications for Niulakita & Nukulaelae

- emergency (cyclone) communications for Niulakita & Nukulaelae

4. Aggregates & Coastal Processes

5. GIS & Remote Sensing

Mr Chairman, Tuvalu hopes that findings from the survey will provide solutions to areas of national concern. The results from the survey will be utilized as *strong decision- making tool* at different levels in the country. We will be able to comment further on these findings well after the survey. On behalf of the Government of Tuvalu, I would like to thank SOPAC with the implementation of the Marine and Field survey.

Like other developing nations, resources and technology constraints in Tuvalu are regarded as hurdles to our developments and progress. Contributions of SOPAC through its three main Core Divisions; Community Lifelines, Community Risk, and Oceans & Islands fortunately helps us with technical and scientific needs. Quality and efficient roles of SOPAC in the region are reflected by good coordination and communication between administration and supporting managers. Quality Assurance, Pro- Active approach and other similar slogans are

fairly new in the Tuvalu context, in terms of monitoring the progress of developments and projects. Tuvalu would like to be part of the team with assistance from SOPAC to make sure that every project are monitored thoroughly from start to the end. Extended review periods and follow- ups by SOPAC in terms of country visits is recommended to make sure that the projects are successfully implemented and that they also meet their objectives.

Mr. Chairman, before I came to this meeting, I was asked to follow up with SOPAC on the following areas:

1. Finalization of Tuvalu Maritime Boundary with her neighbors and outcome of independent verification of data by Geoscience Australia.
2. Acquisition & geo- referencing of IKONOS satellite images.
3. Review the status of Tuvalu EVI.

Mr. Chairman, Tuvalu values the support provided by SOPAC through Fellowship Attachments and In-country workshops.

Finally Mr. Chairman, I wish to welcome you as Chair, and sincere thanks to the outgoing Chair of Niue for her role. Through you Mr Chairman, I wish to specially congratulate the Director of SOPAC in her first year in office, and her staff for their excellent effort in the implementation of the Tuvalu Marine and Field survey. I also like to thank the Government of Papua New Guinea for hosting this meeting, and of course the Government and friendly people of Fiji for this wonderful venue.

Last but not least, Tuvalu would like to thank the Donor Agencies for their ongoing support in the region. It would not be possible to carry out SOPAC activities in the region without your continuous support.

Fakafetai Lasi

VANUATU

Vanuatu would like to join others in thanking the outgoing chair for the services rendered during the past 12 months and likewise congratulate the Ambassador of Papua New Guinea to Fiji for his election as the chairman for this session. We would also like to convey, through you Mr Chairman, our sincere gratitude to the Government of Papua New Guinea for hosting this 33rd SOPAC Annual Session.

We see this session as very important since the Secretariat and its future program will be discussed and determined by the Council members.

Due to other important commitments and other developments taking place in our country, our National Rep is unable to attend the 33rd Annual Council Meeting. He however wishes the Governing Council well in its deliberations.

Vanuatu would like to commend the Secretariat for its technical accomplishments during 2003/2004 work programme year. An account level and amount will be reserved and discussed in the work programmes agenda. In particular, we note that the European Union project and the Disaster risk programme activities have been the most active programme in the country.

In next year's program we place our priorities on tasks relating to Minerals, Maritime Delimitation Boundaries & Application for the Extension of Continental shelf, Institutional Strengthening and Capacity building in the area of Disaster/Risk Management, poverty alleviation, the EU ITC centre establishments and its operation and the Human resources development.

In closing, we thank the donor governments and agencies who have continued to fund SOPAC work programs implemented in our country. We note that there are approved outstanding tasks that are yet to be undertaken but could not be executed which maybe due to unforeseen circumstance faced by the country. In this context we request that these tasks be reconsidered in the next years programme.

Thank you.

PART II: STATEMENTS BY CROP ORGANISATIONS

PACIFIC ISLANDS FORUM SECRETARIAT

- I would like if I may to take this opportunity to update you on recent developments of the Pacific Plan:
 - ✧ Which, as I'm sure you are all aware by now, aims to create stronger and deeper links between Pacific Island Countries; and to identify the sectors where the region can gain the most from sharing resources of governance and aligning policies. I am grateful to the High Commissioner and the Director for referring to it so comprehensively this morning.
- At the Pacific Islands Forum meeting last month in Apia, Leaders reinforced their intention for the Plan to be the main instrument for promoting their Pacific Vision 'so that its people can lead free and worthwhile lives.'
 - ✧ The aim is to deliver real benefits for the people of the Pacific by proposing concrete plans for the enhancement of economic growth, sustainable development, good governance and security – the key core goals of the Forum.
 - ✧ It will also be used as a springboard for stimulating debate on how to shape the region's longer-term future.
 - ✧ This should mark a new era, historically speaking for the Pacific, requiring different kinds of responses in the region.
- The concept of the Pacific Plan arose from the Special Leaders' Retreat in Auckland in April this year where Leaders considered the Eminent Persons' Group Review of the Forum - the first to be conducted in its 30-odd years of existence.
 - ✧ At that meeting, Leaders issued the Auckland Declaration, stating that the serious challenges facing the countries of the Pacific required the careful and serious examination of the pooling of scarce regional resources to strengthen national capacities.
- The Pacific Plan will be carried forward by the Forum Secretariat as a dynamic and multi-layered process evolving over a number of years:
 - ✧ Designed to improve cooperation in key sectors, to provide efficiencies in the way regional organisations interact and to begin harmonising a range of administrative and other processes.
- A Working Group chaired by the Secretariat's Deputy Secretary General and calling on expert support from key regional agencies including SOPAC, SPREP SPC and USP, prepared a framework for the Apia meeting for the development of the Pacific Plan, along with an assessment of the current state of our regional cooperation.
- At the Apia Forum, Leaders approved the Terms of Reference for preparation of the Plan and noted that there would be an extensive but necessary consultation process through the coming year.

- The people of the Pacific must feel a strong sense of ownership of the design and implementation of the Pacific Plan. It is, after all, supposed to serve their best interests and it will have failed if it does not do that. We therefore see the Plan as being the product of as wide a consultation process as we can achieve.
- The degree of buy-in will be critical - on the basis of my consultations around the region, there is unquestionably enthusiasm for moving forward, although this enthusiasm is in couched in fairly general terms.
- The next year will tell us a lot about how far and how fast regional countries are prepared to go.
- The Pacific Plan Task Force, held its first meeting at the end of August at the Secretariat Headquarters in Suva.
 - The Task Force is made up of senior official representatives from all Forum countries.
 - And representatives from CROP organisations including the Forum Secretariat, SPC, USP, SOPAC and SPREP.
- The Task Force agreed on an action plan for development of the Pacific Plan.
 - Initially, it is looking at vital sector by sector cooperation and at harmonising, where possible, processes and procedures as the means by which the best cooperation among our regional organisations might be guaranteed.
 - We will be looking to produce early gains, or 'low hanging fruit' where we can, both for their own sake, and as a means of maintaining momentum.
 - We will also be producing a more general framework, proposals for how we might take matters further.
 - that is, clearly, a very important aspect of the work if we are thinking, as I think we must, about taking our cooperation to new levels, conceptually speaking.
 - In any event, we need to produce a substantial outcome for the Leaders at their 2005 meeting – an outcome which makes practical advances and gives them a basis for judgement about how they might want to further the process.
- Some of the early initiatives being considered are in specific areas of concern for:
 - SOPAC, These include: setting up effective national mechanisms to ensure effective participation in and support of regional cooperation (a very significant matter, this, and one that, as I think we all know, we shall have to tackle in a concerted way); regional support for countries in meeting their reporting responsibilities to fulfil international reporting requirements; custodianship and maintenance of all regional statistics, across all sectors to underpin high quality research to support high quality research and give us a better sense of how we are fairing; drafting regional model legislation and support regulation in respect of land management, proprietary rights for genetic resources and the mining of aggregates; early warning and response systems for natural disasters; and helping with implementation of existing policy commitments on the Pacific Ocean Policy and Action Plan, Standards for Mining and Mineral Exploration (marine & land), the Pacific Islands Energy Policy & Plan (PIEPP), the Pacific Regional Action Plan on Sustainable Water Management (Pacific RAP), and waste & pollution management.
- What does the Pacific Plan - this new approach to development in the region - mean more broadly for regional organisations?
 - A new CROP Charter prepared by the CROP Heads was provided to Leaders in Apia.. Its aim is to engender closer, more effective levels of cooperation among the existing regional organisations.
 - The importance of getting the best out of the CROP mechanism is, in the context of the Pacific Plan, I think, very clear. We have taken some steps in this regard. I think though that the comments made by the outgoing Chair this morning throws light on aspects of the task before us. We as a collective simply have to get better at it.
- Regional cooperation in the Pacific has had its successes, no doubt, and it has been a process without which the region may well have been considerably worse off.
 - Most recently, cooperation in security areas has improved significantly, as it has in trade. Sectoral cooperation in areas like health, education, fisheries has likewise produced some good results and there is some prospect for useful collaboration in aviation.

- ⌘ But, while we have already been moving in that cooperative direction in many ways, the new Leaders' Vision for the Plan represents a much stronger directive to move beyond the present boundaries.
 - ⌘ We need to take advantage of the region's interconnectedness and to find new and creative ways of harnessing those collective capacities.
- Regional organisations, of course, have a key leadership role to play in development of the Pacific Plan.
 - ⌘ But beyond that, we do need to keep very much in mind that there are a lot of resources tied up in these organisations and it is our fundamental duty to see that those resources are put to the best and most efficient possible use on behalf of the region's people.
 - ⌘ And we will have continued support in this from many of our partners – the recently launched EPA negotiations with the EU will, for example, strongly complement the new regional integration objectives. We shall be seeking to enter into substantive discussions shortly, in the same vein, with the ADB, UNDP and other agencies.
- The Pacific Plan should then be seen as, essentially, the script which we regional public servants must work to.
 - ⌘ More particularly, the Pacific Plan presents regional agencies with a unique opportunity in the drivers' seat of regional development at the broadest level.
- The Pacific Plan is a large, if not daunting, undertaking involving a lot of discussion and as many Pacific people as possible.
 - ⌘ We are talking about a process as much as an outcome and regional institutions will need to remain centrally involved.
- All rhetoric aside, the future really is to play for and our people must be permitted to play for it.
 - ⌘ We know the challenges – we work and live with them every day.
 - ⌘ But we all need to be discussing, as intensively as we can, the issues the region faces and the opportunities it may grasp in the context of the new Pacific Plan.
 - ⌘ I encourage you to do that.

SECRETARIAT OF THE PACIFIC COMMUNITY

Mr Chairman, Honoured Delegates, Director and Staff of SOPAC, Heads of International and Regional Organisations, Development Partners, Observers, Ladies and Gentlemen....

Mr Chairman, allow me first of all, to congratulate you for chairing this 33rd Annual Session of the SOPAC Governing Council. Thank you for the opportunity to make a brief statement on behalf of the Secretariat of the Pacific Community. My Director General who unfortunately cannot be here sends her warmest regards and best wishes for a very successful Council meeting.

Mr Chairman, I begin my remarks by congratulating Ms Cristelle Pratt, who is leading the SOPAC team to this 33rd Annual Session of the SOPAC Council for the first time in her capacity as the Director of SOPAC. I wish to register at the outset that SPC accords great value to the work SOPAC does in our common member countries and territories and will continue to collaborate closely with SOPAC in areas that lend themselves to joint programming approaches.

The SPC has enjoyed a very good working relationship with SOPAC over the past few years. It has been a rewarding experience working with an organisation that shares a common vision of 'excellence of service' to its membership.

In our statement to the 32nd Annual Session of Council held in Niue last year, we expressed SPC's strong belief in a " 'strategic, collaborative approach' and partnership between regional organizations in responding to, and addressing important priorities of our respective member countries and territories". Mr Chairman, a number of opportunities occurred this year that clearly demonstrated this vision. I note that many of them are covered in papers for this meeting, and pooling of resources and expertise between regional organizations, where both SOPAC and SPC participated in are as follows:

- **CROP Remunerations Review.** SOPAC, PIFS, SPC, SPREP, FFA, SPBEA participated in the Working Group established by FOC last year, which endeavour to harmonise the terms and conditions for remuneration for staff working in CROP organizations.
- **The Pacific Plan.** SOPAC, SPC, USP and SPREP assisted the Forum Secretariat in much of the Pre-Forum sector analysis work to identify areas of existing regional

cooperation, gaps, and areas for further deeper and broader cooperation. Post Forum, SOPAC, SPC, SPREP, USP continue to be part of the Pacific Plan Taskforce to develop the Pacific Plan being led and coordinated by PIFS Secretary General.

- **The new CROP Charter.** Forum Island Leaders called for a new CROP charter that more clearly delineate its role, the working relationships between member organizations, and the role of the PIFS Secretary General as the permanent Chair of CROP. The new CROP Charter approved by Leaders in Apia was the outcome of the CROP Heads deliberations on July in this year in Port Vila, hosted by USP, at their Emalus campus.

At the organisational level, SOPAC and SPC have great potential for even closer collaboration in some areas of their respective work programmes. Such areas include, but are not limited to:

- **The SOPAC and SPC GIS programmes.** Both SOPAC and SPC run GIS activities in respective areas under their mandates. Closer collaboration between these currently separate GIS programmes could probably add value to each other's utility and the end users of these systems at the national levels. *In addition, the SOPAC GIS programme could also be very helpful for the work of the SPC land Resources Division covering both agriculture and forestry.*
- **SOPAC's work on coastal zone and continental shelf and boundaries and the work of the SPC's Marine Resources Division covering its coastal and oceanic fisheries programmes and maritime programme.** There is potential for closer and deeper collaboration and sharing of resources in these programme areas.

At the executive management level, SPC has continued to enjoy the exchange of ideas, information and strategic organisational issues with SOPAC. SPC has the pleasure of inviting the previous director of SOPAC twice to participate at its annual executive retreat as an important way of sharing information and ideas. This is an opportunity SPC would like to also extend to the new director of SOPAC commencing at our next executive retreat, which will be held in Fiji in the first quarter of 2005.

One important area of mutual interest to SOPAC, SPC and SPTO is the Pacific Village Project, which is the combined office complex that will house the headquarters for SOPAC and SPTO, and the Regional Office of SPC in Fiji. This project has been on the drawing board for

a few years, but it is now looking likely, that this project will come to fruition in the not too distant future. I am sure, the delegate from Fiji will update this meeting on the progress of the Pacific Village Project to date.

Mr Chairman, I now wish to conclude by most sincerely thanking your government for hosting this 33rd Annual Session of the SOPAC Governing Council, and you for giving the opportunity to share these thoughts on behalf of SPC.

May God guide and richly bless you all.

SECRETARIAT FOR THE PACIFIC REGIONAL ENVIRONMENT PROGRAMME

Mr Chairman, Excellencies, distinguished delegates, representatives of sister CROP agencies, ladies and gentlemen – it gives me great pleasure to attend this SOPAC Annual Session for the second time and to present a statement from SPREP.

Mr Chairman, SPREP has just completed its 15th SPREP Meeting and the 5th Environment Ministers' Forum in French Polynesia. Among the key outcomes of these two meetings was the approval of a name change to the organization. Rather than the South Pacific Regional Environment Programme, the organization is now called the Pacific Regional Environment Programme. The Secretariat to the organization is now the Secretariat of the Pacific Regional Environment Programme thus still retaining the SPREP acronym. These two meetings Mr Chairman also approved SPREP's Action Plan for 2005-2009 and our Strategic Programmes for the next ten years (2004-2013), along with a realigned secretariat structure. These two key documents Mr Chairman, reflects the needs and priorities of our member countries, donors and partners and how they want SPREP to carry out the promotion of the sustainable stewardship of the region's environment. More importantly, Mr Chairman, SPREP's Action Plan captures the new Pacific Vision that was adopted by the Forum Leaders last year.

The new Pacific Vision, Mr Chairman, calls for closer and stronger collaboration among CROP agencies and their member countries, donors, the civil society and partners and friends of the region. Already, SPREP has committed its resources and expertise to the Task Force which has been assigned with drafting the Pacific Plan – the main instrument for promoting the new Pacific Vision.

I am happy to report that SPREP through the CROP Sustainable Development Working Group is working side-by-side with other sister CROP agencies, particularly the Forum Secretariat, SOPAC, SPC and USP, in providing technical assistance to PICs through their national summits, the drafting of their National Sustainable Development Strategies, as well as participations in their donor round tables. FSM and Kiribati have completed their National Sustainable Development Strategies. Tuvalu and the Cook Islands are in the process of or close to drafting their National Sustainable Development Strategies. We are looking towards assisting those of our members, upon request, who have yet to undertake this important exercise as a commitment towards engendering sustainable development for our island states – a commitment our Leaders made in Johannesburg two years ago. More recently, we made available one of our experts to participate in the team that was mandated by the Forum Leaders to work with the Government of Nauru to develop a proposal on how the Forum could assist them through their current economic crisis. I intentionally mentioned these Mr Chairman, to demonstrate the priority that SPREP places on Small Island States and it is my fervent wish that, with all our effective collaborations, the Republic of Nauru will be able to bounce back from the doldrums they are currently under.

The inter-linkages between the activities of SPREP and other sister CROP agencies, SOPAC included, is a fact of life. SPREP is committed to the CROP and its working group process to ensure effective coordination and the most efficient use of resources for the highest return to the people we jointly serve. I am happy Mr Chairman to report on the fruitful interactions that the two organizations have had in the Sustainable Development Working Group, the Energy Working Group, the Information and Communication Technology Working Group, the Marine Sector Working Group and the CROP UN Millennium Development Goals Working Group. On specific activities Mr Chairman, Climate Change is one of the areas that the two organizations are working together on. I am happy to note the interactions in the Forum-established Ad-hoc Working Group on Climate Change and the representation of SOPAC in the Project Advisory Committee of our climate change mitigation initiative called the Pacific Islands Renewable Energy Project or PIREP. Speaking of the PIREP Mr Chairman, I appreciate that this initiative cuts through both SPREP's climate change programme and the energy-related activities of the members of the CROP Energy Working Group. I am therefore

committed Mr Chairman to ensure that while SPREP is and will continue to be the execution agency of this climate change initiative, the implementation will be done in collaboration with SOPAC's energy programme as well as those of other members of the CROP Energy Working Group and the Working Group on Climate Change, Climate Variability and Sea Level Rise.

On the global level Mr Chairman, the immediate task at hand is the upcoming Mauritius International Meeting to undertake the 10- Year Review of the Barbados Programme of Action for the Sustainable Development of Small Islands Development States or SIDS, including the very constituents we jointly serve. As you know, preparations are already underway and, with technical assistance from our CROP agencies, our members are engaging our partners in a series of informal consultations to secure "actionable strategies" that will reinvigorate the implementations of the Barbados Programme of Action. This gathering of Leaders at the Mauritius meeting maybe the last opportunity for us to reaffirm to the international community of our "special case for environment and development" as initially mooted in Agenda 21. SPREP will therefore continue to work together with SOPAC and other sister CROP agencies in this important process to better prepare our Pacific Leaders for the Mauritius meeting in January next year.

To conclude and through you Mr Chairman, I would like to thank Council, the Director and the Secretariat for the opportunity to address this honorable gathering. I can assure you that your Director and I will continue to build partnerships and synergies that will best serve the common interests of our two organizations and the people we serve.

Thank you

Attachment to SPREP Statement

SPREP's comments on Agenda Item 6, Sub-agenda 6.1, Title 6.1.6 - Report on SOPAC's activities concerning climate change, sea level rise and climate variability. Also apply to Agenda Item 8, Title 8.2 – Issues arising in the Community Lifelines Programme

On the Pacific Islands Renewable Energy Project (PIREP), SPREP reported that this is a project of hers and is a continuation of an almost ten years of collaborations among UNDP, the GEF and SPREP on building the capacities of PICs to deal with the challenges of climate change. SPREP admitted that while the project has a

renewable energy element, the emphasis has, is and will continue to be on the bigger picture of climate change and how SPREP can assist PICs to meet their reporting requirements to the Conference of the Parties and the international negotiations within the framework of the UNFCCC and the Kyoto Protocol.

SPREP informed the meeting that the PIREP has been designed and is currently being implemented in full consultations with the CROP EWG, including SOPAC, and at the national level this is done through a Country Team consultative approach. SPREP updated the meeting on recent developments regarding the PIREP:

1. In the July 2004 meeting of the CROP in Vanuatu, the CROP EWG through a paper on its revised ToR advised CROP that energy is a cross-sectoral subject which cuts across water, health, environment, telecommunication, education, etc, and therefore it is to be expected that there are many players and donors interacting in energy-related activities.
2. In a CROP EWG paper to the July 2004 CROP meeting justifying the continuance of the CROP EWG, CROP was reminded of the only decision of the Forum Leaders on energy sector coordination in 1981, i.e, that there be a coordinating agency and that the other regional agencies continue to do their respective energy sector-related activities.
3. In a July 2004 multipartite review meeting of the PIREP which was attended by SOPAC, Greenpeace, PICs, UNDP and GEF, the meeting approved that the PIREP be extended in order to allow SPREP to smoothly continue with its execution of the second phase of the project which will be called the Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project (PIGGAREP).
4. The recent SPREP meeting in French Polynesia approved that SPREP continue to develop and execute the second phase of the PIREP and to implement the project in collaboration with SOPAC and the CROP EWG including civil society organizations like Greenpeace, WWF and the Pacific Concerns Resources Centre.

UNIVERSITY OF THE SOUTH PACIFIC

Honourable Chairperson, Director of SOPAC, Ms. Cristelle Pratt, Distinguished SOPAC National Government Representatives, Distinguished representatives from other Governments, Representatives from Fellow CROP Agencies, and from other Regional and International Organisations, Participating Geoscientists, Ladies and gentlemen ...

The University continues to work in close collaboration with the South Pacific Applied Geoscience Commission (SOPAC), and this working relationship has been welcomed by both Organisations. The Acting Vice-Chancellor, Professor Rajesh Chandra, 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 33rd. Annual Session of Council in Fiji, fruitful deliberations. The University wishes to thank most sincerely the Government of Papua New Guinea for organising this 33rd Session, and the Government of the Fiji Islands for generously agreeing that the venue be in this country.

The University wishes to emphasise that it places cooperation among CROP Agencies as a high priority on its agenda. USP regards as most important the joint-approach in addressing issues that seriously affect our region; sometimes sharing is difficult to achieve, but the University will spare no efforts in endeavouring to do so. This is clearly expressed in the University's Research Plan, and in the Future Directions Consultative Report.

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. Four 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. Many of these young SOPAC staff personnel have chosen to continue their own postgraduate studies at the USP.

This year, 2004, SOPAC again supported teaching and other services at USP: the third year Applied Geology course in the Earth Science BSc (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 Commission staff to assist with teaching.

The University is currently undertaking discussions on the possible restructuring of both the faculty/School groupings and the academic programmes the faculties support; the USP Council's committee for the University's future directions is also proposing a new direction for USP from now until the year 2020.

With respect to the Earth Science and Marine Geology Certificate Programme, the University will continue to confer the award for as long as SOPAC should require this. The Certificate studies continues this year with the third year of the current cycle, and all look forward to a new set of graduates emerging from the next USP graduation in April of 2005. 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. The Marine Studies Programme has been involved with the development of the Oceans Policy for the Pacific Islands; and the University seeks to strengthen its participation and representation on all CROP Working Groups, including the (newest) Group on Sustainable Development.

- SOPAC is represented on the USP Marine Studies Advisory Group;
- Marine Studies Programme and SOPAC collaborated in the last SOPAC boundaries meeting conducted in Nadi 2002, and looks forward to further collaborative discussions and activities.
- Marine Studies Programme (MSP) is endeavouring to develop closer collaboration with SOPAC, with special attention to research in Kiribati; and indeed in discussions with the SOPAC Director last month, the possibility was raised of establishing a MOU (along the same lines as being developed with SPC).
- MSP is currently developing a BSc Environmental Science stream in "coastal management", and looks forward to SOPAC input and collaboration in an area significantly addressed by SOPAC since its inception.

The Pacific Centre for the Environment and Sustainable Development (PACE-SD), established in 2001 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, was held last year at the University. This face-to-face, full-time programme afforded the completing student two postgraduate courses which may be used for a postgraduate diploma. Twelve (12) students from 10 of the regional countries were enrolled; SOPAC has assisted with the coastal profiling part of the training, and the USP is sincerely appreciative of this contribution.
- The GEF-funded AIACC Project: USP has negotiated with SOPAC's Vulnerability assessment team for closer interaction.
- USP has worked closely with SOPAC's EVI Project, during the development of SOPAC's strategy document for sustainable development.
- The Director of SOPAC is a member of the PACE-SD Advisory Board.

The University has been strongly represented alongside SOPAC in the CROP Energy Working Group (EWG) and

- Has been heavily involved in the formulation of the Regional Energy Plan and Policy (PIEPP). USP continues to emphasise a focus on education, training and R & D. A strong interest exists in establishing a Centre of Excellence in Energy, and the University is to discuss this with donors under the Type 11 initiatives;
- SOPAC-DANIDA funded project on capacity-building for wind energy is now under way; the PG course is currently being offered with an enrolment of 4. The wind turbine is to be located in the MRD Compound, Suva, near the SOPAC Secretariate. A UNESCAP Pilot training activity was organised in November last year, and the activity was a collaborative one with SOPAC.
- The Department of Physics has appointed a Senior Lecturer in Renewable Energy, which will add to the regional strength in expertise; a growing interest in postgraduate studies in the energy area is evident, and there is scope for further scholarships for regional studies in renewable energy;
- Two Memoranda of Understanding (MOU) have been signed between SOPAC and the University: Collaboration in the technical areas of water quality, and Preparation with the Second High Level Adaptation Consultation.

Staff of the USP Department of Geography continue to be involved in research and publications activity closely related to SOPAC's applied research and consultancy:

Dr James Terry and Professor Patrick Nunn continue to research in the hydrological responses of tropical Pacific island rivers to large storm events, at landscape responses in the region to climate change (Terry), and island tectonics, sea-level changes, and the significance of environmental details in Pacific Islander myths (Nunn). All recent publications by these authors are available by consulting the USP website.

The Department of Geography has strengthened its GIS Unit with the addition of two more senior staff, including Dr. Nick Rollings as the Unit's new Director; a new senior lecturer in GIS and Remote Sensing has also been ap-

pointed. These latest moves by the University and the Department demonstrate the USP's recognition of the increasing role that geospatial science is playing in the Pacific region. USP has also agreed to the development of a Geomatics study programme which will complement the existing Land Use Planning and GIS studies. Another area of current investigation is the use of geomatics and GIS in multihazard mapping - another possible field of collaboration with SOPAC. The Department looks forward to significant collaboration with SOPAC in the areas of capacity building in the spatial sciences to improve informed decision-making in the region; discussions between the GIS staff and the ITC SOPAC staff are currently in progress.

The University Library acknowledges the receipt of SOPAC publications for the Library's Pacific Collection, which supports research and consultancy in the areas of SOPAC focus. The University wishes to remind SOPAC that special arrangements are in place for SOPAC professional staff and SOPAC consultants to have access to the Library's Pacific Collection. This policy extends the facility of USP Library access to all staff of CROP Agencies

USP Solutions, the commercial unit managing many of the University's consultancies, is about to complete a contract for an AUSAID-funded research project, "The Economic Impact of Natural Disasters on Development in the Pacific". The research team, lead by Associate professor Biman Prasad, will develop economic analysis tools for assessing the impact of disasters in the Pacific region, and evaluate the economics of Disaster Risk Management; USP Solutions is collaborating with SOPAC to implement this project.

On a final note, the Acting Vice-Chancellor of the University of the South Pacific wishes to thank most sincerely the SOPAC Governing Council for the invitation to once again be represented at this, and past council meeting. The University continues to note, and highly commends, the excellent contribution the Commission is making to geoscience research and sustainable development in the Region, and wishes the SOPAC Director, Ms Cristelle Pratt, and all SOPAC staff and consultants, all the very best of success in its future work.

PART III: STATEMENTS FROM SUPPORTING GOVERNMENTS AND INTERNATIONAL AGENCIES

ARGO INTERNATIONAL PROJECT

The International Argo Project makes global observations of ocean temperature, salinity, and circulation using an array of autonomous profiling floats, presently numbering 1400 instruments in all of the world's oceans. For the first time, the global oceans are being continuously monitored for a wide range of applications including improved climate understanding, assessment, and prediction. SOPAC and its member nations have played a key role in the development of Argo, since its inception five years ago, by facilitating and encouraging float deployments in the vast ocean region under their stewardship. The tropical Pacific Ocean plays a central role in inter-annual and decadal climate phenomena such as El Nino/Southern Oscillation and Pacific Decadal Variability. Argo acknowledges the importance of its partnership with SOPAC, and will continue to work collaboratively in the coming years toward implementing applications of ocean observations for the benefit of all people in the region.

Dean Roemmich

Scripps Institution of Oceanography

Chairman International Argo Steering Team

INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION (of UNESCO)

Good Morning everyone,

I would like to start by wishing Ms Cristelle Pratt my sincerest best wishes for a successful term as Director of SOPAC. Some of us remember Cristelle when she was just a little girl, and now she is Director of SOPAC. What an enormous change in such a short period of time.

We cannot begin the meeting without acknowledging the contributions made by Mr. Alf Simpson to SOPAC. Alf is a legend in his own time as a leader of SOPAC for 12 years. He is responsible for giving the South Pacific a voice in UNESCO's Intergovernmental Oceanographic Commission and for building the bridge to Pacific Island GOOS.

Cristelle has already picked up this torch by securing the services of Dr. Sarah Grimes to work at SOPAC as PI-GOOS Coordinator. Cristelle actually had this responsibility when serving as SOPAC's Oceans Program Manager.

I hope you have a chance to introduce yourself to Sarah during this meeting.

With Sarah now at SOPAC we expect to see many more projects and activities which will support Pacific Island nations.

I am pleased that the Govt of Australia and the Govt of Western Australia have continued their support to the IOC for PI-GOOS, including the funds to support Sarah, and the support from the National Oceanic and Atmospheric Administration in the United States for this purpose.

The IOC is also represented at this meeting by DR. Mike Fortes. Mike is the new Director of IOC's WESTPAC Office in Bangkok, which has had a long association with this region. Mike will surely strengthen this relationship.

Finally my best wishes for a successful meeting and to Cristelle especially for the challenges that lie ahead. IOC will do its utmost to support SOPAC and the interests of its members.

TAIWAN/ROC

Mr Chairman, Honourable Delegates, Observers, the Director and Staff of SOPAC, Distinguished Guests:

The Government of Taiwan/ROC wishes to congratulate SOPAC, Papua New Guinea and the Fiji Government for organising the 33rd annual session of the South Pacific Applied Geoscience Commission (SOPAC). I especially wish to congratulate Director Pratt of SOPAC for her devotion for this important meeting, the first since she assumed her duty as the Director of SOPAC.

This annual meeting does not only provide a good opportunity for learning the needed scientific technology to improve our way of life, but avails the Pacific Island countries and observers, including the Government of Taiwan/ROC, the opportunity to enhance mutual cooperation and understanding among the countries and peoples of the region. Our common goal is to minimize natural disasters, explore more resources and eliminate poverty. My Government is very honoured to be a part of this beautiful team.

Besides bilateral assistance to individual Forum Island Countries, the Government of Taiwan/ROC has contributed over 11 million US

dollars since 1993, to regional organisations including SOPAC, under the umbrella of the Pacific Islands Forum Secretariat, for the development of the region in areas such as agriculture, fisheries, food processing, health, youth, women's development, culture, marine industry and various other Programmes. This is in addition to the annual funding of US\$500,000 for the Taiwan/ROC-PIF Scholarship Scheme, launched in the year 1999, which now amounts to a total funding of US\$3.0 million. So far, 88 awardees from 14 Forum Island countries have benefited from this scholarship scheme.

My Government is proud to have substantially assisted SOPAC's projects over the many years and we are very proud of its achievements. This has contributed significantly to the development and betterment of our Pacific region.

On behalf of my Government of Taiwan/ROC we take this opportunity to wish this 33rd Annual Session of SOPAC every success in its deliberations and my Government will continue to work closely with SOPAC, to promote scientific development and collaboration among the countries and peoples of the Pacific Island region.

Thank you.

UNITED NATIONS DEVELOPMENT PROGRAMME

The Chairperson and distinguished delegates, the United Nations Development Programme (UNDP) is pleased to address SOPAC's 33rd Annual Session.

UNDP and SOPAC share common goals, as both organizations are working in similar focal areas, and as agencies of larger bodies such as the UN and CROP respectively, which are working closely to support the countries in the region achieve the Millennium Development Goals (MDGs). The MDGs provide countries with clear targets and indicators for achievement in key social and environment areas of development and demonstrate the interrelationships that are essential between and within sectors if equitable and sustainable development is to be achieved.

I would like to take this opportunity to share background information about UNDP and illustrate how SOPAC and UNDP can and do the work together.

UNDP is represented in the Pacific by three offices. There are multi-country offices in Apia

and Suva and an office for Papua New Guinea based in Port Moresby. Across the region there are also a number of other UN agencies which work together with the UNDP offices through the United Nations Country Teams, with the UNDP Resident Representatives in Apia, Suva and Port Moresby being the Resident Coordinator of these UN Country Teams. UNDP is not a donor but has funding allocations for each country as well as a number of regional projects designed to support country and regional initiatives and provide leverage for additional external support.

UNDP works in 5 thematic areas: Poverty; HIV/AIDS; Democratic Governance; Energy and Environment; and Crisis Prevention and Recovery, and incorporates cross-cutting issues such as Gender, and Information and Communication Technologies (ICT). These thematic areas are closely related to SOPAC's work in the areas of water, transportation, energy, risk, governance and poverty, and provide much scope for collaboration.

The achievement of the MDGs is seen as a critical step to accomplish objectives of each of UNDP's five thematic areas. Thus, UNDP is pleased to note SOPAC's work programme links its work directly to the achievement of the MDGs by Pacific Island Countries (PICs) and that this meeting's agenda gives specific attention to this important issue. The strong emphasis on community also highlights the importance of ensuring full community involvement in development decisions and that improvement in living standards for all people must be grounded in community and based on its needs and aspirations.

UNDP is working with SOPAC through its Community Lifelines Programme on the Pacific Island Energy Policies and Strategic Action Planning (PIEPSAP) Project. The PIEPSAP is a new cooperation between the PICs, SOPAC, UNDP, and the government of Denmark and adds substantially to the support already provided by Denmark to the Pacific Island Countries towards the implementation of the Barbados Programme of Action (BPOA). It is, at the same time, a contribution to the European Union's (EU) Energy Initiative and to the Pacific Island Energy for Sustainable Development-initiative, both launched at the World Summit for Sustainable Development (WSSD) in Johannesburg, South Africa.

UNDP is also working closely with SOPAC's Community Lifelines Programme and the Council of Regional Organizations in the Pacific's (CROP) Energy Working Group (EWG) on the

Pacific Islands Energy Policy and Plan (PIEPP), which is soon to undergo a review. UNDP is currently liaising with SOPAC on the Sustainable Integrated Water Resource Management in the PICs project and looking at collaborating on issues relating to the utilization of coconut oil for power generation.

UNDP's Suva office assists ten countries in the Pacific region through the implementation of nationally executed projects supplemented and technically backstopped by regional projects. UNDP's role as one of the Global Environment Facility's (GEF) implementing agencies is a central one, and involves management of numerous environmental projects. UNDP supports its member countries in integrating environmental and developmental goals into national development plans and processes to protect the environment as well as reduce poverty.

Projects fall under GEF's general focal areas and operational focal areas, and under three main international conventions: the United Nations (UN) Convention of Biodiversity (UNCBD); the UN Framework Convention on Climate Change (UNFCCC); and the UN Convention to Combat Desertification (UNCCD).

UNDP Suva is currently assisting up to ten Pacific countries with existing projects such as National Biodiversity Strategy Action Plans (NBSAPs); as well as relatively new projects such as National Adaptation Plans of Action (NAPA); Second National Communication (SNC) to the UNFCCC; and the National Capacity Self-Assessments (NCSA).

UNDP works with the South Pacific Regional

Environment Programme (SPREP) and Forum Fisheries Agency (FFA) on regional projects. SPREP is managing the coastal component of the International waters Programme (IWP), the Invasive Species Management Project, and the Sustainable Land Management Project, while FFA is managing the oceanic component of then IWP.

UNDP is working with the GEF's Small Grants Programme (SGP) to develop country programmes for fourteen Pacific Island Countries. Six country programmes are planned to be launched this year with all fourteen to be in the scheme in the next 2-3 years. The SGP is a more suitable funding facility for the PICs with its flexible nature and will enable NGOs and Community Service Organizations (CSOs) to obtain funding directly.

UNDP is working towards a more coordinated approach in its support of sustainable development processes through the creation of a Regional Centre to be based in Suva. The Regional Centre will encompass thematic areas such as governance, poverty, and conflict prevention and recovery. Information on the centre will be disseminated in due course. UNDP foresees further cooperation with SOPAC through the centre.

UNDP Suva looks forward to stronger ties with SOPAC on all new environment projects that fall under SOPAC's areas of comparative advantage and congratulates SOPAC on its achievements so far. Thank you.

UNDP, Suva
September 14, 2004

PART IV: STATEMENTS FROM NATIONAL INSTITUTIONS

JAPAN OIL, GAS & METALS NATIONAL CORPORATION (JOGMEC)

Thank you Mr. Chairman.

On behalf of Japan Oil, Gas and Metals National Corporation (JOGMEC), I would like to express our sincere appreciation to the Secretariat of SOPAC and SOPAC member countries. We congratulate Ms Cristelle Pratt on her appointment as Director of SOPAC.

Firstly, this is just to inform you that Japan Oil, Gas and Metals National Corporation (JOGMEC) was established in February 2004 as the result of a merger between MMAJ and Japan Oil National Corporation, to ensure the stable supply of energies and nonferrous metals.

At the request of SOPAC, the Japan International Cooperation Agency (JICA) and JOGMEC, formerly MMAJ, have been conducting surveys of deep ocean mineral resources in the EEZs of SOPAC member countries since 1985.

The survey programme is composed of two stages:

The first stage of this joint project was concluded in March 2000, having seen exploration in the EEZs of Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. It was successful in discovering valuable deep-ocean mineral deposits in several areas of the ocean floor of the Pacific and also in identifying promising sites for further investigation.

The second stage covers surveys to be carried out over a six-year period, commencing in April of 2000. The surveys are carried out using the research vessel *Hakurei-Marū No.2*, focusing on detailed ore prospecting in the promising areas found through the first stage and an environmental baseline survey for future marine mining activities. The EEZ of the Cook Islands, Fiji and the Marshall Islands have been investigated so far in phase I of the second stage, which concluded in March 2003. The second phase, with a three year duration, is on-going and the 2003 survey of the first year of phase II was conducted in the EEZ of the Kiribati and Niue. This is the first time that the survey cruise using R/V *Hakurei-Marū No.2* was conducted in Niue waters through the programme and the survey cruise revealed manganese nodules in abundance in Niue waters. Coastal state rep-

resentatives from Kiribati and Niue participated in the cruise as on-board trainees. This year the research cruise will be carried out in the EEZ of Fiji from December 17 to January 11 2005. Next year, the final year of the programme, the research cruise will be conducted in the EEZ of the Federated States of Micronesia

Besides the Deep-sea Mineral Resources Joint Project, JICA has been despatching experts to the SOPAC Technical Secretariat in Fiji since 1987. They have been involved in offshore minerals programmes, construction of databases, the related data management, cruise co-ordination and various works in the field of offshore programmes. Some JOGMEC staff have been working at the SOPAC Secretariat as JICA experts, and I believe their work contributes greatly to the steady development of the South Pacific Countries.

JOGMEC hopes for further potential areas of cooperation with SOPAC countries in various fields.

Thank you.

KOREA OCEAN RESEARCH & DEVELOPMENT INSTITUTE (KORDI)

Distinguished delegates, Director and Secretariat Staffs of SOPAC, and Ladies and Gentlemen, I am very pleased to represent the Korea Ocean Research and Development Institute (KORDI) at the 33rd Annual Session of SOPAC. First of all, on behalf of KORDI, I extend greetings and congratulations on this occasion.

Since KORDI initiated its Marine Scientific Research (MSR) program in the South Pacific in 1997, KORDI's interests in this region has been gradually increased to various scientific areas. KORDI has been conducting several survey programs for seabed minerals such as cobalt-rich manganese crusts around the rims of old Cretaceous and Jurassic seamounts and hydrothermal massive sulfides in back arc basin areas.

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 to 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. KORDI supported and participated SOPAC organized regional workshop held in Port Moresby in 2001, which handles sensitive issues concerning procedures of marine scientific application. We appreciated and welcomed SOPAC's role in issuing and settling contrary views among survey bodies and coastal states.

This year, KORDI will have a research cruise in the EEZ of the Kingdom of Tonga to understand the submarine hydrothermal systems in the Lau Basin, using the KORDI's R/V Onnuri. This cruise will be continued for 18 days from December 12 to 29. We have a plan to gather bathymetric data and sub-bottom profiles, collect bedrock, hydrothermal sulfide, sediment, and seawater samples, take bottom photographs, and to monitor the physicochemical

features of water masses at various depths. A representative of the Kingdom of Tonga will participate in the cruise.

KORDI founded the Korea-South Pacific Ocean research Center (KSORC) in Chuuk State of the Federated States of Micronesia (FSM) in 2000, for the effective implementation of research activities in the region of the South Pacific. Although current activities of the Center are limited to FSM, we have no doubt that Center's role will expand its research activities to various regions in the SOPAC member countries in the future.

We wish all of us will have a very successful and fruitful 33rd Session.

Thank you, Vinaka.

APPENDIX 5

STAR CHAIR'S REPORT TO COUNCIL 2004

Chair of SOPAC, Excellencies, Distinguished National representatives and Delegation members, representatives of Institutions and Organisations, Ladies and Gentlemen.

I. Introduction

Thank you for this opportunity to formally report on STAR's activities. But before I do so, may I take the opportunity on behalf of STAR to extend our congratulations and best wishes to Cristelle as the new director of SOPAC. I am sure that our working relationship will be as productive as that with her predecessor, Alf Simpson.

As people here for the first time may not be familiar with STAR, I will briefly outline its role.

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 prior to this Annual Session of the SOPAC Governing Council. This year, the 21st meeting of STAR was held on September 18th and 19th at this hotel. As STAR is celebrating its 21st birthday, I would here like to acknowledge Dr Kazuhiro Kitazawa who is present at this meeting and who was instrumental in setting up STAR originally. That this unique symbiosis of scientists, managers and policymakers still thrives is a tribute to the foresight of Kazu and the others who were involved at the start.

II. STAR Presentations

As the Chair of SOPAC outlined this morning, the themes of this year's STAR meeting were:

- Mineral policy, plate tectonics and offshore mining,
- Hazard assessment and risk management, and
- Water, sanitation and human settlement.

These themes were well developed and, as is customary with STAR, there were a range of other papers on topics relevant to the region. During the meeting, 54 scientific papers and two longer general talks were presented orally and 26 others by the posters displaying research results you see displayed at the back of this room. Abstracts of these are published in SOPAC Miscellaneous Report 576. As is always the case for STAR meetings, the information presented covered a broad 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.

Let me briefly outline the scope of the presentations for you, to indicate the variety. During the Geology & Geophysics session, papers covered aspects of the geology of tectonic plate boundaries and of other onshore and offshore structural features. Oceans & Coastal papers looked at data collection and application from several viewpoints, coastal and lagoonal change, and policy issues. Hazards & Risk Management presentations covered a wide range of topics, including case studies in Australia, New Zealand and Fiji, and the conclusions to be drawn from them. Three presentations devoted to the effects of tropical cyclone Heta were of particular interest as last year's STAR/Annual Session meetings were held on that island.

Tsunami papers partly inspired by the South Pacific Tsunami Awareness Workshop in July filled three sessions, and covered many aspects of this hazard. Papers associated with community lifelines covered issues related to water, sanitation and capacity building, as well as discussions on societal development in the Solomon Islands and cost-benefit analyses of black pearl farming.

The final session looked at several renewable

energy options together with petroleum and deep ocean mining.

On Sunday evening, the meeting featured two guest lectures on more general issues relevant to the region. These were entitled “*What is meant by sustainable development*” by Andrew Matthews of NIWA and “*Oceans and their economic significance and opportunities for the Pacific*” by Alex Malahoff of IGNS.

III. Working Groups

In addition to the scientific presentations, 5 working groups also met. These working groups offer an important 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, Observations & Monitoring, Risks, Tsunami and Water, Sanitation & Hygiene working groups met. I will report briefly on their main recommendations here but the full reports with supporting arguments for the conclusions are appended and I recommend these for your perusal.

The *Energy Working Group* made the following recommendations: Energy Working Group (EWG) noted that a number of the recommendations from 2003 still remain relevant and where necessary have been combined or updated and included in this report. The key issues were as follows:

The WG noted the need to encourage the transfer of information on renewable energy technologies and projects that have been utilised within the region. The EWG acknowledged and accepted Papua New Guinea’s offer to work jointly with SOPAC to report on progress with geothermal energy development in particular the Lihir Geothermal Project which could be used as a model for other geothermal project development.

The Working Group further:

- endorsed the proactive approach that SOPAC has taken in respect to the ongoing resource assessment in wind, wave, ocean thermal, geothermal, bio-fuels and biomass, and encouraging the publication of this information;
- reinforced the urgent need to establish an arrangement between Power Utilities, the Pacific Power Association (PPA) and SOPAC so as to allow the open and unrestricted sharing of power utility information and data;

- reinforced its support for the earlier proposal to convene a central workshop to bring technicians from PICs together to provide training and support to PICs in GIS and Remote Sensing and encourage a particular emphasis for the utilities;
- noted the proposal for a Regional Energy Meeting (REM2004 to be convened in December in Madang, Papua New Guinea;

Finally, the EWG noted the encouraging increased interest in Energy within STAR and the upcoming events such as CSD14 and CSD15 (2006/2007) which include energy and could provide a focus within future STAR Sessions.

The *Observations & Monitoring Working Group* working group met to discuss the Pacific Island GOOS coordinator’s work plan. The coordinator position was established recently at SOPAC through combined funding of the IOC Perth Office, Bureau of Meteorology Australia and NOAA and Ms. Sarah Grimes was appointed to that position.

The working group concluded that an important action for Ms. Grimes should be reconstituting the PI-GOOS Steering Committee, establishing national focal points for PI-GOOS countries and National Coordinating Committees for PI-GOOS.

Key immediate tasks are to establish a network, a website for PI-GOOS, travel to countries to assess needs and identify applications, surveys of the user community, interactions with service providers overseas - with close collaboration with the IOC Perth Office.

A work plan will be drafted and reviewed by SOPAC and GOOS to ensure oversight and enhance donor support.

Ms. Grimes will seek to improve interactions with foreign research vessel activities, including advance knowledge of ship schedules, greater participation in research activities, receipt of research results and improved communications with researchers through guest lectures and seminars.

The *Risks Working Group* defined several objectives and recommendations to Council.

The first objective is a greater focus on how partnerships actually build capacity between SOPAC members and the respective national organisations

Recommendation; that Governing Council:

- initiate a medium-term study to determine how regional action plans are translated

into increased capacity for national programs, among both public and private sector institutions; and

- review the appropriateness of risk management models and their implementation among different communities and sector groups.

The second objective is collaboration in geological, geochemical, meteorological and climatological hazard monitoring, to achieve effective minimum surveillance of SW Pacific hazards.

Recommendation; that Governing Council:

- note that, without the ability to detect hazards and evaluate trends, the risk management process has no adequate basis;
- note that timely pre- and post-disaster data collection is an effective means of establishing the cost-benefits for long-term mitigation planning;
- agree to create a framework for pre- and post-disaster assessment, with open sharing of information and appropriate use of regional capabilities in association with development of a Spatial Data Infrastructure (SDI); and
- agree to commission a feasibility study to determine the prerequisite capabilities (infrastructural, organisational, financial and political) for minimum, effective hazard detection, alerts and warnings.

The *Tsunami Working Group* considered the recommendations of the South Pacific Tsunami Awareness Workshop July 1 – 3, 2004 and several other meetings, as well as the presentations of the STAR. They presented the following recommendations for Council endorsement:

1. Support for the South Pacific Tsunami Awareness Workshop's proposed work programme for 2 years as agreed in July 2004 and specifically to:
 - Finalise the Terms of Reference and establish a SOPAC Tsunami Working Group, which is to produce a work schedule within two months;
 - Coordinate the investigation and development of a Regional Tsunami Information and Warning System within the SOPAC region;
 - Finalise the Terms of Reference for the recommended Feasibility Study;
 - Seek resources to conduct the Feasibility Study for the Regional Tsunami Information and Warning System.

2. Consider the inclusion of the South Pacific Tsunami Awareness Workshop's proposed work programme in the Draft Pacific Regional Position Paper for the 2nd World Conference on Disaster Reduction.

The members of the *Water, Sanitation & Hygiene Working Group* (WASH WG) present the following recommendations:

1. They recommend that the Community Lifelines Programme continues to build its Water Sector programme upon the Regional Action Plan on Sustainable Water Management (Pacific RAP).
2. They recommend the CLP continues to host the Coordination Unit and facilitate the Pacific Partnership on Sustainable Water Management as a modality for the implementation of the Pacific RAP.
3. The WASH WG recommends SOPAC Member Countries use the Pacific RAP to develop and implement National Water Action Plans for Sustainable Water Management.
4. The WASH WG recommends CLP assist in improving the availability and access to information on water and sanitation on national and regional levels through the development of databases and GIS/GPS.

With reference to the six thematic areas of the Pacific RAP the WASH WG specifically recommends CLP to provide contributions specifically to the following programmes:

- I. Water Resources Management,
- II. Island Vulnerability,
- III. Awareness,
- IV. Technology,
- V. Institutional Arrangements, and
- VI. Financing.

IV. General Comments from Chair of STAR

At this point, I would appreciate the opportunity to convey some personal impressions of this STAR meeting. The first is that the clearly applied direction to much of the research that has always been a particular feature of STAR continues and is increasingly directed towards the provision of quality technical advice to member governments. As just two examples of practical studies, we heard details of the processes of deep ocean mining and of the use of copra oil as a transport fuel. A second point that impressed me is that large volumes of quantitative data are coming available rapidly now from

a range of monitoring and remote sensing systems, and incorporating up-to-the-minute information into research and policy will be a continuing challenge for us all. Finally, this year about half of the STAR presentations were from scientists based within the SOPAC region and a goodly proportion of those dealt with Papua New Guinea, giving us a glimpse of the fascinating geology of that country which the Chair of SOPAC alluded to in his greeting to us this morning. Combined with the other presentations, we are seeing genuinely global research but with a strong Pacific base.

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. That is only possible thanks to the efforts of the Secretariat who, of course, also have this meeting to prepare. And finally, Mr Chairman, may I take this opportunity as Chair of STAR speaking on behalf of all the scientists to thank our hosts, the Government and people of Papua New Guinea. And personally I'd like to say thank you for your support during the meeting.

That concludes my address. Thank you.

John Collen

Chair, Science Technology and Resources Network (STAR)

Fiji, 21 September 2004

ATTACHMENT TO STAR CHAIR'S REPORT MINUTES OF STAR WORKING GROUPS

I. Energy Working Group

Working Group Members: Bernard Pawih (PNG) [Chair], Joe Buleka (PNG), Nathan Mosusu (PNG); Donn Tolia (Solomon Islands), Isaac Lekelalu (Solomon Islands) Chris Ioan (Vanuatu), Ian Fry (Tuvalu), Taputoa Titimaea (Samoa – Water Utility), Andrews Matthews (NIWA-NZ), Paul Fairbairn (SOPAC), Gerhard Zieroth (SOPAC), Anare Matakiviti (SOPAC), Yogita Bhikabhai (SOPAC), Jan Cloin (SOPAC – apology).

Facilitator/Rapporteur: Donn Tolia (Solomon Islands), Paul Fairbairn (SOPAC). Edits provided by Andrews Matthews (NIWA-NZ) and Ian Fry (Tuvalu).

Working Group Report & Recommendations:

The members of the Energy Working Group (EWG) agreed the following recommendations should be submitted to Governing Council for the benefit of the Community Lifelines Programme (CLP) and individual Member Countries. In making this report it should be noted that a number of the recommendations from 2003 still remain relevant and where necessary have been combined or updated and included in this report. The key issues were as follows:

- i) Noted the progress in the region with the development of renewable energy technologies and the need for PICs to continue to plan for the design, development, integration and use of these alternate sources of energy.
- ii) Noted the interest and need to encourage the transfer of information on renewable energy technologies and projects that have been utilised within the region. The EWG acknowledged and accepted Papua New Guinea's offer to work jointly with SOPAC to report on progress with geothermal energy development in particular the recent Lihir Geothermal Project in PNG where this could be used as a model for other geothermal project development.
- iii) Noting the technical publications already prepared and published by SOPAC and those in final draft, requested that SOPAC continue to update these as relevant taking into account pilot projects such as the Lihir Geothermal, and further take a lead role in the identification and dissemination of information on new and developing technologies including information where research is being carried out on relevant alternate energy sources and development that are relevant for adoption within the region.
- iv) Endorsed the proactive approach that

SOPAC has taken in respect to the ongoing resource assessment in wind, wave, ocean thermal, geothermal, bio-fuels and biomass, encouraged the publication of this information including the monitoring and reporting on the use of other potential energy sources and fuels such as ethanol.

- v) Acknowledged the work of NIWA in resource assessment (in wind, wave and tidal) and in particular highlighted recent work in modelling complex terrain.
- vi) Recommended that SOPAC continue to monitor the progress with other potential developing energy technologies.
- vii) Noted and supported the current exchange of energy information through the Pacific Energy Newsletter (PEN) and the Pacific Power Association (PPA) Magazine.
- viii) Reinforced the urgent need to establish an arrangement between Power Utilities, the Pacific Power Association (PPA) and SOPAC so as to allow the open and unrestricted sharing of power utility information and data without condition or constraint.
- ix) Reinforced its supported for the earlier proposal to convene a central workshop to bring technicians from PICs together to provide training and support to PICs in GIS and Remote Sensing and encourage a particular emphasis for the utilities (power / water / telecom / PWD). Furthermore the EWG encourages SOPAC to seek funding to support this initiative.
- x) Noted the need to continue in parallel with identifying alternate energy sources the implementation of demand and supply side management and sustainable energy developments to reduce wastage and improve efficiency.
- xi) Noted and thanked SOPAC for the update on the current review of the Pacific Islands Energy Policy and Plan (PIEPP), the Pacific Islands Energy Policy and Strategic Action Planning (PIEPSAP) Project, the GEF Regional Energy Efficiency Project (Transport Sector), and the Pacific Islands Renewable Energy Project (PIREP – Phase I) and proposed PIREP – Phase II.
- xii) Noted the proposal for a Regional Energy Meeting (REM2004) to be convened in December in Madang, Papua New Guinea.
- xiii) Concern was noted regarding the split in regional renewable energy activities between CROP Organisations and urged greater collaboration between CROP Organisations to ensure more effective, effi-

cient and coordinated delivery of regional renewable energy programmes.

- xiv) The EWG noted the future proposed strengthening of the regional energy programme at SOPAC to provide assistance to member countries through the Pacific Islands Energy Policy and Strategic Action Planning (PIEPSAP) Project in policy and planning matters.
- xv) The proposal of SPREP to develop a set of Guidelines for the development of CDM projects was noted. The EWG highlighted that as there were significant inter-linkages between CDM and energy, noted that CDM was also a component within the PIEPSAP menu of options, and hoped that there would be collaboration between SPREP and SOPAC in the development of the guidelines and energy focused CDM projects.
- xvi) Finally the EWG noted the encouraging increased interest in the Energy within STAR and that the upcoming events, in particular the CSD14 and CSD15 (2006/2007) which includes energy and could provide a focal area for future STAR Sessions.

II. Observations and Monitoring Working Group

Chair: Bill Erb

The working group met to discuss the progress of Pacific Island GOOS and to suggest activities to be undertaken by the new PI-GOOS Coordinator Ms. Sarah Grimes. The coordinator position was established recently through combined funding of the IOC Perth Office, Bureau of Meteorology Australia and NOAA. Ms. Grimes will be located at SOPAC who will provide her local support.

In the past year PI-GOOS has made significant progress with continued capacity building related to activities in SEREAD, remote sensing and regional organizational development. A workshop was held in Brisbane on remote sensing, SOPAC hosted the first meeting of the GOOS Regional Alliances in Suva and SEREAD completed the resource manuals for primary and secondary schools and conducted three workshops in the region to train teachers.

The working group concluded that an important action for Ms. Grimes should be reconstituting the PI-GOOS Steering Committee, establishing national focal points for PI-GOOS coun-

tries and National Coordinating Committees for PI-GOOS. These organizational entities will guide and assist the future development of the program and are critical elements.

Key immediate tasks for Ms. Grimes are to establish a network and improve communication. Steps to be taken include a website for PI-GOOS with proper linkages. Travel to countries is required to assess needs and to identify applications and services that are available to the countries. Assessment of needs will be enhanced by surveys of the user community throughout the region. Interactions with service providers overseas will be necessary to achieve an understanding of the applications available and to negotiate with the service providers delivery of the services to the South Pacific. The IOC Perth Office will work closely with Ms. Grimes to achieve this result and will provide continued funding support.

Reflecting the result of the PAAOP Workshop Ms. Grimes will also devote some time to improving interactions with foreign research vessel activities in the region. This should include advance knowledge of ship research schedules, greater participation by locals in research activities and research cruise results and information, and improved communications with researchers through guest lectures and seminars while transiting through the region.

The PI-GOOS initiative is one requiring governmental cooperation, commitment and a great deal of personal support, volunteerism and a community spirit. We are hoping that that the South Pacific will share this commitment for the benefit of all the people in its region.

The key elements associated with PI-GOOS are PRODUCTS, COMMUNICATIONS, ORGANIZATION, OBSERVATIONS, COMMITMENT, PEOPLE and FUNDING.

III. RISK Working Group

Present: Amo Mark (PNG) (**Vice Chair**), Anciet Beauvais (IRD, New Caledonia), Andrew Matthews (NIWA, NZ), Bernard Pelletier (IRD, New Caledonia), David Heron (GNS, NZ), Doug Ramsay (NIWA, NZ), Emily McKenzie (SOPAC), Hugh Cowan (GNS, NZ) (**Chair**), Michael Bonte (SOPAC), Noud Leenders (SOPAC), Peter Newsome (Landcare, NZ), Roger Jones (SOPAC), Sandra Melzer (Uni. Bonn, Germany), Tariq Rahiman (Uni. Cant. NZ)

Apologies: Laura Kong (ITSU, Hawaii), Wally

Johnson (GA, Australia), Stan Goosby (PDC, Hawaii)

Introduction

“RISK” encompasses all of the environmental, technological, social and economic factors that affect the well-being of SOPAC member communities.

This broad scope is reflected in the range of affiliations and discipline expertise offered by the members of this ad-hoc working group.

The following objectives and recommendations reflect awareness or perception of growing needs arising from work in progress among member organisations and States. We submit these views for consideration by the SOPAC Governing Council.

Objectives and Recommendations

Objective: A greater focus on how partnerships actually build capacity between SOPAC members and the respective national organisations.

Recommendation: That the Governing Council:

Initiate a medium-term study to determine how regional action plans are translated into increased capacity for national programs, among both public and private sector institutions¹

Review the appropriateness of risk management models and their implementation among different communities and sector groups

Objective: Collaboration in geological, geochemical, meteorological and climatological hazard monitoring, to achieve effective minimum surveillance of SW Pacific hazards.

Recommendation: That the Governing Council:

Note, that without the ability to detect hazards and evaluate trends, the risk management process has no adequate basis²

Note, that timely pre-and post-disaster data collection is an effective means of establishing the cost-benefits for long-term mitigation planning

Agree, to create a framework for pre- and post-disaster assessment, with open sharing of in-

¹ An example could be the regional action plan for sustainable water use

² This applies to all hazards. Illustrative examples include detection of tsunami or volcanic ash plumes, resource depletion, water or soil contamination and coastal erosion

formation and appropriate use of regional capabilities in association with development of a Spatial Data Infrastructure (SDI)

Agree, to commission a feasibility study to determine the prerequisite capabilities (infrastructural, organisational, financial and political) for minimum, effective hazard detection, alerts and warnings

IV. Tsunami Working Group

Members of Group: Lawrence Anton [Chair], Atu Kaloumaira, Michael Bonte-Graptin, Noud Leenders, Job Esau, Laura Kong, Loren Kroenke, Wally Johnson, Dave Tappin, Doug Ramsay, Chalapan Kaluwin, Chip McCreery, Bernard Pelletier, Kazuhara Kitazawa, and Kata Duaibe

Recommendation to Council: Upon considering the recommendations of the South Pacific Tsunami Awareness Workshop July 1 – 3, 2004, the presentations of the STAR session and the discussions of the STAR Tsunami Working Group; and

Recognizing the long experiences of the UNESCO/IOC International Coordination Group for the Tsunami Warning System in the Pacific (ITSU) and its efforts to promote the development of regional tsunami warning systems in the Pacific for more effective tsunami mitigation; and

Noting the Draft Pacific Regional Position Paper for the 2nd World Conference on Disaster Reduction;

We present the following **recommendations** for Council endorsement:

1. Support the South Pacific Tsunami Awareness Workshop's proposed work programme for 2 years as agreed in July 2004 and specifically to:

- Finalise the Terms of Reference and establish a SOPAC Tsunami Working Group, which is to produce a work schedule within two months;
- Coordinate the investigation and development of a Regional Tsunami Information and Warning System within the SOPAC region;
- Finalise the Terms of Reference for the recommended Feasibility Study;

Seek resources to conduct the Feasibility Study for the Regional Tsunami Information and Warning System.

2. Consider the inclusion of the South Pacific Tsunami Awareness Workshop's proposed work programme in the Draft Pacific Regional Position Paper for the 2nd World Conference on Disaster Reduction.

V. Water, Sanitation And Hygiene Working Group

Working Group Members: Tevita Fatai, (Tonga); Isaac Lekelalu, (Sol.Is); Andrew Matthews, (NIWA); Alex Malahoff, (GNS, NZ); Paula Wilisoni (Fiji); Andre Siohane (Niue); Ben Parakoti (Cook Is); Tamara Tait, (GNS, NZ); Petero Lafaele (ASPA, Am. Samoa); Esmond Moses (PUC, Pohnpei); David Dengokl (BPW, Palau); Anthony Chargualaf (Guam Waterworks Authority); George Laman, (Yap Water Authority); Lameko Talia, (Met. Samoa); Malakai Finau, (MRD, Fiji); Amataga Penaia, (SWA, Samoa); Moefaauro Taputoa Titimaea, (SWA, Samoa); Amo Mark, (PNG Waterboard); Taboia Metutera, (PUB, Kiribati); Lucio Haller, (CPUC, Chuuk); Eita Metai, (PUB, Kiribati); Ian Fry, Env. Division, Tuvalu). Alena Lawedrau-Moroqa, (SOPAC); Rhonda Bower, (SOPAC); Marc Overmars, (SOPAC); Sarabjeet Singh, (SOPAC); Sarah Davies, (SOPAC); Stephen Booth, (SOPAC).

Facilitator/Rapporteur: Mike Dworksy (PWA)

Working Group Report & Recommendations:

The members of the Water, Sanitation & Hygiene Working Group (WASH WG) agreed the following recommendations should be submitted to Governing Council for the benefit of the Community Lifelines Programme (CLP) and individual Member Countries:

The WASH WG recommends the CLP continues to build its Water Sector programme upon the Regional Action Plan on Sustainable Water Management (Pacific RAP).

The WASH WG recommends the CLP continues to host the Coordination Unit and facilitate the Pacific Partnership on Sustainable Water Management as a modality for the implementation of the Pacific RAP.

The WASH WG recommends SOPAC Member Countries to use the Pacific RAP to develop and implement National Water Action Plans for Sustainable Water Management.

The WASH WG recommends CLP to assist in improving the availability and access to information on water and sanitation on national an

regional levels through the development of databases and GIS/GPS.

With reference to the six thematic areas of the Pacific RAP the WASH WG specifically recommends CLP to provide contributions specifically to the following programmes and actions:

I. Water Resources Management – A hydrology support programme for National Hydrological Services to augment the regional hydrological training programme.

II. Island Vulnerability – Improve access to climate information and assistance in drought mitigation and disaster preparedness for water managers.

III. Awareness – Improve communication and

coordination between all stakeholders in water, sanitation and hygiene

IV. Technology – A comprehensive regional water demand management and leak detection programme to reduce unaccounted-for water.

V. Institutional Arrangements – Develop National instruments (including national visions, policies, plans and legislation) for good water governance appropriate to each island country and adopt an Integrated Water Resources Management approach.

VI. Financing – Reduces costs through improved operational efficiencies using benchmarking, asset management, development of water-loss reduction programmes and improved work practices.

APPENDIX 6

REVISED RULES OF PROCEDURES ON EXECUTIVE APPOINTMENTS

A. PROCEDURES FOR APPOINTMENT OF DIRECTOR

(23rd September 2004)

Preliminary

1. Article 7 section 3 of the Agreement Establishing the South Pacific Applied Geoscience Commission vests the power to make appointments to the positions of Director and Deputy Director in the Governing Council (hereinafter referred to as the Council). However, Council at its 33rd Session held September 2004, agreed that henceforth the Director only would be appointed by Council and the Deputy Director be appointed by the Director in close consultation with a Council approved Appointments Subcommittee for the Deputy Director.

2. Only nationals of SOPAC member countries shall be eligible for appointments as Director.

3. The position requirements for the Director shall be approved by the Council.

4. The initial term of an appointment shall be for a period of three (3) years. Incumbents may apply for and the Council may at its discretion approve one three (3) year extension to the initial term. Under no circumstances would an extension beyond six (6) years be considered.

Notification of vacancies to member countries

5. The Director shall send notification of a vacancy to National Representatives of member countries as soon as practicable and at the same time advertisements are to be placed.

6. In the event that an incumbent indicates an intention to vacate a position prior to the scheduled termination date, the Director shall advise the Chair and shall immediately notify the governments of member countries with a view to initiating the regular recruitment procedures as soon as possible.

Interim appointments should a Deputy Director not be in Post

7. As an interim arrangement where for any reason it is impossible or impracticable to ap-

point a Director in accordance with these procedures before the incumbent leaves his/her post and as a result there is an unfilled vacancy, the Chair, in consultation with member governments, may appoint an interim Director on such terms and conditions as may be approved by the Council.

8. The interim Director may be selected from the Secretariat or, if there is no suitable candidate in the Secretariat, from nominees of member countries.

9. Interim appointments stand until a permanent appointment is made. Interim appointments confer on the holder no assumption of permanency. Holders of an interim appointment shall not however be precluded from applying for permanent appointment in accordance with the provisions of these procedures.

Advertisement

10. Vacancies will be advertised at least six (6) months prior to the Annual Session at which the appointment is to be made. Applications should close three (3) months prior to the Annual Session. Each country is responsible for advertising the vacancy at national level.

11. Advertisements will be placed in public gazettes, appropriate national newspapers, appropriate regional magazines or journals and other publications at the discretion of the Chair.

Applications

12. Applications should be addressed in confidence to the Chair and should contain a full curriculum vitae of the candidate and the names and addresses of three professional referees. The Chair, in his/her discretion, may direct that applications be addressed to him/her care of the Secretariat. In such circumstances the Secretariat will act at the direction of the Chair.

13. Applications should reach the Chair by the closing date.

14. Incumbents eligible for reappointment for a second 3-year term are required only to express their interest in writing to the Chair by the closing date.

Appointments Committee

15. An ad hoc Committee shall be appointed by the Council (hereinafter referred to as the "Appointments Committee") to assist the Council in the initial selection process. This committee to be determined at the Council meeting prior to an appointment being made. The role of the Committee will be to screen applications, conduct interviews if necessary, and make a recommendation to Council.

16. The Appointments Committee to include:

- (i) the Chair
- (ii) Vice Chair
- (iii) not less than two (2) other members

17. The initial function of the Appointments Committee shall be to screen all applications received and to draw up a short-list of not more than five candidates for consideration by Council. This task to be completed within one month of closure of applications.

18. In carrying out this function the Appointments Committee shall:

- (i) prepare a summary of all applicants and determine their eligibility
- (ii) consider each eligible application individually having regard to the criteria established by the Council, this to be summarised in a spreadsheet, identifying scoring criteria and weighting, and thereby identifying the short-listed candidates in preferred order;
- (iii) call for referees reports for the short-listed candidates
- (iv) prepare a report for circulation to member countries on each of the short-listed candidates, this report to include letters of application, CVs, and referees reports received, together with results sheets provided by each member of the Committee.

19. Immediately upon completion of the report, the Chair shall forward a copy of the same to each member country. Member countries may submit to the Chair comments on the short-list or the report of the Appointments Committee.

Interview

20. The Chair after reviewing the report of the Appointments Committee and following consultation with Council, will call for interviews. Should this be necessary, the Appointments Committee shall form the interview panel and interviews completed at least three weeks prior to Council meeting.

21. The interview panel shall prepare an immediate interview report, including scoring criteria presented in a spreadsheet, on each interviewed candidate which shall be forwarded to member governments.

Final Selection Process

22. The final selection of the Director shall be made by the Council.

23. In considering its decision Council shall have available the reports and recommendations of the work of the Appointments Committee including the shortlisting and interview processes. In making an appointment the Council will fully consider the work of the Appointments Committee, but shall not be constrained in any way by the recommendations of the Appointments Committee.

24. In deciding upon appointments the Council shall make every effort to reach a decision by consensus consistent with Article 6.10 in the Constitution. Should consensus not be reached, Council must decide either to adhere to the procedure in the Agreement Establishing the South Pacific Applied Geoscience Commission, or to an alternate acceptable process.

25. The Chair to negotiate with the successful candidate on behalf of Council. As such, a draft letter of contract agreed to by Council, and signed on Council's behalf by the Chair is to be presented to the successful candidate as soon as practical. Should the successful candidate not accept the position, then the position is offered to the runnerup. Council notes that it has secured a new Director only after a contract is signed by both parties.

Amendments

26. The Council reserves the right to amend or waive these procedures in exceptional circumstances. This provision should not be invoked whilst the rules are being applied during a particular appointment process.

B. PROCEDURES FOR APPOINTMENT OF DEPUTY DIRECTOR

(23rd September 2004)

Preliminary

1. Article 7 section 3 of the Agreement Establishing the South Pacific Applied Geoscience Commission vests the power to make appointments to the positions of Director and Deputy Director in the Governing Council (hereinafter referred to as the Council). However, Council at its 33rd Session held September 2004, agreed that henceforth the Director only would be appointed by Council and the Deputy Director be appointed by the Director in close consultation with a Council approved subcommittee (hereafter referred to as "Appointments Subcommittee for Deputy Director").

Appointment Process

2. The position requirements for the Deputy Director shall be approved by the Council, prior to advertising, and at that time the Appointments Subcommittee for the Deputy Director be determined.

3. The Appointments Subcommittee shall comprise at least four members of Council and the Director

4. The appointments process for the Deputy Director shall conform to that approved by Council for Secretariat Professional Staff and the role of the Appointments Subcommittee is

to oversee the process including acting as a screening and interview panel.

5. The initial term of an appointment shall be for a period of three (3) years. Incumbents may apply for one three (3) year extension to the initial term. Under no circumstances would an extension beyond six (6) years be considered.

Interim appointments

6. As an interim arrangement where for any reason it is impossible or impracticable to appoint a Deputy Director in accordance with these procedures before the incumbent leaves his/her post and as a result there is an unfilled vacancy, the Director, in consultation with Council, may appoint an interim Deputy Director.

7. The interim Deputy Director may be selected from the Secretariat or, if there is no suitable candidate in the Secretariat, from nominees of member countries.

8. Interim appointments stand until a permanent appointment is made) Interim appointments confer on the holder no assumption of permanency. Holders of an interim appointment shall not however be precluded from applying for permanent appointment in accordance with the provisions of these procedures.

APPENDIX 7

LIST OF CONFERENCE ROOM DOCUMENTS

AS 33/1/Info 1	Information Circular
AS 33/1/Info 2	Programme for Official Opening (Circulated at Registration)
AS 33/3.1 Rev. 2	Provisional Agenda
AS 33/3.1/Info 1	Draft Working Schedule
AS 33/3.1/Info 2	Working Procedures
AS 33/3.1/Info 3	List of Conference Room Documents
AS 33/3.1/Info 4	Provisional List of Participants (To be circulated at Registration)
AS 33/4.1	Designation of SOPAC National Representatives
AS 33/6.1.1	2003 Annual Report Summary
AS 33/6.1.2	Summary Report of 2004 Donor Support
AS 33/6.1.3	Review of Country Profiles
AS 33/6.1.4	SOPAC Work Programme and the MDGs
AS 33/6.1.5	International Meeting on SIDS, Mauritius January 2005
AS 33/6.1.6	Report on SOPAC Activities Concerning Climate Change, Sea Level Rise, Climate Variability and Extreme Weather Events
AS 33/6.2	CROP Summary Report
AS 33/6.3	STAR Chair Report
AS 33/6.4	SOPAC/EU Project Report
AS 33/7.1	Report on the Ocean & Islands Programme for 2004
AS 33/7.2	Issues Arising in the Ocean & Islands Programme
AS 33/8.1	Report on the Community Lifelines Programme for 2004
AS 33/8.2	Issues Arising in the Community Lifelines Programme
AS 33/9.1	Report on the Community Risk Programme for 2004
AS 33/9.2	Issues Arising in the Community Risk Programme
AS 33/10	Programme Review Monitoring & Evaluation
AS 33/10 Supp	[Nominated Members of the] Programme Review Monitoring & Evaluation Groups
AS 33/11.2*	SOPAC 2005-2009 Corporate Plan and Programme Strategies

AS 33/11.3*	Leader's Pacific Plan
AS 33/11.3 Supp*	[Information Paper – An Assessment of Regional Mechanisms and Processes in the Pacific]
AS 33/12.1.1*	2003 Audited Financial Statements, Auditors Report and Management Report
AS 33/12.1.2*	Report on 2003 Regular Budget Variance and Virement of Funds
AS 33/12.1.3*	Report on Assets & Inventory written off for the year ended 31 December 2003
AS 33/12.2.1*	Financial Accounts for the 6-month period to June 2004
AS 33/12.2.2*	Membership Contributions
AS 33/13.1*	Rules of Procedure for Executive Appointments
AS 33/13.1 Supp*	[Revisions to] Rules of Procedure for Executive Appointments
AS 33/13.2*	Deputy Director Position
AS 33/13.3*	SOPAC Staff Remuneration-CROP Remuneration Review Report
AS 33/13.4*	Reappointment of Contract Staff since 32 nd Annual Session
AS 33/13.5*	Secretariat Integrated Corporate Risk Management Plan
AS 33/13.6*	Review of ICT, Library and Publications Guidelines
AS 33/13.7*	Review of Financial Regulations
AS 33/14.1*	Reserve Fund Ceiling
AS 33/14.2*	Appointment of Auditor
AS 33/14.3*	Draft 2005 Work Plan and Budget

** Restricted distribution to Council on only*

APPENDIX 8

ACRONYMS

(CUMULATIVE LISTING)

AAPG	- American Association of Petroleum Geologists (Tulsa, USA)
ACDP	- Acoustic Doppler Current Profiler
ACIAR	- Australian Centre for International Agricultural Research
ACP	- African, Caribbean and the Pacific countries of the Lome Convention
ACTEW	- Australian Capital Territory Electricity and Water Corporation
ADB	- Asian Development Bank
ADCP	- acoustic doppler current profiler
ADITC	- Australian Drilling Industry Training Committee
AFAC	- Australasian Fire Authorities Council
AGC	- Atlantic Geoscience Center (Canada)
AGSO	- Australian Geological Survey Organisation
AIACC	- Assessments of Impacts and Adaptations to Climate Change
AIDAB	- Australian International Development Assistance Bureau
AMSAT	- Australia Marine Science & Technology Limited
ANU	- Australian National University
ANZECC	- Australia and New Zealand Conservation Council
AOSIS	- Alliance of Small Island States
AOPC	- Atmospheric Observing Panel for Climate
AOSIS	- Alliance of Small Island States
APAN	- Asia Pacific Area Network
APEC	- Asia-Pacific Economic Commission
APPA	- American Public Power Association
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
ASPA	- American Samoa Power Authority
ATP	- authority to prospect
AUD	- Australian Dollar
AusAID	- Australian Agency for International Development
AUSLIG	- Australian Surveying and Land Information Group
AVI	- Australian Volunteers International
AVHRR	- Advanced Very High Resolution Radiometer

AWA	- Australia Water Association
AWWA	- American Water Works Association
BAC	- Climate Alert Bulletin
BGR	- Bundesanstalt für Geowissenschaften und Rohstoffe (Germany)
BGS	- British Geological Survey
BIO	- Bedford Institute of Oceanography (Canada)
BOM	- Bureau of Meteorology (Australia)
BPoA	- Barbados Plan of Action
BRGM	- Bureau de Recherche Géologiques
BSc	- Bachelor of Science
CalCOFI	- California Cooperative Fishery Investigation
CalTech	- California Institute of Technology
CAR	- Communities At Risk
CBD	- Convention of Biological Diversity
CCCC	- Climate Change Carrying Capacity
CCCCC	- Caribbean Community Climate Change Centre
CBO	- Community-Based Organisations
CCAMLR	- Commission for the Conservation of Antarctic Marine Living Resources
CCOP	- Committee for Coordination of Joint Prospecting for Mineral Resources in Asian Off-shore Areas (ESCAP)
CCOP/SOPAC	- Committee for Coordination of Joint Prospecting for Mineral Resources in South Pacific Offshore Areas (now SOPAC)
CDM	- Clean Development Mechanisms
CD-ROM	- Compact Disc Read Only Memory
CDPI	- Community Development and Participation Initiatives
CDR	- Centre for Disaster Research (of UPNG)
CEA	- Commissariat à l'Énergie Atomique (Atomic Energy Commission), France
CEHI	- Caribbean Environmental Health Institute
CELT	- Centre for the Enhancement of Learning and Teaching
CEO	- Centre for Earth Observation
CEO	- Chief Executive Officer
CEOS	- Committee on Earth Observation Satellites
CERMP	- Cyclone Emergency and Risk Management Project (Tonga)
CESMG	- see ESMG
CFTC	- Commonwealth Fund for Technical Co-operation
C-GOOS	- Coastal-Global Ocean Observing System
CGPS (cGPS)	- Continuous Global Positioning System
CHARM	- Comprehensive Hazards and Risk Management
CIDA	- Canadian International Development Agency
CISNet	- Coastal Index Site Network
CLIPS	- Climate Information and Prediction Services
CLIVAR	- Climate Variability and Predictability

CLP	-	Community Lifelines Programme (SOPAC)
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 Southwest 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
CPWC	-	Collaborative Programme on Water and Climate
CRGA	-	Committee of Representatives of Governments and Administrations (of South Pacific Community)
CROP	-	Council of Regional Organisations of the Pacific (formerly SPOCC)
CROP ICT WG	-	CROP Information and Communication Technologies Working Group
CRP	-	Community Risk Programme (SOPAC)
CSA	-	Cambridge Scientific Abstracts (USA)
CSC	-	Commonwealth Science Council
CSD	-	Commission of Sustainable Development (of United Nations)
CSI	-	Coastal Regions and Small Islands (of UNESCO)
CSIRO	-	Commonwealth Scientific and Industrial Research Organisation (Australia)
CSO	-	Civil Society Organisation
CSP	-	Conservation Society of Pohnpei
CSPOD	-	Canadian South Pacific Ocean Development Programme
CT	-	Composting Toilet
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
DISMAC	-	Disaster Management Centre
DMA	-	Defence Mapping Agency (US)

DMU	- Disaster Management Unit (SOPAC Secretariat)
DO	- Dissolved Oxygen
DoM	- Department of Mining (PNG)
DOALOS	- (UN) Division for Ocean Affairs and the Law of the Sea
DORD	- Deep Ocean Resources Development Co. Ltd, Japan
DOS	- Disk Operating System
DOWA	- Deep Ocean Water Applications
DSDP	- Deep Sea Drilling Project
DSM	- Demand Side Management
DSTO	- Defense and Science and Technology Organisation (Australia)
DTM	- Digital Terrain Modelling
DWC	- Dialogue on Water and Climate
EC	- European Community (now EU)
ECOSOC	- Economic and Social Council (UN)
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
EPC	- Electric Power Corporation (Samoa)
EPC	- thermal graphic recorder used in mapping (probably after company founder: Edward P. Curly)
EPCS	- Electronic Particle Counting System
EPM	- Environmental Programme for the Mediterranean
ER	- Internal SOPAC Secretariat abbreviation for EU-SOPAC Project reports
ESCAP	- Economic and Social Commission for Asia and the Pacific (UN)
ESMG	- Earth Science and Marine Geology (SOPAC certificate course)
ESSI	- Earth Search Science Incorporation
EST	- Environmentally Sound Technologies
EU	- European Union
EUEI	- European Union Energy Initiative [for Poverty Eradication for Sustainable Development]
EUMETSAT	- European Organisation for the Exploitation of Meteorological Satellites
EVI	- Environmental Vulnerability Index
EWG	- Energy Working Group (CROP)
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
FEPC	- Federation of Electric Power Companies (Japan)
FEMA	- Federal Emergency Management Agency (US)
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
FICs	- Forum Island Countries
FIELD	- Foundation for International Environmental Law and Development
FINNIDA	- Finnish Department of International Development Cooperation
FINTEL	- Fiji's International Telecommunications Provider
FIT	- Fiji Institute of Technology
FJD	- Fijian Dollar
FLIS	- Fiji Land Information System
FMS	- Fiji Meteorological Service
FNPF	- Fiji National Provident Fund
FNTC	- Fiji National Training Council (now TPAF)
FOAM	- Forecast Ocean Atmosphere Model
FOC	- Forum Officials Committee
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 and International Waters Assessment
GLI	- Global Imager
GLOBEC	- Global Ocean Ecosystems Dynamics Programme
GLOSS	- Global Sea-Level Observing System
GNP	Gross National Product
GODAE	- Global Ocean Data Assimilation Experiment
GOES	- Geosynchronous Operational Environmental Satellite
GOOS	- Global Ocean Observing System
EuroGOOS	- European GOOS
I-GOOS	- Intergovernmental GOOS
NEARGOOS	- North East Asian Region GOOS
MedGOOS	- Mediterranean GOOS
PI-GOOS	- Pacific Island GOOS
GOSSP	- Global Observing Systems Space Panel
GPA	- Global Plan for Action
GPF	- General Purpose Fund
GPS	- Global Positioning System
GRID	- Global Resource Information Database (UNEP)
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
GWP	- Global Water Partnership
HAB	- Harmful Algal Blooms
HAU	- Hazards Assessment Unit (SOPAC Secretariat)
HDI	- Human Development Index
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)
HYCOS	- Hydrological Cycle Observing System
IAEA	- International Atomic Energy Agency
IAMSLIC	- International Association of Aquatic and Marine Science Libraries and Information Centers

IAS	- Institute of Applied Science (USP)
IAVCEI	- International Association of Volcanism and Chemistry of the Earth's Interior
IBTS	- International Bottom Trawl Survey
ICCEPT	- Imperial College Centre for Energy Policy and Technology
ICES	- International Council for the Exploration of the Sea
ICM	- Integrated Catchment Management
ICOD	- International Centre for Ocean Development (Canada)
ICOGS	- International Consortium of Geological Surveys
ICRI	- International Coral Reef Initiative
ICSU	- International Council of Scientific Unions
ICT	- Information and Communication Technologies
ICU	- [Pacific] Islands Climate Update (NZAID)
ICZM	- Integrated Coastal Zone Management
IDNDR	- International Decade for Natural Disaster Reduction
IEDS	- Integrated Exploration and Development Services Limited (Australia)
IETC	- International Environmental Technology Centre
IFREMER	- Institut Francaise de Recherche pour l'Exploitation de la Mer (Formerly CNEXO)
IGBP	- International Geosphere-Biosphere Programme
IGES	- Institute for Global Environmental Strategies
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)
IIEC	- International Institute for Energy Conservation
IISEE	- International Institute of Seismology and Earthquake Engineering
IKONOS	- High Resolution Satellite Imagery
IMA	- International Market Allowance
IMO	- International Maritime Organisation
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
IRC	- Internal Revenue Commission (PNG)
IRD	- Institut de Recherche pour le Développement (ex ORSTOM)
IRETA	- Institute for Research Extension and Training in Agriculture (USP)
IRI	- International Research Institute for Climate Prediction
IRIS	- Incorporated Research Institution for Seismology

ISA	- International Seabed Authority
ISC	- Interim Sub-Committee (of SOPAC Governing Council to deal with future role and direction of SOPAC)
ISDR	- International Strategy for Disaster Reduction
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	- Information Technology
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
IWCAM	- Integrated Watershed and Coastal Area Management
IWP	- International Water Programme
IWRM	- Integrated Water Resources Management
IYO	- International Year of the Ocean (also YOTO)
JAFOOS	- Joint Australian Facility for Ocean Observing Systems
JAIF	- Japan Atomic Industrial Forum
JAMSTEC	- Japan Agency for Marine-Earth Science and Technology (formerly Japan Marine Science and Technology Centre)
JCOMM	- Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology
JGOFS	- Joint Global Ocean Flux Study
JIBC	- Japan Bank of International Cooperation
JICA	- Japan International Co-operation Agency
JNOC	- Japan National Oil Corporation
JOGMEC	- Japan Oil, Gas and Metals National Corporation (formerly MMAJ)
JPfA	- Joint Caribbean-Pacific Programme for Action on Water and Climate
JPOI	Johannesburg Plan of Implementation
JREC	- Johannesburg Renewable Energy Coalition
JWP	- Just World Partners (UK)
KEEP	- Kiribati Environmental Education Project
kgoe	- kilogram of oil equivalents
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
ktoe	- kiloton of oil equivalents

LADS	- Laser Airborne Depth Sounder
LAN/WAN	- Local Area Network/Wide Area Network
LDC	Least Developed Countries
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
LOA	- Letter of Agreement
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
MBSM	- Multi-Beam Swath Mapper
MCDEM	- Ministry of Civil Defence and Emergency Management (New Zealand)
MDG	- Millennium Development Goals
MERIS	- Medium Resolution Imaging Spectrometer
MEXT	- (Japanese) Ministry of Education, Culture, Sports, Science and Technology
MIMRA	- Marshall Islands Marine Resources Authority
MITI	- Ministry of International Trade and Industry (Japan)
MLML	- Moss Landing Marine Laboratory
MLSNR	- Ministry of Lands, Survey and Natural Resources (Tonga)
MMAJ	- Metal Mining Agency of Japan (now JOGMEC)
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)
NIWA	- 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)
NTCA	- National Tidal Centre Australia
NURP	- National Undersea Research Programme (US)
NZAID	- New Zealand Agency for International Development (formerly known as NZODA)
NZIGNS	- New Zealand Institute of Geological and Nuclear Sciences
NZODA	- New Zealand Overseas Development Assistance (now NZAID)
NZWWA	- New Zealand Water and Wasterwater Association
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
OECS	- Organisation of Eastern Caribbean States
OEDC	- Ocean Engineering Development Company (Japan)
OFDA	- Office of US Foreign Disaster Assistance
OHP	- Operational Hydrology Programme (of WMO)
OISCA	- Organisation for Industrial, Spiritual and Cultural Advancement
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 Francaise 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), see IRD
OTEC	- Ocean Thermal Energy Conversion
PACE-SD	- Pacific Centre for the Environment and Sustainable Development

PACER	- Pacific Agreement on Closer Economic Relations
PacESD	- Pacific Centre for Environment and Sustainable Development
PACPOL	- Pacific Ocean Pollution Prevention (Programme)
PALM	- Pacific Island Leaders Meeting (acronym used to refer to Japan-PIFS Summit Meetings, begun in 1997, 2 nd Summit in 2000, and 3 rd in May 2003)
PAMBU	- Pacific Manuscripts Bureau
PAOOP	Potential Applications of Ocean Observations for the Pacific Islands Region
PAR	- Photosynthetic Active Radiation
PAYE	- Pay as you Earn
PCGIAP	- Permanent Committee on GIS Infrastructure for Asia and the Pacific
PCM	- Participatory Watershed Management
PcSs	Pacific Coastal States
PDC	- Pacific Disaster Center
PDF	- Portable Document Format
PDL	- Petroleum Development Licenses
PDO	- Pacific Decadal Oscillation
PDWBC	- Pacific Deep Western Boundary Current
PEAC	- Pacific ENSO Application Center
PEACESAT	- Pan-Pacific Education and Communications Experiment by Satellite
PEAMIS	- Pacific Environment Assessment and Management Information System
PECC	- Pacific Economic Cooperation Council
PEG	- Pacific Energy and Gender Network
PEN	- Pacific Energy News (SOPAC)
PESA	- Petroleum Exploration Society of Australia
PET '98	- Pacific Exploration Technology (conference of 1998, Nadi, Fiji Islands)
PFTAC	- Pacific Financial Technical Assistance Centre
PIAS (DG)	- Pacific Institute for the Advanced Studies in Development and Governance
PIBA	- Pacific Islands Broadcasting Association
PIC	- Pacific Island Country (s)
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
PICTAR	- Pacific Island Countries Trade Agreement
PICTs	- Pacific Islands Countries and Territories
PIDP	- Pacific Islands Development Program
PIEPP	- Pacific Islands Energy Policy and Plan
PIEPSAP	Pacific Islands Energy Policies and Strategic Action Plan
PIESD	Pacific Islands Energy for Sustainable Development
PIFS	- Pacific Islands Forum Secretariat
PIG	- Pacific Island Gold

PIGS	- Pacific Islands Geological Society
PIGGAREP	- Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project (PIREP Phase II)
PIIPP	- Pacific Islands Information and Communications Technologies Policy and Strategic Plan
PIMD	- Pacific Institute of Management and Development
PIMM	- Pacific Islands Management Model
PIMRIS	- Pacific Islands Marine Resources Information System
PIRATA	- Pilot Research Array in the Tropical Atlantic
PIREIS	- Pacific Island Resource and Environment Information Service
PIREN	- Pacific Island Renewable Energy Network
PIREP	- Pacific Islands Renewable Energy Project (SPREP)
PIRMBIS	- Pacific Islands Regional Maritime Boundaries Information System
PIROF	- Pacific Islands Regional Ocean Forum
PIROF-ISA	- Pacific Islands Regional Ocean Framework – Integrated Strategic Action
PIROIS	- Pacific Islands Region Ocean Information System
PIROP	- Pacific Islands Regional Ocean Policy
PLU	- Publications and Library Unit (of SOPAC Work Programme)
PMEG	- Programme Monitoring and Evaluation Group(s) (SOPAC)
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
PPB	- private post bag
PPL	- Petroleum Prospecting Licenses
PNG	- Papua New Guinea
PORTS	- Physical Oceanographic Real-Time System
PRAP	- Pacific Regional Action Plan on Sustainable Water Management
PRC	- People's Republic of China
PRDMM	- Pacific Regional Disaster Management Meeting
PREA	- Pacific Regional Energy Assessment
PREFACE	- the Pacific Rural Renewable Energy France-Australia Common Endeavour Project
PREP	- Pacific Regional Energy Programme
PRIP	- Pacific Regional Indicative Programme
PSSA	- Particularly Sensitive Sea Area
PPSEAWA	- Pan-Pacific South-East Asia Women Association
PTWC	- Pacific Tsunami Warning Centre
PUB	- Public Utilities Board
PWA	- Pacific Water Association
PWD	- Public Works Department

PWP	- Pacific Water Partnership
RAC	- Regional Analysis Centers
RAMP	- Rapid Assessment of Marine Pollution
RAMSI	- Regional Assistance Mission to the Solomon Islands
RAO	- Regional Authorising Office (EU)
RAP	- Regional Action Plan
RB	- Regular Budget
REEEP	- Renewable Energy and Energy Efficiency Partnership
REM	- Regional Energy Meeting
REPP	- Regional Energy Policy and Plan
RINEX	- Receiver Independent Exchange Format
RMI	- Republic of the Marshall Islands
ROC	- Republic of China
ROV	- remotely operated vehicles
RTFP	- Regional Trade Facilitation Programme (Pacific)
RS	- remote sensing
RSC	- Regional Steering Committee (of UNESCO, IHP in the Asia-Pacific region)
SAP	- Strategic Action Plan for International Waters
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
SDI	- Sustainable Development Indicators
SDR	- Special Drawing Rights
SDWG	- Sustainable Development Working Group (CROP)
SEACAMP	- Southeast Asian Centre for Atmospheric and Marine Prediction
SEAFRAME	- Sea Level Fine Resolution Acoustic Measuring Equipment
SERREAD	- Scientific Educational Resources and Experience Associated with the Deployment of Argo profiling floats in the South Pacific Ocean
SeaWIFs	- Sea-viewing Wide Field of View Sensor
SEI	- Special Events Imager
SHMAK	- Stream Health Monitoring and Assessment kit (New Zealand)
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
SM	- SPREP Meeting
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
SPACHEE	- South Pacific Action Committee for Human Ecology and Environment
SPAS	- School of Pure and Applied Sciences (USP)
SPaRCE	- Schools of the Pacific Rainfall Climate Experiment
SPBCP	- South Pacific Biodiversity Conservation Programme
SPBEA	- South Pacific Board of Educational Assessment
SPC	- Secretariat of the Pacific Community
SPDRP	- South Pacific Disaster Reduction Programme
SPILLCON	- Asia Pacific marine environmental pollution prevention & response conference
SPM	- Sustainable Project Management
SPREP	- Secretariat of the 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
SPSLCMP	- South Pacific Sea Level and Climate Monitoring Project
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)
SURE	- Sustainable Use of Renewable Energy
SWA	- Samoa Water Authority
SWPHC	- South West Pacific Hydrographic Commission
SYSMIN	- A special financing facility intended for ACP States whose mining sector plays a major role in their economy and is faced with known or foreseeable difficulties
TAF	- The Asia Foundation
TAG	- Technical Advisory Group
TAO-IP	- Tropical Atmosphere Ocean Implementation Panel
TCDT	- Tonga Community Development Trust (now called Tonga Trust)
TCSP	- Tourism Council of the South Pacific
TCWUP	- Tropical Cyclone Warning Upgrade Project
T-DEM	- Time-Domain Electromagnetic
TEMA	- IOC Training, Education and Mutual Assistance programme
TEPB	- Tonga Electric Power Board
TESL	- Teaching English as a Second Language
TNA	- Training Needs Analysis
TNC	- The Nature Conservancy (Pohnpei, Federated States of Micronesia)

TOGA	- Tropical Ocean Global Atmosphere Research Programme
TOPEX	- Typhoon Operational Experiment
ToR	- Terms of Reference
TPAF	- Training and Productivity Authority of Fiji (formerly FNTC)
TQM	- total quality management
TRITON	- Triangle Trans-Oceans Buoy Network
TTPI	- Trust Territory of the Pacific Islands
TWAS	- Third World Academy of Sciences
TWB	- Tonga Water Board
UFP	- Universite Francaise du Pacifique
UH	- University of Hawaii
UK	- United Kingdom
UN	- United Nations
UNCED	- United Nations Conference on Environment and Development
UNCLCS	- United Nations Commission on the Limits of the Continental Shelf
UNCLOS	- United Nations on the Law of the Sea
UNCTAD	- United Nations Conference on Trade and Development
UNDESA	- United Nations Department of Economic and Social Affairs
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
UNIFEM	- United Nations Development Fund for Women
UNISPACE	- United National Conference on Outer Space
UNU	- United Nations University
UoG	- University of Guam
UPNG	- University of Papua New Guinea
US	United States
USACE	- United States Army Corps of Engineers
USAID	- United States Agency for International Development
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
WASH	- Water Sanitation Hygiene (WSSCC)
WASH WG	- Water, Sanitation & Hygiene Working Group (STAR)
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)
WHYCOS	World Hydrological Cycle Observing System
WIOMAP	- Western Indian Ocean Marine Applications Project
WMO	- World Meteorological Organisation
WPSs	- Work Programme Strategies (SOPAC)
WRU	- Water Resources Unit (SOPAC Secretariat)
WSIS	- World Summit on the Information Society
WSSCC	- Water Supply & Sanitation Collaborative Council
WSSD	- World Summit on Sustainable Development
WTO	- World Trade Organisation
WWF	- World Wide Fund for Nature
WWF-SPP	- World Wide Fund for Nature – South Pacific Programme
3 rd WWF	- Third World Water Forum
WWG	- Water Working Group (STAR)
WWII	- World War 2
WWSSN	- World Wide Seismic Network
XBTs	- Expandable Bathy-Thermographs
YOTO	- Year of the Ocean
YPR	- Yield-Per-Recruit