

SPREP and SOPAC: Implementing the RIF

A Case for Integration – Opportunities and Issues

1. Introduction

1.1 The purpose of this briefing paper is to set out the SPREP Secretariat's perspective and proposals for integration with SOPAC components based on the directives given by the SPREP Governing Council at the 19th meeting (SM19) in 2008. SM19 mandated the Director to work with the CEOs of SOPAC and SPC to arrive at a workable solution for the implementation of the Forum Leaders' decisions on the merging of SOPAC into SPREP and SPC at their meetings in 2007 and 2008. In doing so, SPREP Members considered "the opportunities to strengthen the region's environment organisation that would be provided by rationalization of SOPAC functions, in whole or part, into SPREP".

1.2 This paper represents the Secretariat's response to the Members' directives and sets out SPREP's position on the issues and opportunities for an improved regional environment organisation that can be forged by integrating relevant functions of SOPAC and SPREP. In doing so it proposes significant changes to the structure of the Secretariat to facilitate improved service delivery to the region, and in this regard the process should be seen as a meeting of equals, rather than "absorption", to provide enhanced service delivery to Members: an integration of complementary functions and objectives.

1.3 For the purpose of this paper, the following are key strategic considerations arising from the Forum and SM19 decisions:

- 2008 Forum Leaders' Meeting: agreed that rationalization of SOPAC functions into SPREP and SPC should occur "*without any substantive diminution in SOPAC functions*".
- SM19: Members considered "the *opportunities to strengthen the region's environment organisation* that would be provided by rationalization of SOPAC functions, in whole or part, into SPREP".
- SM19: Members recognized "the need to consider the legal, financial, administrative, and *programmatic implications for absorbing SOPAC and/or its functions*, in whole or in part, within SPREP".
- SM19: Members directed "the Director...to engage collaboratively with...CEOs of SOPAC and SPC...to determine and jointly identify proposed institutional arrangements based on an analysis of:
 - *synergies and linkages between programs*
 - *optimizing service delivery*
 - *organisational capacities*
 - *maintaining the integrity of the applied science and technical services*"
- SM19: Members directed "the Director...in his deliberation on new institutional arrangements to *take account of the ICR recommendations and implementation*."

1.4 The consultant terms of reference also include the decision of the SPC CRGA to include "analysis of the core function of each SOPAC programme to assess whether it is

primarily (a) an environmental programme or (b) an economic development programme” – this is discussed in 2.6.

1.5 Other strategic considerations are noted in the findings of the *2008 Joint Triennial Review: Australian and New Zealand Approaches to Supporting Pacific Regional Organizations*. For example, at the regional level the report notes:

- “Opportunities from regionalism are becoming more critical as *Pacific island countries require more capacity building and capacity supplementation in an increasingly complex regional environment*. Pacific island countries increasing reliance on regional service delivery was highlighted by most Members consulted during this Review.”
- “CROP agencies focused on by the review have received funding increasing from approximately US\$70 million in 2005 to US\$100m in 2007 *but Members continually highlight the lack of visibility of in-country impact*.”
- “Members have articulated their preference that *PROs coordinate on one regional Joint Country Strategy per country* rather than manage separate strategies from each regional agency to maximise reductions in transaction costs and improved national/regional coordination.”
- “*All regional planning should be based on achieving outcomes at a national level*. This will require PROs to align with and support national level processes and work more closely with their Members.”

2. Organisational context and synergies

2.1 SPREP as an independent regional organisation was established under an intergovernmental agreement in 1993, with the mandate to:

“promote cooperation in the South Pacific region and to provide assistance in order to protect and improve its environment and to ensure sustainable development for present and future generations.”

2.2 SOPAC’s mandate is to:

“contribute to sustainable development, reduce poverty and enhance resilience for the peoples of the Pacific by supporting the development of natural resources, in particular non-living resources, investigating natural systems and the management of vulnerability through applied environmental geosciences, appropriate technologies, knowledge management, technical and policy advice, human resource development and advocacy of Pacific issues.”

2.3 In SPREP’s view these mandates are overlapping and complementary in their focus on natural resources, environment and sustainable development. This complementarity is also reflected at programmatic component and output levels and in the principles of SPREP’s five-yearly Action Plans adopted as part of the SPREP Agreement:

- *coordinating* regional activities
- *monitoring and assessing the State-of-Environment* - impacts of human activities on ecosystems
- development to maintain or enhance *environmental quality*
- *promoting and developing programmes*, including research, to protect atmosphere, and terrestrial, freshwater, coastal and marine ecosystems and species

- *ecologically sustainable use of resources*
- *reducing atmospheric, land-based, freshwater and marine pollution*
- *strengthening national and regional capabilities and institutional arrangements*
- *training, educational and public awareness activities*
- *integrated legal, planning and management mechanisms*

2.4 SPREP recognizes that there are applied geoscience technical skills and methodologies within the SOPAC programmes that would strengthen SPREP's work to conserve, manage and sustainably utilize the region's environment and natural resources. Conversely, the technical, policy and planning skills and in-country delivery in SPREP that support Pacific island countries and territories (PICTs) in biodiversity and ecosystem management, species conservation and management, environmental assessment, sustainable development, MEAs, pollution and waste, climate change and energy would strengthen many of the programmes of work that are currently undertaken by SOPAC. SPREP-SOPAC collaboration on a number of projects and initiatives, including recently approved EDF10 concepts, has highlighted the increasing synergy and the relevance of combining geophysical and environmental objectives and approaches in a holistic manner.

2.5 An integration of SOPAC and SPREP programmes would therefore offer PICTs an opportunity for improved service delivery and 'added value' in the context of mainstreaming environment into development planning and processes. To do so, it is essential that the Secretariat's role is science-based, and that it has the in-house capacity to assist countries with high quality technical advice, and to undertake the regional level environmental monitoring that is part of its mandate under the SPREP Agreement. The Secretariat is also mindful of the SM19 decisions to adopt the findings of the Independent Corporate Review, especially in the context of defining SPREP's core functions. In this respect, it is considered that SPREP's position on SOPAC rationalization is in accord with the ICR recommendations, and that the RIF process has given impetus to the SPREP Secretariat to define an improved core functional framework in the context of the proposed changes presented diagrammatically in Figure 1.

2.6 With reference to the consultant TOR requirement to examine whether SOPAC's programmes are primarily environmental or economic, SPREP's position is that its own environmental and sustainable development work in support of Members cannot be separated from environmental or economic interests. In turn, most of SOPAC's programmes deal with environmental geoscience and sustainable development issues. The range of programmatic work undertaken by both SOPAC and SPREP cannot easily be separated into 'economic' or 'environmental' – and indeed should not be, as both organisations are concerned with ecosystem-based management, on which island economies so greatly depend. SPC, SOPAC and SPREP have recently collaborated on a proposal for EDF10: Sustainable Management of Aquaculture and Coastal Fisheries for Food Security and Small Scale Livelihoods (SMACFISH), which has successfully passed the first stage of assessment and was recommended to be merged with a SPREP proposal for mainstreaming ecosystem-based management.

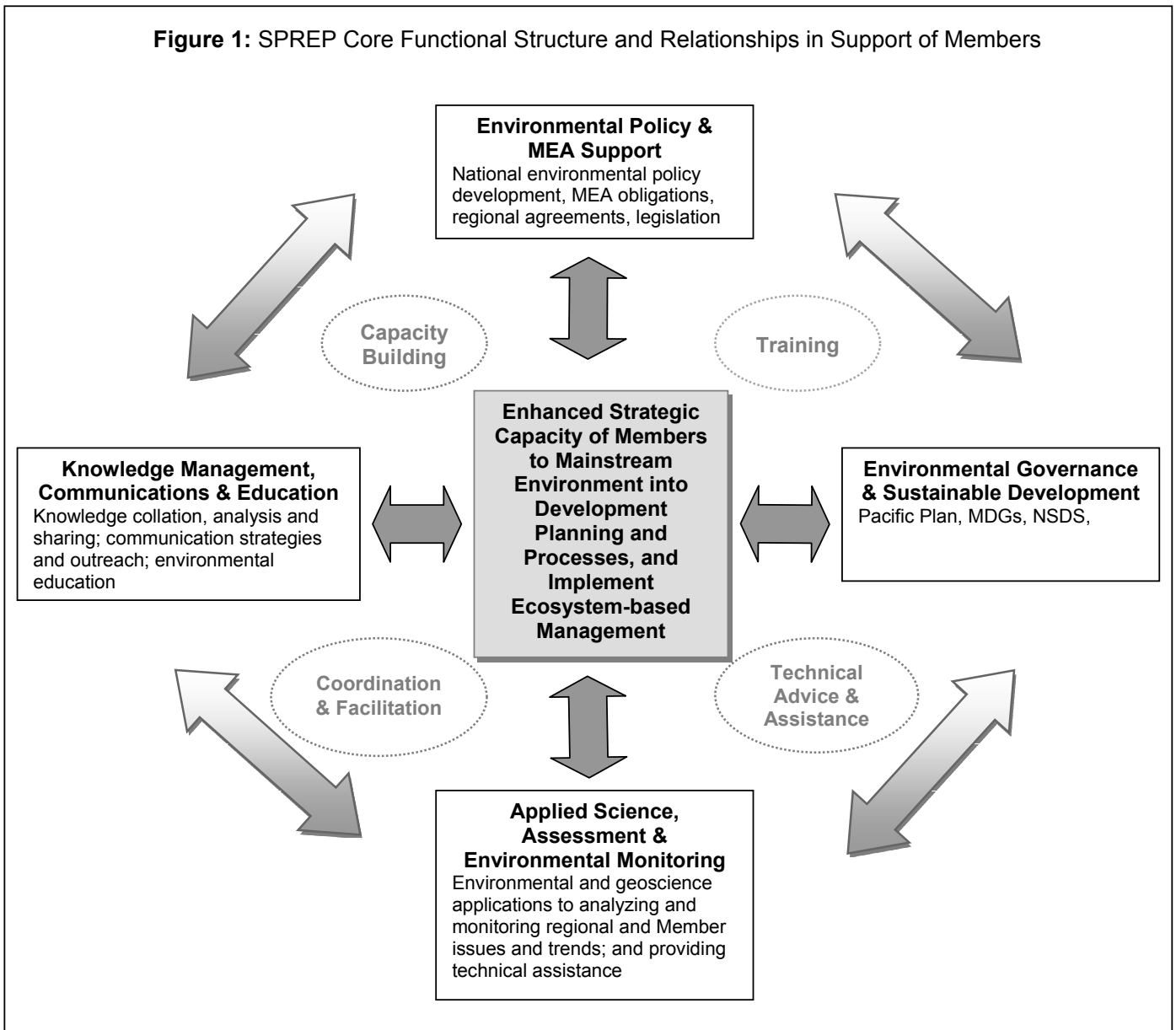
2.7 Climate change, a programmatic component of both SOPAC and SPREP, is an example of the importance of integrating economic and environmental planning. Consequently, at their 2007 meeting, the Forum Economic Ministers noted in their action plan that "adaptation to Climate Change is critical for sustaining economic growth of small islands". At a 2002 Pacific Islands High Level Consultation: Investing in Adaptation held in

Fiji, attended by ministers and senior officials of PIC finance, planning and environment ministries and donors, the final communiqué stated:

“Climate change, climate variability and sea-level rise is not just an environmental, but also an economic, social, and political issue for Pacific Island countries. It strikes the very heart of their existence. The impacts, and in particular the related economic and social shocks, pose serious political and national financial management issues for Pacific Island countries. Climate change, climate variability and sea-level rise adversely affect GDP, balance of payments, budget deficits, foreign debt, unemployment, and living standards.

Economic risk management must include adaptation to climate change, climate variability, and sea-level rise. Adaptation is therefore recognised as a component of good governance and sound domestic policy.”

Figure 1: SPREP Core Functional Structure and Relationships in Support of Members



3. Programmes and components for integration into SPREP

3.1 Annexes 1-3 present simple compatibility analyses of the three SOPAC programmes and the two SPREP technical programmes on the basis of high, medium or low compatibility. The programme goals, objectives and components are taken from the current SOPAC Strategic Plan 2005-2009 and SPREP's revised strategic programmes. The analysis demonstrates high correlation between SPREP and SOPAC programmes at the higher levels of goals and objectives, and with a number of the components. It also indicates strong compatibility at the output level, and there are clear alignments between some of SOPAC's work and either the SPREP Island Ecosystems (IEP) or Pacific Futures (PF) programmes, or both.

In broad terms:

- i) Much of the **Oceans and Islands Programme** (OIP) work is synergistic with that of IEP, especially in relation to ecosystem management (coastal management, coral reefs, forests, watersheds, etc), habitat analysis and environmental monitoring, resource and ocean governance (PIROP), vulnerability assessments, linkages to MEAs such as the CBD, Ramsar, UNCCD, CMS, and so on. For the PFP there are clear links with environmental monitoring, pollution and sustainable development. The only SOPAC output that is clearly not within SPREP's mandate is output OI 1.7 – hydrocarbon and mineral potential promoted, which would be better placed in a resource development agency. Output OI 3.1 is potentially problematic in that the task of maritime boundary delimitation does not fit obviously with current SPREP mandates, although the outcome does relate clearly to better ocean governance (including linkages to management of migratory marine species, such as cetaceans), implementation of PIROP, marine pollution work as well as implementation of the Noumea Convention and its Oil, HNS and Dumping Protocols. Overall, most of the OIP would complement and strengthen SPREP's work and the resulting integration would provide Members with a biophysical-geophysical technical, planning and policy support service for ecosystem-based management (EBM) in PICTs that would strengthen SOPAC's existing service delivery. There is a strong case for a coherent, integrated ecosystem focused function in SPREP that combines SPREP's coastal and marine management work with OIC to create a new EBM programme that would not only include IEP outputs on marine ecosystems, but also its terrestrial work, as well as linking and PF outputs on marine pollution and its related MEAs. The recent news that SPREP's €9 million proposal to EDF10 (in which SOPAC is a partner), Mainstreaming Ecosystem-based Management in the Pacific, has been successful in its first stage of submission further emphasizes the importance of this approach. The natural resource economics function implemented by OIC would most likely better fit with SPREP's environmental governance work, recommended for establishment as a new Environmental Governance Division (see Figure 2).
- ii) The **Community Lifelines Programme** (CLP) has a number of components, some of which are closely aligned to SPREP programme components while others are less so. It is clear, for example, that SPREP should not take CLP ICT components, which are better placed with SPC where they relate to its mandate in the Pacific Plan. However, SOPAC's GIS capability would strengthen SPREP's marine and terrestrial ecosystem management work, and would be an essential component of an OIP transition to SPREP. The CLP integrated water resources management IWRM work would logically fit into a new EBM component that includes OIP and IEP elements as outlined above – further strengthening an integrated island ecosystem approach that would provide enhanced service delivery to Members. The water and sanitation outputs of CLP are clearly aligned with PF's pollution and waste work. These outputs are spread over the three components of the CLP components and would need to be all packaged into a single component and integrated into SPREP. The merging of this component with SPREP's pollution and waste work would not only enhance or strengthen both elements but also expand the

scope of the programme, thus mutually benefiting both programmes. Furthermore, this new work area would complement and support some outputs of the IWRM work that would be absorbed into the new EBM programme as outlined above (please refer to matrix for more detailed explanations).

- iii) Existing linkages between CLP's Pacific HYCOS, the OIP's Pacific Island Global Ocean Observing Programme (PI-GOOS) and the OIP South Pacific Sea Level and Climate Monitoring Project (SPSLCMP), with the SPREP Pacific Island Global Climate Observing System (PI-GCOS) could clearly be combined to produce an effective integrated ocean-climate-water observing and monitoring system. The combined forces of these programmes and their scientific data collection and capacity building in-country would serve to improve the scientific understanding and capability of PICT human resources and institutions, and generate new knowledge that could be used to improve decision making on environmental resources.
- iv) SPREP clearly has a role in the environment-focused aspects of energy – including reducing PICTs heavy reliance on fossil fuel with its detrimental environmental impacts. Renewable energy and energy efficiency are the backbone of any energy and/or mitigation programme with resource monitoring, policy and planning, database and awareness as derivatives from them. Renewable energy and energy efficiency are also key measures for mitigating climate change, and funding for energy activities in the region have, are and will continue to come to primarily pursue environmental and climate change objectives.
- v) SPREP is well positioned with a long history of work in this area; initially under the Pacific Islands renewable Energy project (PIREP) and more recently under a major regional renewable energy programme (PIGGAREP with US\$5.23 million) to complement and strengthen SOPAC's work on renewable energy and energy efficiency under its Pacific Futures Division in an Energy and Mitigation Programme. The successful submission of SPREP's energy proposal to the first stage of EDF10 assessment, and request to prepare a full proposal in 2009 that incorporates the SOPAC energy proposal, further strengthens the case to bring CLP energy work to SPREP, in addition to the existing PIGGAREP.
- vi) The impacts of climate change are manifold, but for Pacific Islands they impact on all aspects of sustainable development – economic, social and environmental well-being. At the same time, given that 70% of the Pacific is un-served or under-served by modern energy services, the sustainability of future energy growth needs to take climate change into account. Energy is the engine of economic growth, but a new approach will be needed to ensure that economic growth can be in the context of sustainable development.
- vii) The goals and objectives of the **Community Risk Programme** (CRP) are closely aligned with SPREP's work, especially climate change adaptation and pollution and waste, but also ecosystem management since many natural disasters and hazards are linked to human disturbance of island ecosystems. Climate change adaptation and disaster risk reduction have similar aims and mutual benefits. However, to date the climate change and disaster risk management communities have operated largely in isolation from each other. This situation must change as a matter of urgency. Adaptation and DRR policy makers, experts and practitioners must communicate and collaborate with each other effectively to ensure that a comprehensive risk management approach to development at the local, national, regional and international levels is achieved. A start towards this is the management of these two areas of work under SPREP's Pacific Futures programme, which already has the mandate to coordinate climate change adaptation work in the region. This could result in the following benefits:

- Reduction of climate related losses through widespread implementation of DRR measures linked to adaptation.
- More efficient use of financial, human and natural resources.
- Increased effectiveness and sustainability of both adaptation and DRR approaches.

4. Restructuring SPREP's programmes to enhance service delivery

4.1 In order for effective integration of SOPAC and SPREP functions to occur, and to provide for enhanced service delivery to Members, it will be necessary for SPREP to restructure its programmes. While this will require careful consideration, and full collaboration with SOPAC on programme design, it will be essential in order to fully integrate those functions and provide confidence to Members and Forum Leaders that SOPAC's services will not only be maintained but enhanced as a result of the merger. It should be clear to SPREP Members that this restructuring should be seen not only in terms of SOPAC services but also of SPREP's programmes, in order to create a stronger and better regional environment organisation.

4.2 Figure 2 presents a draft scenario for reorganizing SPREP programmes to accommodate and enhance SOPAC functions. In this scenario the existing two programmes have been transformed into three divisions and, in turn, new programmes have been created within these divisions. As outlined in Section 3, SPREP is proposing to integrate the whole of the SOPAC Community Risk Programme, most or all of Oceans and Islands and substantive components of Community Lifelines. However, it must be recognized that it does not make organisational sense to expect that CRP and OIP can simply be transferred and operate as separate programmes – that would result in duplication with SPREP programmes and negate the idea of 'added value'. At the same time, it is essential to maintain SOPAC service delivery – and to enhance those services by integrating them with those of SPREP. The Secretariat proposes to take this opportunity to build an improved organization. In doing so, Figure 2 suggests that a new Environmental Governance Division be created that includes the crosscutting areas environmental policy, resource economics, law, capacity, education, communication and knowledge management. As examples, Figures 3 and 4 expand on the conceptual approach for integrating SOPAC and existing SPREP functions to create new Ecosystem-based Management and Climate Change and Community Lifelines programmes respectively.

5. Maintaining and strengthening the Science, Technology and Resources (STAR) Network

5.1 SPREP recognizes the important scientific and advisory role that STAR plays in maintaining the quality of SOPAC's work. It will ensure that the value of this network is maintained and strengthened by the inclusion of scientific input on wider ecosystem management issues relevant to both SPREP and SOPAC existing programmes and components. The exact modality will have to be determined but it will be undertaken in conjunction with implementation of ICR recommendations relating to improved governance of SPREP.

Figure 2: Example of New Programmatic Structure to Facilitate SOPAC Programme Integration

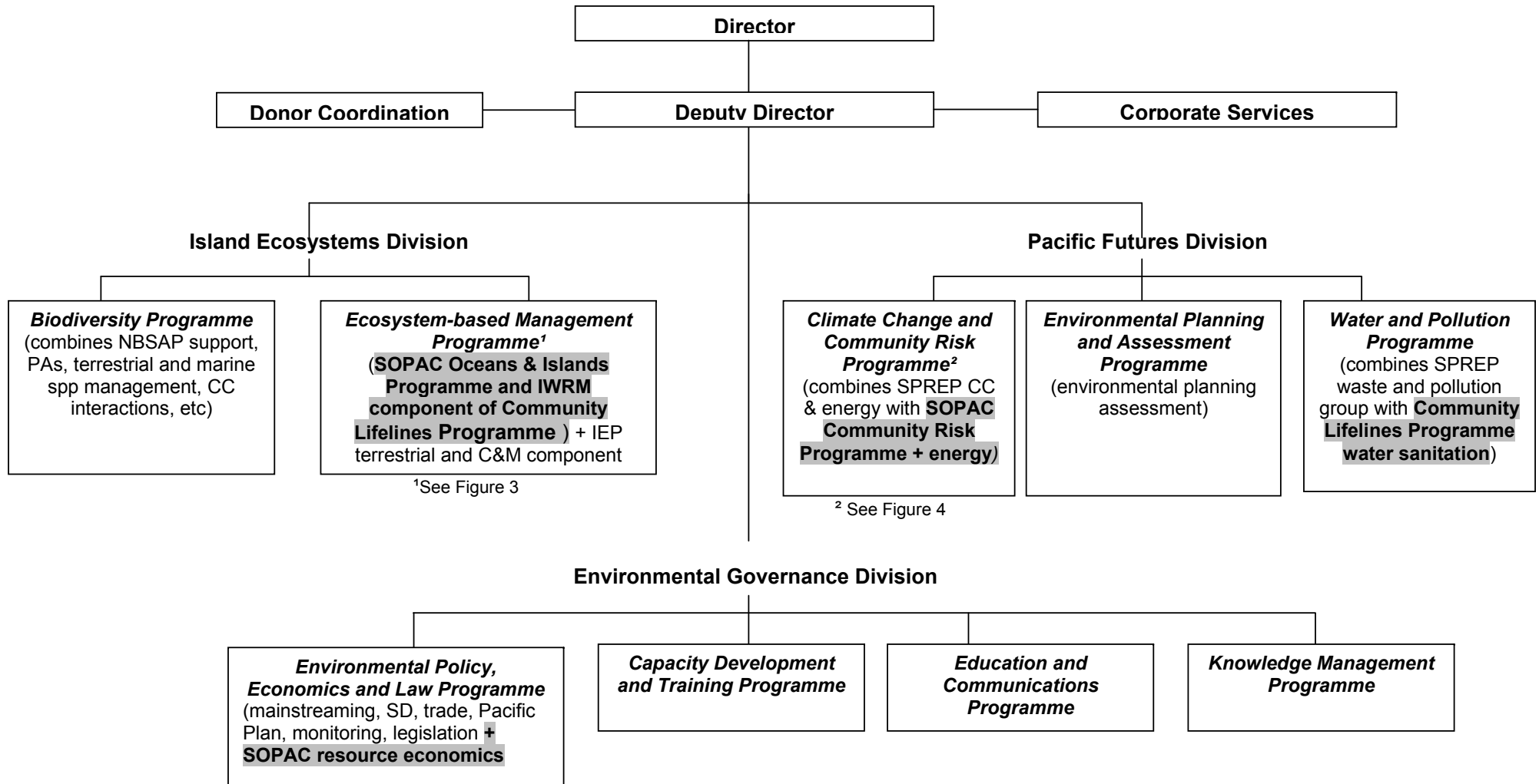


Figure 3: Improved Service Delivery to PICTs through IEP-OIP and CLP IWRM Integration

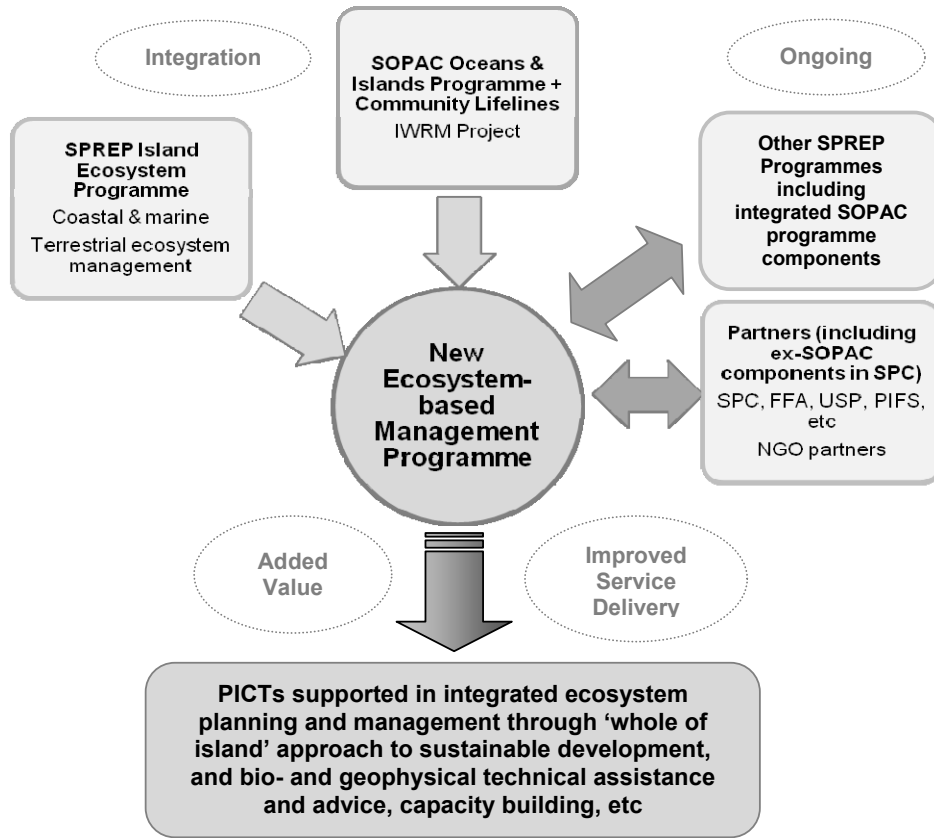
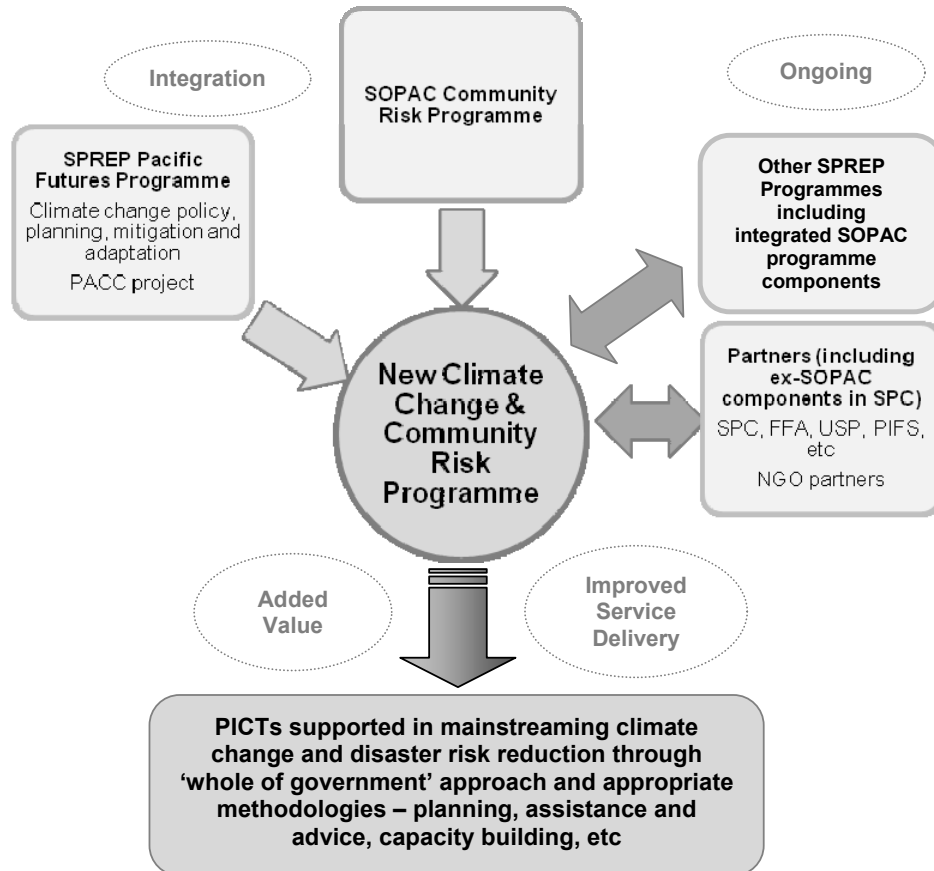


Figure 4: Improved Service Delivery to PICTs through PF-CRP Integration



6. Staffing and Finance

6.1 At the beginning of 2009 SPREP operates with a significantly smaller number of programme staff and extra-budgetary funding than SOPAC, which currently has a much larger project portfolio than SPREP. This is expected to change over the next 1-5 years as SPREP secures and/or implements large-scale projects. For example, PIGGAREP (GEF \$5 million), PACC (GEF \$13 million), energy (EDF10 €5 million), biodiversity and climate change (AusAID A\$4-5 million), mainstreaming ecosystem-based management and SMACFISH (EDF10 €9 million), regional invasive species (GEF \$3.5 million), regional MEA capacity building (EU/UNEP \$1.3 million), various ecosystem and species projects (Critical Ecosystem Partnership Fund \$1 million). The current and projected project and programmatic funding for SPREP 2009-2014 is presented at Annex 4.

6.2 The approved 2009 budget and staff numbers at 1 February 2009 are:

	Funding (US\$)			Staff Numbers		
	Core	Extra Budget	Total	Professional	Support	Total
Island Ecosystems	35,660	2,172,129	2,207,789	12	2**	14
Pacific Futures		3,212,813	3,212,813	13	2**	15
Executive Management & Corporate Services*	1,811,912	414,560	2,226,472	13	23	36
	1,847,572	5,799,502	7,647,074	38	27	65

*Director under recruitment ** Administrative support staff funded in Corporate Services budget

6.3 In terms of staff numbers and administration, the implications of a merger of the SOPAC programmes and components proposed above would be significant for SPREP and SOPAC - in the order of 40-50 additional programme staff based on current numbers. A programmatic merger would significantly enhance capacity to engage with the region and strategically align itself with country defined goals and priorities across a number of sectors. It would also provide the institutional capacity to support a more focused and integrated cross-sectoral approach to mainstreaming environmental considerations into sustainable development in the region. A merger would necessitate a complete review of administrative structure in addition to programme structure to maximize the opportunities for synergies and to create a more effective and efficient organization. An important consideration will be retention of SOPAC's current Suva facilities as part of a strategy to improve the outreach of SPREP's work as recommended by the ICR (see 7.1).

6.4 Although a merger would have significant financial management implications for SPREP, as SOPAC programmes are also implementing high-cost projects, SPREP has considerable experience and financial expertise in managing multiple large-scale projects. In addition to the current and forthcoming projects referred to in 6.1, SPREP has, for example, previously managed the South Pacific Biodiversity Conservation (\$15 million) and International Waters (\$11 million) projects.

6.5 Significant technical and administrative challenges are involved with integration for Corporate Services and its components of Information Technology Centre (ICT), Information Resources Centre (IRC), media and publications, finance and human resources and administration. However it is felt that integration would also present numerous opportunities for Corporate Services support to enhance the quality and range of its services to

stakeholders, and to do so in a manner consistent with the mandates of the Independent Corporate Review (ICR). These specific issues will be highlighted during the second phase of the project. Development of detailed implementation plans involving possible restructure and redesign of existing services are envisioned at that time, once the precise nature and form of programme integration becomes clear.

6.6 An issue that must be clarified is core programme support from assessed contributions and programme funding – Members and donors that currently contribute core funding to SOPAC will need to provide proportionally additional funds to support the costs of merged SOPAC programmes/activities. SPREP, in line with other CROP agencies, is currently negotiating multi-year funding, core and programme, with Australia and New Zealand.

7. Location – Issues and Opportunities

7.1 A merger with SOPAC functions has implications for the capacity of SPREP headquarters to physically accommodate additional staff. The Government of Samoa has indicated that it will provide additional land and accommodation as required. However, availability of accommodation at SPREP HQ should not be the primary consideration in locating SOPAC programmes/activities, but rather the opportunities that would be provided by taking a more creative approach to improve service delivery to Members. ICR Recommendation 113 states: “SPREP should consider decentralizing some Secretariat activities by locating selected staff at strategic sub-regional locations, in order to service a group of PICTs that require extensive support”. In addition, the report also noted: “Establishing a decentralized presence across the region perhaps through co-location at SPC or USP centres would no doubt improve the visibility and subsequently the efficiency of the Organization” (Annex 6 para 21).

7.2 Placement of merged SOPAC-SPREP programmes in Suva therefore provides an opportunity for SPREP to establish a presence in Fiji and Melanesia, with the following advantages:

- Establishment of a formal SPREP office would partly address Fiji’s political concerns in losing a CROP agency through the dissolution of SOPAC.
- It would encourage SOPAC staff to remain with programmes/projects. A risk of the SOPAC absorption is the loss of staff and SPREP would make a concerted effort to encourage SOPAC staff to continue with their programmes and projects. Trying to replace large numbers of predominantly technical staff would place an enormous strain on SPREP’s resources, and severely undermine the delivery of programme and project outputs – with the subsequent failure to deliver to Members and loss of SPREP’s credibility.
- A location in Suva would improve SPREP access to the PIFS, SPC, USP, EU and other donors.
- It would provide an opportunity to establish a joint working presence with SPC and other similar regional organisations and offices; and it would enable an integrated working relationship with different programme components that may be absorbed separately into SPREP and SPC.

8. Conclusion

8.1 Given the Forum Leaders’ decision to rationalize SOPAC into SPREP and SPC, SPREP considers that it presents an outstanding opportunity to provide Pacific island countries and territories with improved, integrated service delivery in applied environmental and geosciences. The improved service would cover the wide scope of policy, planning and

technical services. From SPREP's perspective it complements the directions set out in the ICR and also addresses SOPAC's requirements for maintaining the integrity of its work. In order to build on the existing synergies and complementarities of the two organisations, SPREP proposes to restructure its programmes to facilitate effective integration with SOPAC programmes. One scenario has been presented here, but finalization of any restructuring would be undertaken jointly with SOPAC – and would be subject to endorsement of the SPREP Council.

8.2 In summary, SPREP considers that there is a strong case for a merger of the following SOPAC programmes and programme components with SPREP:

- Oceans and Islands
- Community Lifelines – energy, water and GIS capacity
- Community Risk

ANNEX 1: SPREP–SOPAC examples of improved service delivery to Members

A. Island Ecosystems Programme

1. Naviti Island, Fiji, community forest restoration project

This project is an initiative of local people in one village and a locally owned resort on Naviti. The community has (unaided) almost eradicated goats from the island. Goats had contributed to general deforestation and the hope was to restore native forest by removing the animals. However, goat removal allowed the introduced tree *Leucaena leucocephala* to spread into the grassland that had been created by the goats. The community therefore wishes to manage *Leucaena*, and requested SPREP's assistance in project design. This planning could be improved by the provision of georeferenced site maps, which could also be used for monitoring progress, and which could be provided with SOPAC assistance. Project monitoring is important for this project, as the techniques are experimental and the project's experiences should be useful for developing a best-practice model for *Leucaena* management in the seasonal tropics.

2. Biodiversity and climate change atlas for the Pacific

SPREP was recently requested by AusAID to prepare a proposal for a major initiative on climate change and biodiversity in the Pacific. This proposal has passed the first stages and is currently under further development. A major element of the proposal comprises the production of a climate change atlas, to include aspects such as potential range changes of native vegetation types, range shifts of endemic and threatened species, distributional changes of invasive species and changes in suitability ranges for crop plants (plus potential changes in the marine area). With the current institutional structure, much of this work would need to be out-sourced, as SPREP does not have the required capacity to carry it out. Further, SPREP does not currently have the capability to plan the work in full detail, and will be seeking collaboration with outside agencies with greater experience in this area. A merger with SOPAC would not only permit some of the atlas work to be done in-house but, perhaps more importantly, would also enable the project to be designed more effectively and confidently, with less reliance on outside assistance.

3. Christmas Island, Kiribati, ecotourism and biodiversity resource valuation

Christmas Island was formerly perhaps the largest seabird breeding island in the world, certainly in the tropics. Its value has been severely degraded, especially in the past 30 years, as a consequence of the movement of people there from the Gilbert group, and a lack of adequate conservation and development planning and management. Repeated studies over this period have resulted in similar recommendations, most recently in the ADB-sponsored Kiritimati Island Development Plan, but the Government of Kiribati has not implemented these. SPREP has been working with the Kiribati authorities to improve conservation management on the island, but this underlying factor remains unaddressed. In the long term, current conservation efforts will fail unless a major change in development planning for the island takes place. All recent studies have recommended a shift in the economy towards ecological tourism, based mainly on birds and reefs, but the potential returns from this and the other values of these resources, have not been estimated in economic terms. SOPAC's expertise in economic resource assessment could play a crucial role in enabling the Govt of Kiribati to understand the economic value of making such a shift, which could in the end determine the survival or not of these globally significant wildlife resources.

4. Samoa's Program of Work for Protected Areas (PoWPA), key biodiversity gap analysis

Supported by SPREP's Islands Ecosystem Programme, this project has 3 key objectives:

1. Promote the strategic expansion of the existing MPA network in order to meet agreed country marine protected area (MPA) targets
2. Strengthen and consolidate the management of existing PA networks
3. Identify the information gaps required to inform a) and b).

To achieve these goals near shore marine habitat must be mapped to better understand the condition and resources current conservation is managing to allow for the logical and beneficial expansion of marine protected areas.

SOPAC's extensive library of high resolution, recent satellite imagery coupled with SOPAC officers' expertise in geo-referencing satellite imagery was instrumental for habitat mapping nearshore areas in Samoa. The effort and considerable cost in acquiring and pre-processing imagery for the SOPAC/SPREP region is a substantial undertaking and Member countries benefit greatly from SOPAC's proficiency in this arena. Together with SPREP's post-processing and analysis countries like Samoa can make real steps forward with conservation based on a national scale dataset rather than relying exclusively on site specific surveys.

The combined resources and effort of SPREP and SOPAC has made much of the analysis portion of the PoWPA more complete and comprehensive.

5. Vanuatu climate change and coastal governance and conservation Project

SPREP has been engaged to implement in Vanuatu the '*Enhancing Coastal and Marine Ecosystems Resilience to Climate Change Impacts through Strengthened Coastal Governance and Conservation Measures Project*'. This project has four components:

- the establishment of appropriate institutional mechanisms for implementation for long term adaptation to climate change through the development of an *Integrated Coastal Management Framework*;
- the provision of technical support and training opportunities for government officials and local communities to implement a package of low cost adaptive measures based on informed local decision making and the application of practical tools for the protection and restoration of coastal and marine habitats and monitoring of their effectiveness;
- the implementation of adaptation measures in demonstration sites in areas experiencing high vulnerability to coastal degradation and erosion and climate change impacts; and
- the raising of awareness and understanding of the linkages between climate change and biodiversity, the application of integrated coastal management and targeted adaptation measures as long term adaptation strategies to climate change impacts.

In previous and current discussions with SOPAC, there are obvious areas where the current SPREP project can be enhanced and strengthened with SOPAC's input under:

- the *Ocean and Islands Programme* (via physical oceanographic data to provide solutions for ocean management and development, advice on coastal processes assessment and modeling, and natural resource governance);
- the *Community Lifelines Programme* (via vulnerability assessments, asset management, and specific inputs from the sub-programmes - *Integrated Waters Resource Management Programme*, and the *Pacific Hydrological Cycle Observing System*); and
- the *Community Risk Programme* (via strengthening resilience to disasters, mitigating the effects of hazards and mainstreaming disaster risk management).

SOPAC's *Oceans and Islands Programme* most relevant and recent activities in Vanuatu relate to the collection of bathymetric data in the greater Villa area that will be used to

determine wave modelling and therefore impact and potential inundation. This is of course important to any development of an *Integrated Coastal Management Framework*.

The *Community Risks Programme* offers essential components for the management of disasters from acute disturbances, particularly those related to climate change; subsequently disaster management tools will be key to reducing and managing impacts and optimising responses.

The *Community Lifelines Programme* matches the approaches of the *Ocean and Islands Programmes*, particularly those related to issues of coastal vulnerability. The *Integrated Waters Resources Management Programme* has demonstration activities at Luganville and the Sarakata Catchment in Santo. Even though coastal zones are only a small part of the geographical scope of these demonstration sites, the project still supports policy development, GIS training, capacity development, community participation, monitoring and evaluation, and institutional support, all relevant to SPREP's project.

Finally, SOPAC's *South Pacific Sea Level and Climate Monitoring Project* also targets Vanuatu, whereby equipment has been installed around the country that provides critical long-term sea level data. This has been combined with the training of locally based institutions in data collection and dissemination with national and regional stakeholders.

Subsequently, common to both SPREP and SOPAC activities are the:

- implementation of adaptation measures through providing information on the most suitable interventions, and the consequences of inappropriate action;
- mainstreaming of climate change into national policies, planning processes, plans and decision-making across sectors;
- promotion of good governance in considering climate change through the participatory nature of the project, from village to national, and regional level;
- improvement of understanding by upgrading data collection systems, technical data sets developed under the project will be considered adopting a no-regrets approach; and
- strengthening human capacity to monitor and assess environmental, social and economic risks and effects of climate change.

A combined SPREP/SOPAC collaboration would therefore assist in the overall effectiveness of SPREP's project through the increased capacity in service delivery of pragmatic, data based approaches integrated with resource economic assessments to ensure solutions are not only technically feasible but are appropriate in the context of the socio-economic conditions. This collaboration would also increase the baseline data to guide adaptation responses, and the dissemination of appropriate tools to guide adaptation and/or resource use solutions. Improved service delivery would also be enhanced by supporting and strengthening the governance approach of the project, by enhancing institutional coordination in government, which is currently a major challenge, especially where integration of project based methods is needed to be transferred into national institutional practice post-project. There are also additional strengths in linking with SOPAC because the implementation of SPREP and SOPAC activities, particularly the demonstration sites will face similar challenges and collaboration will enable adaptive processes and allow lessons learned to be incorporated. Overall, a combined SPREP/SOPAC team will enhance the application of climate information to cope with climate variability and change, and change the paradigm for dealing with island vulnerability from reactive responses to proactive adaptation.

B. Pacific Futures Programme

1. PIEPSAP-PIGGAREP: Energy policy and renewable energy

SOPAC had a Danish-funded Pacific Islands Energy Policy and Strategic Action Plan (PIEPSAP) project that ran from 2004-2008. The programme assisted PICs to draft and adopt National Energy Policies, Plans and Legislations. It also did some work on renewable energy resources monitoring in the PICs. SOPAC offered PIEPSAP to be a co-financing project to the PIGGAREP. Prior to the closure of the PIEPSAP, an understanding was reached for PIGGAREP to follow-up on the renewable energy-related activities of the PIEPSAP. This is documented in the attached report by the PIEPSAP project manager.

PIGGAREP is now following up on the PIEPSAP wind monitoring activities in the Cook Is, Samoa and Tuvalu. It is assisting these countries to analyze the data collected by PIEPSAP and to conduct feasibility studies based on these data. PIEPSAP assisted Tonga to have a renewable energy act in place. PIGGAREP is now assisting Tonga to have the relevant regulations under the Act in place. PIEPSAP assisted Kiribati to draft an Energy Policy, PIGGAREP is now assisting Kiribati to draft and adopt an Action Plan to go with the Policy.

2. Niue: Coastal Development Policy and EIA

One of the important tasks post-Heta in Niue was the formulation of a Sustainable Coastal Development Policy. SOPAC was able to produce the policy with funding under EDF 9. The policy acts as a guide for risk reduction, disaster management and sustainable development in the coastal area. The SOPAC Sustainable Development Adviser realized that for the guide to produce maximum impact, other tools were needed, particularly a system of environmental impact assessment - which only existed in Niue in an ad hoc and non-mandatory fashion. She enquired to SPREP for suggestions as to where to look for assistance. The Environment Officer mentioned that expertise existed at SPREP and offered his services together with that of the Environmental Legal Adviser. A programme of action was proposed, involving making Niue stakeholders aware of what an EIA was, gathering information in order to draft an EIA regulation, training of relevant stakeholders in the process of EIA and advice on continuing development of EIA awareness and skills. After a short exchange of correspondence with SOPAC and Niue's Environment Department the SPREP offer was accepted. The assistance was undertaken over two country visits. The first country workshop included the launch of the Niue Sustainable Coastal Development Policy. After the EIA regulations were drafted a second workshop was arranged in which the Regulations were presented and training conducted under the Regulations. Both workshops were fully covered by SOPAC as well as travel arrangements and most of the travel costs for the SPREP officers. The draft Regulation is now with the Attorney General's Office and the Environment Department for advancement. The collaboration amongst the 3 officers worked very well, providing complementary skills mix and a coherent team approach. The SPREP officers are grateful to SOPAC for funding their participation – which apparently received priority over other SOPAC proposals – which allowed them the opportunity to fulfill their own work programme objectives. The Niue experience has provided valuable experience and confidence towards conducting similar work in other PICs.

3. Noumea Convention implementation: mining and EIA

This project is currently in the development and planning phase. Under the Noumea Convention (a Pacific region treaty on marine and coastal protection and pollution prevention with 12 parties from the region), provision exists for conducting EIAs. Moreover, specific reference is made to mining activities resulting in environmental damage. The project involves officers from both Programmes: the Coastal Management Adviser (the marine and coastal environment), the Environment Officer (EIA processes), the SPREP waste team (Noumea Convention, chemical and marine pollution) the Environmental Legal Adviser (regarding the Noumea Convention and relevant country laws). SPREP has rarely been involved in mining sector activities and this was seen as a good opportunity to engage in this

important area. The thinking has been to initially focus on the narrow limits of the Noumea Convention: provision of an EIA on damage to the coastal environment resulting from mining activities and recommendations for mitigation and rehabilitation. Later, once a working relationship has developed with the relevant government and stakeholders, it is hoped this work can be broadened in depth and scope to address the underlying drivers.

Given SOPAC's expertise in minerals and baseline and prediction assessments enquiries were made to them at the outset (15-18th October 2008). Arthur Webb and Akuila Tewake gave a positive indication of support with Akuila nominating to compile a list of mines (present and planned) with the potential of operations impacting on coastal zones. On January 28th, the Coastal Management Adviser while in PNG contacted Yvonne Tio, the Executive Manager for Sustainable Marine Environments at the PNG Department of Environment and Conservation (DEC) for the purpose of organizing an EIA training workshop for PNG. The next stage will involve organizing the training, essentially capacity building aimed at increasing the human resource and organisational capacity for implementing quality environmental assessments for EIA (for projects), to CEA (for areawide developments), SEA (for policy assessments) and IEA (for state of the environment assessments). Follow-on activities include the identification of a suitable site within PNG (possibly the Bismarck-Ramu Nickel Mine in the Madang Province; or one of the smaller gold mines in the Morobe and Central Provinces) to conduct in 2009 a study on the effects (pollution, coastal erosion, etc.) on the area of coast affected by the mining activity. Both SOPAC from the mineral and hydrology side and SPREP from the ecosystem and policy/legal/waste side will be involved, with possible involvement of other experts. Funds of around USD 50,000 have been secured to assist in this work, with co-financing and in-kind support from PNG agencies to be sought.

4. Climate Change Adaptation and Water

In late 2008, two GEF projects, the Pacific Adaptation to Climate Change (PACC) executed by SPREP and the Integrated Water Resource Management programme (IWRM) by SOPAC were approved by the GEF CEO Ms Monique Babut. This will avail USD 23.125 million to the Pacific region from 2009-2012 to carry out climate change adaptation and water development support programmes. This is an important case of two regional CROP agencies supporting countries to access GEF resources for national activities. During the preparatory phase, it was realized that a closer collaboration between these two projects and these two organizations was imminent if the two projects were to be approved by the GEF CEO. Efforts were then made for joint planning and collaboration of activities from the regional to the national level. The first such meeting was carried out in April 2007 at the Sonaisali Resort, Fiji. PACC and the IWRM focal points dealing with water were brought together in one setting to talk not only amongst themselves but with other colleagues and learn and share experiences with each other, and discuss activities of the two projects. As co-financing was a prerequisite for accessing GEF support, it was also discussed in this setting. Further discussions were then continued at the national level as a result, co-financing support letters were secured in record time. At the regional level, SPREP and SOPAC officers worked on joint texts to be inserted into the two-project documents that talk about complementarities and the synergies between the two projects. From this joint work, it was also realized that the IWRM programme provides the opportunity and mechanism by which the PACC water demonstration projects can be incorporated into national strategic planning, implementation and replication. With this national IWRM planning mechanism, the opportunity for PACC pilot project replication is significantly increased. The IWRM programme therefore increases the strategic value of the PACC pilot projects. As a step further to this effort, there are already some discussions at country level (in some countries) for joint implementation to reduce stress on human resources at national level and minimize duplication.

5. Water, sanitation and waste

The Pacific course on Improving Sanitation and Wastewater Management was the first of its kind for the Pacific Islands region. This training was organised by the UNEP-GPA office and coordinated by SOPAC's water and sanitation division with technical input from SPREP's waste management division and was a response to the outcomes of the Regional Wastewater Consultation Meeting held in 2001 in Majuro (Marshall Islands) and organised jointly by SOPAC, SPREP, GPA/UNEP and Pacific Waters Association (PWA).

The Pacific Wastewater Policy and Framework for Action that resulted from the Regional Wastewater consultation incorporated a specific guiding principle related to capacity building, which articulated, "viable and sustainable levels of skilled and knowledgeable people within the wastewater sector and communities will improve wastewater management". It further stated that:

"Appropriately trained and experienced urban and rural wastewater professionals are needed to develop projects and operate facilities, at the technical, managerial and community participation levels. Increased training enables communities and individuals to take responsibility for operating and maintaining their systems".

The training course constitutes a first step in addressing this resources issue.

The joint effort of technical staff from UNEP-GPA, USP, SOPAC and SPREP allowed for the delivery of the training modules to be done in a more holistic manner in which the original components were expanded to include components of solid and hazardous waste and not solely on wastewater. These linkages are essential for operations manager to attend to the waste issue in a more holistic manner rather than just as a single issue.

A very good indicator of the training programme's success is the level of presentation that the participants showed that they had acquired not just wastewater knowledge but waste management in general. The training was delivered at the highest possible standard, though there was still room for further improvements.

The course was then run in PNG, Guam, Kiribati and Tonga as a result of the level of interest generated through the original region offering.

6. SPREP's Role in the Energy Sector

The key energy issue for the PICs is its heavy reliance on fossil fuel. This can be addressed with two primary measures: renewable energy and energy efficiency. The same two key measures are central to CC mitigation. At the same time, current and future funding for energy in the region is being driven mostly from the environment agenda (GEF, EU, Italy, Austria, etc). It is an opportune time for the PICs to decide on a future based on renewable energy future or fossil fuel.

SPREP's current work on energy is presently on renewable energy given that its current confirmed funding to 2012 is only on renewable energy. However the 19th SPREP Meeting of 2008 approved the inclusion of energy efficiency in its 2009-2011 work programme. Therefore SPREP's effort on renewable energy will perfectly match SOPAC's on energy efficiency.

SPREP is another CROP agency providing complementary services to others who are working on energy in the region. It delivers its energy services from an environmental and sustainable development angle. These are in the areas of GHG mitigation, CDM, energy and wastes disposal (e.g waste oil, used solar batteries etc, waste-to-energy, energy and ecosystems, improving adaptation capacity of energy infrastructures, etc. The environmental and sustainable development benefits of energy as inseparable. When one is achieved, the

other is automatically achieved as well. SPREP energy activities are highly compatible with other CROP, regional and international agencies working on energy in the region since pursuing energy from a rural development angle, or poverty alleviation, saving foreign exchange or improving energy efficiency will also achieve similar environmental benefits. For instance, IUCN's Italian and Austrian-funded energy programme is on Ecosystems and Sustainable Livelihood but they are working on the same renewable energy resources like solar, wind, biofuel, hydro, geothermal etc that PIGGAREP and SOPAC are working on. One does not plan, study and install and/or consider a solar project differently regardless of whether you are looking at it with from an environment, economic, rural development, poverty alleviation or community perspective.

SPREP is the second key CROP agency on energy, after SOPAC. Confusions on who is doing what on energy is often between SOPAC and SPREP. Merging them at SPREP will be in the true spirit of rationalisation while reincarnating SOPAC's energy in another agency will continue to have 2 regional energy programmes and which will work against the spirit rationalisation.

SPREP and SOPAC collaboration to date

- SPREP has been collaborating closely with SOPAC in terms of the Pacific Plan and CROP EWG processes. This involved the drafting of the Pacific Islands Energy Policy and Strategic Action Plan which is the basis for the energy initiatives in the Pacific Plan.
- Each agency has invited the other and participated in their respective meetings and workshops. There have been joint workshops in the PICs, for example, at Tonga and Vanuatu. SOPAC was a member of the SPREP-completed Pacific Islands Renewable Energy Project. SOPAC participated in the design and review of the PIGGAREP.
- SOPAC offered its Danish government-funded PIEPSAP as a co-financing activity for the PIGGAREP. The PIEPSAP was completed in Aug 2008 but PIGGAREP is now following up on the activities started by the PIEPSAP (see attached PIEPSAP project manager's report). PIGGAREP is extending the PIEPSAP's wind monitoring activities in the Cook Is, Samoa and Tuvalu into monitoring activities at alternative sites, analysing the collected data and conducting of feasibility studies PIEPSAP assisted Nauru to adopt a national energy policy where a renewable energy target has been set. PIGGAREP is adding value to this by doing the wind resource monitoring and feasibility study. PIEPSAP assisted Tonga to draft a renewable energy bill which has been passed by parliament. PIGGAREP is assisting Tonga to develop the associated regulations in the Act.
- SOPAC has assisted Kiribati with drafting its National Energy Policy. PIGGAREP is adding value to this by assisting Kiribati to develop the Action Plan based on the adopted policy.
- SPREP has used SOPAC's expertise as national consultants for some of its activities. For instance, SOPAC made available Anare Matakititi to be the national consultants at Vanuatu and paid for by SPREP's earlier Pacific Islands Renewable Energy Project (PIREP).
- SPREP produced the National Energy Assessment Reports which is the basis for SOPAC's energy database and policy works.
- SPREP co-funded with SOPAC the 2007 Regional Energy Meeting and Energy Ministers' meeting and are working together in the preparation for the 2009 REM / PEMM.

Benefits if the energy activities currently being undertaken by SOPAC are transferred to SPREP

Benefits to SOPAC:

- PIGGAREP's confirmed funding will assist in the funding of SOPAC's renewable activities and for following up on activities earlier started at SOPAC's PIEPSAP
- PIGGAREP has only one full time staff therefore offers an opportunity to absorb some of SOPAC's staff with the relevant skills and experience
- SPREP's energy coverage of CDM, energy wastes disposal like waste oil, transformer oils, solar batteries etc, waste-to-energy, energy and ecosystems and improving adaptation capacity of energy infrastructures will broaden SOPAC's energy focus
- GEF expertise within SPREP will ensure future GEF funding to continue SOPAC's current energy activities
- Approved funding under the SPREP-managed EU MEA project to support SOPAC's work on CDM
- SPREP continuously receive funding from Taiwan for the inclusion of non-GEF SOPAC member countries in the activities of the PIGGAREP

Benefits to SPREP:

- SOPAC's energy efficiency activities will complement SPREP's renewable energy activities to make a more complete and stronger energy and mitigation programme
- All of SOPAC's confirmed funding for its renewable energy activities, if any, can be treated as co-financing for the PIGGAREP
- Staff at SOPAC can be absorbed to assist with the current one-man implementation of the PIGGAREP
- The joint SPREP-SOPAC EDF 10 proposal with an indicative budget of 9 million Euros will all come to one organisation (SPREP) thereby ensuring the sustainability of future regional funding for energy

The challenges

Lead coordinating agency and lead energy subject agencies

It is impossible for energy to be centralised in one CROP agency. It has always been a cross cutting area for all agencies. But there is always a recognized and accepted lead coordinating energy agency and lead agencies on the key energy subjects. It is accepted by CROP EWG members that SOPAC is now the lead coordinating agency (convening EWG meetings, lead in the convening of the Regional Energy Meeting / Pacific Energy Ministers' Meeting (REM/PEMM), Pacific Plan reporting, etc) and lead agency on energy efficiency. SPREP is the lead agency on renewable energy, PPA on the power sector, PIFS on petroleum and USP on training, etc. SPC has been out of the energy radar since 2002! In the current environment, one can allocate SPC to be the lead agency on biofuel given its close linkage to agriculture.

Uninterrupted delivery will depend on readily available funding

SOPAC energy is currently understaffed with mostly support staff and under-funded with ad-hoc activities here and there. Care should be taken not to transfer an empty-handed programme to an empty-handed host as the PICs will suffer as a consequence.

Familiarity and experience makes effective coordination

Regardless of whether SOPAC Energy will go to SPC or SPREP, PPA and USP will continue to do their respective work on energy. Other agencies like ESCAP, UNDP, WB, ADB, IUCN, etc will continue to be energy players in the region. The qualities to inherit SOPAC's regional coordination role should therefore be considered. Does the agency have the institutional memory, existing extensive contacts with, and the respect of, key national, regional and international energy players?

A grand Regional Energy Programme

Right now, everyone is jumping into renewable energy and energy efficiency is neglected and perhaps this is an opportunity to design a more structured, coherent and all encompassing regional energy programme. A programme on renewable energy and energy efficiency should not be considered in isolation from the power industry (PPA) as well as the petroleum industry too (PIFS). The last regional energy programme design was by SOPAC and SPC in 1998 which led to the birth of the joint Aust and France renewable energy programme at SPC. But that was just between SOPAC and SPC. What the region needs is a grand regional programme designed by SPREP, SOPAC, SPC, PPA, USP, NGOs and international agencies with priority activities in renewable energy, energy efficiency, petroleum, power, training, etc with all-inclusive output indicators (social, environment, economic, technical etc) that is consultatively agreed to among CROP agencies and for which each CROP member will be answerable for to the REM and PEMM. It is a programme with a coherent objective and approach to its implementation by all the CROP agencies. For instance, the region is currently promoting renewable energy and at the same time buying more fossil fuel as long as you buy them cheaply (bulk fuel project). Are they not conflicting each other?

Energy Leadership

The region needs a leadership style that is more accommodating and an inclusive one.

Managing the transition and overcoming identified challenges

SPREP will study Peter Johnston's review of the regional energy programme, which was done for SOPAC in July 2008 and use that as a basis for the structure of a fully-fledged regional energy programme at SPREP. The report is titled: "Coordination & Implementation Mechanisms for Regional Energy and Pacific ACP EDF-10 Energy Initiatives."

SPC as the potential lead agency

The difficulty that SOPAC is experiencing is that it is regarded as the lead energy agency but most of the funding is with other agencies, particularly SPREP.

If energy is to go to SPC, most of the funding for a least the next 6 years will still be at SPREP, given the PIGGAREP, EDF 10 and GEF 5, etc. The region will then continue to have 2 major energy programmes, confusions, wastage and against the spirit of streamlining.

The joint SOPAC-SPREP EDF 10 project will be more difficult to be managed and implemented between two different organisations.

It will take time for SPC to build the recognition and the confidence of agencies and PICs alike that it is: (1) a major regional energy player and (2) a lead agency on energy.

SPREP as the potential lead agency

SOPAC's programme would perfectly match SPREP's PIGGAREP and it would be a smooth transition to a host which is already currently recognized by all to be a key player in the regional energy scene. A host that currently has confirmed funding and excellent prospects for future funding and which has institutionalised energy into its work programme. Mainstream.

It will provide an opportunity to expand the horizon of energy to put more effort on CDM, energy and wastes, energy and ecosystems, improving adaptation capacity of energy infrastructures, etc.

ANNEX 2: SOPAC Oceans and Islands Programme Compatibility Assessment

SOPAC Oceans & Islands		SPREP Island Ecosystems	Compatibility	SPREP Pacific Futures	Compatibility
Goals	Improved technical knowledge of ocean and islands ecosystems for the sustainable management of natural resources	PICTs able to manage island resources and ocean ecosystems sustainably, supporting life and livelihoods	High	PICTs able to plan and respond to threats and pressures on island and ocean systems	High
Component 1 – Resource use solutions Develop for Members technical and scientific solutions for the assessment, development and management of natural resources		1.1 Ecosystems management: promote and support effective management of island ecosystems	High	2.1 Climate change: improve PICT's understanding of and strengthen capacity to respond to climate change	High
		1.2 Species conservation & management: promote and foster species conservation and management	Medium–High (relationship to spp habitat issues)	2.2 Pollution prevention and waste management: assist and enhance PICTs capabilities to manage and respond to pollution and waste	High
		1.3 People, institutions, education & knowledge management: equip people and institutions...with the capacity, education and knowledge to plan and manage their environmentally sustainable development	High	2.3 Environmental governance: improve means to identify, respond to, and report on environmental pressures, emerging threats and opportunities	High
Component 1 Outputs	OI 1.1 Coast to ocean spatial surveys for coastal management and development	Strongly aligned with coastal and marine ecosystem management outputs and aspects of marine species work - identification of characteristics of nearshore feeding and breeding areas for marine species of conservation concern - cetaceans, dugongs and marine turtles, seabirds; identification of nesting beaches for marine turtles in index beaches; comparable mapping of areas with characteristics to assist management	High	Relevant to CC adaptation, planning, and policies; environmental monitoring and assessment activities - SOPAC methods useful for PACC implementation and future projects; Integrated coastal management approach relevant as a joint approach across CC, Disaster Risk Management, biodiversity and conservation, and this OI output assists greatly in providing that on-the ground, factual, baseline data and information	High

SOPAC Oceans & Islands	SPREP Island Ecosystems	Compatibility	SPREP Pacific Futures	Compatibility
OI 1.2 Mineral and aggregate assessments	Some relevance to coastal ecosystem management work	Low-Medium	Relevant to CC adaptation issues (coastal stability and sea level rise); environmental monitoring and assessment SOPAC methods incorporated with EIA could assist PACC and future projects - relevant for resource management and monitoring.	Medium–High
OI 1.3 Coastal engineering assessments and advice	Relevant to coastal ecosystem management work. E.g., rehabilitation of affected nesting areas and minimizing impacts on nesting beaches and feeding areas, e.g. sea-grass beds for dugongs from infrastructural activities.	Medium-High	Relevant to environmental assessment work and for assessing alternative CC adaptation solutions	High
OI 1.4 Technical data and information on maritime and land boundaries provided	Relevant to coastal ecosystem management work re governance issues and PIROP, and high seas issues, and MEAs	High	Relevant to MEA work and transboundary pollution issues	Medium-High
OI 1.5 Maps and information products for ecosystem management	Strongly aligned with coastal and marine ecosystem management outputs. E.g., analysis of habitat characteristics for breeding/nesting grounds for turtles and dugongs; mapping of habitat characteristics referencing species, population densities, area coverage, stocks	High	Relevant to environmental monitoring and assessment work	Medium-High
OI 1.6 Certificate Course in Earth Science and Marine Geology delivered	Not mainstream IEP work area but could be aligned to education and training activities	Medium	Not relevant	Low
OI 1.7 Hydrocarbon and mineral potential promoted	Not within IEP scope	Low	Not within PF scope	Low
OI 1.8 Appraisal of environmental impact assessments and statements	Aligned with coastal and marine ecosystem management outputs	Medium-High	Strongly aligned with environmental assessment work	High
Component 2 – Monitoring Physical and Chemical Change in Ecosystems Assist SOPAC island members in developing appropriate strategies for the management of island	1.1 Ecosystems management: promote and support effective management of island ecosystems	High	2.1 Climate change: improve PICT’s understanding of and strengthen capacity to respond to climate change	High

SOPAC Oceans & Islands		SPREP Island Ecosystems	Compatibility	SPREP Pacific Futures	Compatibility
ecosystems based upon information from long-term sustained monitoring		1.2 Species conservation & management: promote and foster species conservation and management	Medium–High (relationship to spp habitat change issues)	2.2 Pollution prevention and waste management: assist and enhance PICTs capabilities to manage and respond to pollution and waste	High
		1.3 People, institutions, education & knowledge management: equip people and institutions...with the capacity, education and knowledge to plan and manage their environmentally sustainable development	High	2.3 Environmental governance: improve means to identify, respond to, and report on environmental pressures, emerging threats and opportunities	High
Component 2 Outputs	OI 2.1 Regional integrated ocean observing system alliance	Relevant to some aspects of coastal and marine ecosystem management work - strong link to the PACPOL in Invasive Marine Pests e.g. Biological Baseline Surveys for early detection on invasives,	Medium	Strongly aligned to CC - PI-GOOS and SPSCMP work closely aligned, linkages with SPREP PI-GCOS and CC data and information work. Joint work (one output is the quarterly Vai Pasifika newsletter) also extends to the Pacific HYCOS work. Pollution outputs (marine pollution response using shoreline cleanup assessment techniques or tools [SCAT analysis]).	High
	OI 2.2 Long term monitoring systems for physicochemical parameters of ocean and islands ecosystems in selected sites	Relevant to some aspects of coastal ecosystem management and species conservation work	Medium–High	Relevant to CC - selection of adaptation methods for selected sites and their monitoring for gauging effectiveness of intervention. Pollution and environmental monitoring and assessment - PACPOL especially for oil (WWII wrecks) & haz chem. spill and invasive marine pests response	High

SOPAC Oceans & Islands		SPREP Island Ecosystems	Compatibility	SPREP Pacific Futures	Compatibility
	OI 2.3 Physical oceanographic data to provide solutions for coastal management and development	Strongly aligned to coastal and marine ecosystem management work. E.g., evaluation of impacts of development on turtle nesting beaches and near-shore breeding areas and feeding habitats including sea-grass for dugongs, turtles; monitoring changes (e.g. impact of climate change) on nesting/feeding areas	High	Relevant to CC - selection of adaptation methods for selected sites and their monitoring for gauging effectiveness of intervention. Pollution and environmental monitoring and assessment	High
	OI 2.4 Information products and services from global ocean observing systems initiatives	Relevant to education, communication and knowledge management	High	Relevant to CC information and communication and environmental monitoring	High
Component 3 – Natural Resources Governance Support SOPAC island members in meeting their obligations for the effective management of non-living resources, as articulated in relevant international and regional agreements		1.1 Ecosystems management: promote and support effective management of island ecosystems	High (relationship to habitat issues and PIROP)	2.1 Climate change: improve PICT's understanding of and strengthen capacity to respond to climate change, and relates to international agreements	High
		1.2 Species conservation & management: promote and foster species conservation and management	Medium–High (relationship to spp habitat change issues)	2.2 Pollution prevention and waste management: assist and enhance PICTs capabilities to manage and respond to pollution and waste	High
		1.3 People, institutions, education & knowledge management: equip people and institutions...with the capacity, education and knowledge to plan and manage their environmentally sustainable development	High	2.3 Environmental governance: improve means to identify, respond to, and report on environmental pressures, emerging threats and opportunities	High

SOPAC Oceans & Islands		SPREP Island Ecosystems	Compatibility	SPREP Pacific Futures	Compatibility
Component 3 Outputs	OI 3.1 Support relevant provisions under UNCLOS, for delimitation of maritime boundaries and the protection of the marine environment through the provision of technical and policy coordination and advice (Parts II, IV, V, VI and XII)	Relevant to marine ecosystem management and governance	High	Relevant to MEA support including SPREP Convention	High
	OI 3.2 Support relevant parts under UNCLOS for marine scientific research, technology transfer and for mineral prospecting, exploration and exploitation through the provision of technical and policy coordination and advice (Part XIII and XIV, and Annex III)	Relevant to marine ecosystem management re marine scientific research	High	Relevant to marine pollution issues; environmental monitoring and assessment PACPOL planning preparation and coordination of response capabilities for oil & haz chem spills as well as IMPs. CC and impacts of ocean fertilization experiments and ocean acidification from climate change	High
	OI 3.3 National ocean policy development and implementation support for ocean management of coastal states EEZs	Relevant to marine ecosystem management and governance	High	Relevant to assisting Members develop National Sustainable Development Strategies	High
	OI 3.4 Implement relevant elements of the Integrated Strategic Action framework of the Pacific Islands Regional Ocean Policy	Relevant to marine ecosystem management and governance, implementation of PIROP	High	Relevant to assisting Members develop National Sustainable Development Strategies	High
	OI 3.5 Provision of technical and policy advice for natural resource management and development	Relevant to marine ecosystem management and governance, implementation of PIROP	High	Relevant to assisting Members develop National Sustainable Development Strategies and mainstreaming; pollution, environmental monitoring and assessment	High

ANNEX 3: SOPAC Community Lifelines Programme Compatibility Assessment

SOPAC Community Lifelines		SPREP Island Ecosystems	Compatibility	SPREP Pacific Futures	Compatibility
Goals	Improved community access to energy, water and sanitation, and information and communication technologies for sustainable livelihoods	PICTs able to manage island resources and ocean ecosystems sustainably, supporting life and livelihoods	High (re water resource management)	PICTs able to plan and respond to threats and pressures on island and ocean systems	High (all except ICT)
Component 1 – Resource Assessment, Development and	Strengthen SOPAC island members in resource assessment, development and management for energy, water, wastewater, and information and communication technologies	1.1 Ecosystems management: promote and support effective management of island ecosystems	High (re water resource management)	2.1 Climate change: improve PICT’s understanding of and strengthen capacity to respond to climate change	High
		1.2 Species conservation & management: promote and foster species conservation and management	Low	2.2 Pollution prevention and waste management: assist and enhance PICTs capabilities to manage and respond to pollution and waste	High
		1.3 People, institutions, education & knowledge management: equip people and institutions...with the capacity, education and knowledge to plan and manage their environmentally sustainable development	Medium-High	2.3 Environmental governance: improve means to identify, respond to, and report on environmental pressures, emerging threats and opportunities	High
Component 1 Outputs	CL 1.1 Water resources assessments	Relevant to terrestrial and wetlands ecosystem management	Medium	Relevant to CC adaptation, planning, and policies (PACC relates to water resources, so this will add value); pollution; environmental monitoring and assessment activities; sustainable development	High
	CL 1.2 Appropriate methods and technologies for water supply and sanitation		Low	Relevant to pollution; CC adaptation issues (climate change adaptation these methods will be useful for presenting alternatives); environmental monitoring and assessment; sustainable development	High

SOPAC Community Lifelines		SPREP Island Ecosystems	Compatibility	SPREP Pacific Futures	Compatibility
	CL 1.3 Integrated water resources management	Relevant to terrestrial and coastal ecosystem management	High	Relevant to environmental monitoring and assessment; pollution; sustainable development; CC - PACC project has already sought close interaction with SOPAC IWRM project	High
	CL 1.4 Renewable and non-renewable energy resources assessments		Low	Relevant to energy and CC; sustainable development	High
	CL 1.5 New renewable and developing energy technologies promoted		Low	Relevant to energy and CC; sustainable development	High
	CL 1.6 Energy efficiency and conservation promoted through technological approaches and management		Low	Relevant to energy and CC; sustainable development	High
	CL 1.7 ICT, GIS and remote sensing advice and support in resource assessments	GIS and RS relevant to terrestrial and coastal ecosystem management	High	GIS and RS relevant to environmental monitoring and assessment	High
	CL 1.8 Information provided on appropriate new and developing energy, water, wastewater, ICT, GIS and remote sensing technologies and applications	Relevant to knowledge management function	High	Relevant to knowledge dissemination in appropriate areas (energy, water, CC adaptation, etc)	High
Component 2 – Resource Assessment, Development & Management Strengthen SOPAC island members in asset management for energy, water, wastewater, and information and communication technologies		1.1 Ecosystems management: promote and support effective management of island ecosystems	Low	2.1 Climate change: improve PICT's understanding of and strengthen capacity to respond to climate change	Medium-High (re energy)
		1.2 Species conservation & management: promote and foster species conservation and management	Low	2.2 Pollution prevention and waste management: assist and enhance PICTs capabilities to manage and respond to pollution and waste	High
		1.3 People, institutions, education & knowledge management: equip people and institutions...with the capacity, education and knowledge to plan and manage their environmentally sustainable development	Medium-High	2.3 Environmental governance: improve means to identify, respond to, and report on environmental pressures, emerging threats and opportunities	Medium

SOPAC Community Lifelines		SPREP Island Ecosystems	Compatibility	SPREP Pacific Futures	Compatibility
Component 2 Outputs	CL 2.1 Water demand management, water quality monitoring and awareness in conservation practices		Low	Relevant to CC adaptation; pollution; environmental monitoring and assessment; sustainable development	High
	CL 2.2 Improved, effective and efficient management of wastewater		Low	Relevant to pollution	High
	CL 2.3 Disaster preparedness strategies developed for energy, water, wastewater and, ICT infrastructure		Low	Relevant to CC adaptation; pollution; environmental monitoring and assessment; sustainable development (except ICT)	High
	CL 2.4 Regional facility for remote sensing established	RS relevant to knowledge management; ecosystem management – but not for SPREP as the regional facility or capacity builder	Low	Technology crucial for monitoring adaptation in the longer term	High
	CL 2.5 Support provided in the use and application of ICT, GIS, GPS and remote sensing				
	CL 2.6 ICT, GIS and remote sensing tools and solutions developed				
	CL 2.7 Information provided on new and developing technologies, and applications				
Component 3– Resource Assessment, Development and Management Support SOPAC island members to develop, promote and implement appropriate policy, planning, regulatory frameworks and community awareness	1.1 Ecosystems management: promote and support effective management of island ecosystems	High	2.1 Climate change: improve PICT's understanding of and strengthen capacity to respond to climate change	High (re energy)	
	1.2 Species conservation & management: promote and foster species conservation and management	High	2.2 Pollution prevention and waste management: assist and enhance PICTs capabilities to manage and respond to pollution and waste	High	
	1.3 People, institutions, education & knowledge management: equip people and institutions...with the capacity, education and knowledge to plan and manage their environmentally sustainable development	Medium-High (community awareness)	2.3 Environmental governance: improve means to identify, respond to, and report on environmental pressures, emerging threats and opportunities	High	

SOPAC Community Lifelines		SPREP Island Ecosystems	Compatibility	SPREP Pacific Futures	Compatibility
Component 3 Outputs	CL 3.1 Regional policies, plans, strategies and guidelines for energy, water, wastewater, sanitation, ICT, GIS and remote sensing promoted	Relevant to coastal management issues	Medium	Relevant to CC adaptation and complementary to various action plans; and policies; pollution; environmental monitoring and assessment activities; sustainable development	High
	CL 3.2 Technical support and advice in the development of national legislations, policies, plans, strategies, guidelines and regulatory frameworks for energy, water, wastewater, sanitation, hygiene, ICT, GIS and remote sensing	Water management issues relevant to terrestrial and coastal ecosystem management; capacity building (not ICT, GIS, RS)	Medium	Relevant to environmental law; MEAs; pollution; CC adaptation issues and action plans; energy; environmental monitoring and assessment; sustainable development (not ICT, GIS, RS)	High
	CL 3.3 Implementation support for relevant elements of regional and national policies, plans, strategies, guidelines and regulatory frameworks for energy, water, wastewater, sanitation, ICT, GIS and remote sensing	Water management issues relevant to terrestrial and coastal ecosystem management; capacity building (not ICT, GIS, RS)	Medium	Relevant to environmental law; MEAs; pollution; CC adaptation issues; energy; environmental monitoring and assessment; sustainable development (not ICT, GIS, RS)	High
	CL 3.4 Strengthened partnerships with relevant stakeholders through advocacy	Relevant to communication on water and ecosystems issues	Medium	Relevant to environmental law; MEAs; pollution; CC adaptation issues (fits with the international level support and the PCCR); energy; environmental monitoring and assessment; sustainable development (not ICT, GIS, RS)	High
	CL 1.5 Energy, water, wastewater, sanitation, hygiene, and information and communication technologies community awareness promoted	Relevant to knowledge management; social communication and education	Medium-High	Relevant to knowledge management; social communication and education	Medium-High

ANNEX 4: SOPAC Community Risk Programme Compatibility Assessment

SOPAC Community Risk		SPREP Island Ecosystems	Compatibility	SPREP Pacific Futures	Compatibility
Goals	To improve disaster risk management practices to build safer and more resilient communities	PICTs able to manage island resources and ocean ecosystems sustainably, supporting life and livelihoods	High	PICTs able to plan and respond to threats and pressures on island and ocean systems	High
Component 1 – Strengthening Resilience to Disasters To strengthen SOPAC Island members disaster management capabilities		1.1 Ecosystems management: promote and support effective management of island ecosystems	High (re ecosystem function and stability)	2.1 Climate change: improve PICT’s understanding of and strengthen capacity to respond to climate change	High
		1.2 Species conservation & management: promote and foster species conservation and management	Low	2.2 Pollution prevention and waste management: assist and enhance PICTs capabilities to manage and respond to pollution and waste	High
		1.3 People, institutions, education & knowledge management: equip people and institutions...with the capacity, education and knowledge to plan and manage their environmentally sustainable development	High	2.3 Environmental governance: improve means to identify, respond to, and report on environmental pressures, emerging threats and opportunities	High
Component 1 Outputs	CR 1.1 National disaster management planning and coordination arrangements, including the national focal point (NDMO0, strengthened)		Low	Relevant to CC adaptation, planning, and policies especially to create synergies between similar activities to adaptation; sustainable development	High
	CR 1.2 Disaster management knowledge and the application best practices through effective training and information management strengthened	Relevant to capacity building and training	High	Relevant to CC adaptation (best practices and training methods applicable to adaptation); sustainable development	High
	CR 1.3 Public awareness and early warning systems strengthened		Low	Relevant to CC adaptation	High
	CR 1.4 Emergency management communication systems and practices established and maintained		Low	Relevant to CC adaptation	High
	CR 1.5 Emergency preparedness and response strengthened		Low	Relevant to CC adaptation	High
	CR 1.6 The International Strategy for Disaster Reduction (ISDR) promoted and advocated		Low	Relevant to CC adaptation	High
	CR 1.7 Social, environmental and economic costs of disasters analyzed	Relevant to ecosystem management	High	Relevant to CC adaptation; sustainable development	High

SOPAC Community Risk		SPREP Island Ecosystems	Compatibility	SPREP Pacific Futures	Compatibility
Component 2 – Mitigating the Effects of Hazards To develop, for SOPAC Island members, technical solutions that provide a knowledge base for the mitigation of hazards and reduction of vulnerability		1.1 Ecosystems management: promote and support effective management of island ecosystems	High	2.1 Climate change: improve PICT’s understanding of and strengthen capacity to respond to climate change	High
		1.2 Species conservation and management: promote and foster species conservation and management	Low	2.2 Pollution prevention and waste management: assist and enhance PICTs capabilities to manage and respond to pollution and waste	Medium
		1.3 People, institutions, education & knowledge management: equip people and institutions...with the capacity, education and knowledge to plan and manage their environmentally sustainable development	High	2.3 Environmental governance: improve means to identify, respond to, and report on environmental pressures, emerging threats and opportunities	High
Component 2 Outputs	CR 2.1 Environmental Vulnerability Index (EVI) tool promoted	Relevant to ecosystem conservation and management – ecosystem services; MEA support	High	Relevant to CC adaptation; environmental monitoring and assessment; sustainable development	High
	CR 2.2 Integrated hazard assessment and risk reduction solutions promoted		Low	Relevant to CC adaptation; environmental monitoring and assessment; sustainable development	High
	CR 2.3 Loss and damage assessment tools developed and promoted		Low	Relevant to CC adaptation; environmental monitoring and assessment; sustainable development	High
	CR 2.4 Vulnerability assessment guide developed and distributed	Relevant to communication and education	High	Relevant to CC adaptation; environmental monitoring and assessment; sustainable development	High
	CR 2.5 Networks and systems for information transfer improved	Relevant to knowledge management	High	Relevant to CC adaptation; environmental monitoring and assessment; sustainable development	High
	CR 2.6 Disaster Impacts analysis and lessons learnt support provided	Relevant to capacity building	High	Relevant to CC adaptation; environmental monitoring and assessment; sustainable development	High

SOPAC Community Risk		SPREP Island Ecosystems	Compatibility	SPREP Pacific Futures	Compatibility
Component 3– Mainstreaming Disaster Risk Management To assist SOPAC Island members in the process of mainstreaming disaster risk management practices into national development planning		1.1 Ecosystems management: promote and support effective management of island ecosystems	High	2.1 Climate change: improve PICT’s understanding of and strengthen capacity to respond to climate change	High
		1.2 Species conservation & management: promote and foster species conservation and management	Low	2.2 Pollution prevention and waste management: assist and enhance PICTs capabilities to manage and respond to pollution and waste	High
		1.3 People, institutions, education & knowledge management: equip people and institutions...with the capacity, education and knowledge to plan and manage their environmentally sustainable development	High	2.3 Environmental governance: improve means to identify, respond to, and report on environmental pressures, emerging threats and opportunities	High
Component 3 Outputs	CR 3.1 Regional framework for action 2005-2015 promoted and advocated	Relevant to social communication and outreach	High	Relevant to CC adaptation; environmental monitoring and assessment; sustainable development	High
	CR 3.2 National disaster risk reduction plans based on the application of Comprehensive Hazard And Risk Management (CHARM) strengthened		Low	Relevant to CC adaptation; environmental monitoring and assessment; sustainable development	High
	CR 3.3 Community based disaster risk management training coordinated	Relevant to capacity building and training	High	Relevant to CC adaptation	High
	CR 3.4 Benefits of applying CHARM to support the mainstreaming of disaster risk reduction evaluated		Low	Relevant to CC adaptation; environmental monitoring and assessment; sustainable development	High

Programme	Donor	Project/Programme Name	Total Funding		2009		2010		2011		2012		2013		2014	
			Foreign Currency	USD	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec	Jan-June	July-Dec
ISLAND ECOSYSTEMS	MacArthur Foundation	Response to Climate Change impacts in Coastal Areas - Vanuatu	USD	165,000	\$165,000											
	Conservation International	Pacific Islands Marine Conservation Analysis and Marine Managed Area Science (PI-MCA/MMAS) Initiative	USD	260,000	\$260,000											
	The Nature Conservancy	Pacific Invasives Learning Network (PILN)	USD	121,440	\$121,440											
	WPRFMC	Mgt. of the Regional Turtle Database and Regional Marine Turtle Conservation Prog. Network : Database Officer	USD	43,225	\$43,225											
	France	Coastal Reef Management Officer Support Costs	Euro	95,000	\$122,137											
	UNEP	Managing for the Future : A project to reverse degradation of coral reefs and related ecosystems and enhance livelihoods in the Pacific Islands Region (CRISP)	USD	860,585	\$860,585											
	UNEP	NBSAP/Climate Change & Protected Areas Workshop	USD	136,737	\$136,737											
	UNEP-EU	Capacity Building related to Multilateral Environment Agreements in ACP Countries	Euro	1,300,000	\$1,671,354											
	Critical Ecosystem Partnership	Ecosystem and species projects	USD	500,000	\$500,000											
	Critical Ecosystem Partnership	Ecosystem and species projects	USD	500,000	\$500,000											
	Ramsar	Associate Ramsar Officer Support Costs	USD	300,000	\$300,000											
	AUSAID	Biodiversity & Climate Change	AUD	5,000,000	\$3,225,872											
	UNDP-GEF	Regional Invasive Species	USD	3,500,000	\$3,500,000											
	EU	Mainstreaming ecosystem-based management and SMACFish	Euro	9,000,000	\$11,570,909											
PACIFIC FUTURES	UNDP-GEF	Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project (PIGGAREP)	USD	5,230,000	\$5,230,000											
	UNDP-GEF	Pacific Adaptation to Climate Change (PACC)	USD	13,125,000	\$13,125,000											
	NZAID & AUSAID	Global Environment Facility (GEF) Support Adviser (Trilateral Agreement)	USD	588,000	\$588,000											
	NOAA	PI-GCOS Officer Support Costs	USD	95,000	\$95,000											
	UNITAR	Capacity development for adaptation to climate change and GHG mitigation in Non-Annex I Parties to the United Nations Framework Convention on Climate Change (UNFCCC)	USD	320,000	\$320,000											
	WMO	Pacific Desk Training (WMO/NOAA/NWS)	USD	27,600	\$27,600											
	IMO	Marine Pollution Work	USD	124,000	\$124,000											
	EU	Energy project - EDF10	Euro	5,000,000	\$6,428,283											
ALLOCATION TO BE DETERMINED	AUSAID	Programme Funding	USD	715,442	\$715,442											
	NZAID	Programme Funding	USD	1,055,130	\$1,055,130											
	AUSAID	Programme Funding (conservative estimate at current levels +10%)	USD	2,604,924	\$2,604,924											
	NZAID	Programme Funding (conservative estimate at current levels +10%)	USD	3,841,728	\$3,841,728											

ANNEX 5: Current and Projected Funding

Conversion rates (03/02/09)
Euro 1.2857
AUD 0.64517

Key	
Existing	
Approved	
Proposed	