



Second Meeting of the SOPAC Division Noumea, New Caledonia, 3-5 November 2012 (SOPAC-2)

AGENDA ITEM	TITLE
2.	REPORTS
2.4	SOPAC Division Emerging Issues and Opportunities

Purpose and Background

The purpose of this paper is to provide a summary of emerging issues and opportunities for the work programme in the year(s) ahead. For further information refer to the full extended narrative report available for each of the three main technical work programmes.

OCEAN AND ISLANDS PROGRAMME (OIP)

Improving Hydrodynamic Modelling Capacity

Climate change concern in PICTs frequently translates into consideration of shoreline vulnerability. Shoreline instability, erosion, wave over topping, seawater incursion and shoreline property and infrastructure damage are all major threats due to both on-going climate variability and climate change stress. Development in PICT's also predominantly occurs in coastal zones and the departure from former more sustainable lifestyles and aspirations combined with rapidly increasing populations, poses increasingly complex challenges. Traditional coping mechanisms are not adequate to address coastal vulnerability issues in urban and peri-urban coastal environments and in many coastal PICT settlements "development" is synonymous with increasing exposure to coastal hazards.

Sound baseline information regarding the physical and built environment, combined with data which describes dynamic processes such as climate and ocean conditions and extremes are fundamental to managing risk and hazards in the coastal zone. Activities designed to build resilience to natural disasters or for example "climate-proof" shoreline infrastructure must be informed by analysis of such empirical baselines. In turn, computer based modelling techniques, which simulate wind, water flow, waves, sediment transport, sea level rise and inundation are capable of showing the interaction of these processes and the outputs provide empirical, data based information to support improved management of hazards and use of coastal resources.

OIP has taken an important step in the continued development of the open source Geonetwork data management system which provides a single point of entry, archive, discovery and data access facility which endures across multiple Projects and data uses, and continues to keep invaluable data in circulation. Conversely, OIP's hydrodynamic modelling capacity has been largely dependent on proprietary software which requires significant investment in licensing

(USD75,000 over the next three years). These high costs are a significant risk to sustained service provision and like all propriety software platforms use and even access and ownership of its products are complex and not easily shared.

OIP wishes to transfer its hydrodynamic modelling capacity across to open source alternatives which offer a free and more universal approach to handling data and model outputs. It is instructive to note the United States Govt. requires that all such data, models and tools funded by taxpayers should be available openly and it is OIP's intention to follow this lead and progress our HD modelling capacity in a way that will allow for "parallel computing", whereby a number of computers can be used to reduce processing time and allow for tighter integration with other systems such as Geonetwork, the Pacific Risk Information Systems (PacRIS), OpenEarth knowledge management initiative (www.openearth.eu), and others. Through this approach, OIP can more seamlessly and efficiently continue to develop an integrated approach between data collection, archiving, analysis and sharing with regional and international partners and build a sustained regional facility to provide high quality advice to coastal zone managers and planners.

Confronting the challenges of development in coastal zones is crucial for sustainable development in many PICT settings. The present approaches are invariably implemented on a project-by-project basis resulting in inefficiencies in collating information, developing consistent approaches and building crucially important sustained buy-in and use of such tool in country. Individual projects commonly set out to collect their own baseline data and many lessons of implementation dissipate once the projects are completed. Likewise, where projects are delivered by outside interests this can act to limit even further regional progress and in the extreme outside agencies can seek to protect their knowledge capital and impose restrictions in the reuse of data and subsequent value adding.

Changing waves and coasts in the Pacific (WACOP) Project

An information paper on the need for a comprehensive assessment of wave climate in the Pacific was presented to the SOPAC Governing Council at the 39th Annual Session in 2010. This was largely in response to the damaging wave event in December 2008, which displaced more than 75,000 people across the central western Pacific, but also in answer to the call at the international level by the IPCC in the 4th Assessment Report (2007) for climate change impact assessments in the coastal zone to be broadened to include wave climate rather than focus exclusively on sea-level rise. The SOPAC Council subsequently endorsed a proposal for a regional study on wave climate. The information paper was developed into a full proposal and approved for funding under the ACP Caribbean & Pacific Research Programme for Sustainable Development (10th European Development Fund). The Project will commence on 1 December for 36 months, with a focus on the Cook Islands, Fiji, Tonga, Tuvalu, Vanuatu, and Samoa, and the specific objective to improve the technical knowledge base, information and understanding of coastal hazards and wave energy resources at scales relevant to small Pacific islands.

Hydrographic surveying – assisting member countries to fulfil obligations for the benefit of maritime safety, protection of the marine environment and sustainable development of ocean and coastal areas, as required under the UN conventions of Safety of Life at Sea (SOLAS) and Law of the Sea (UNCLOS)

The SOLAS convention requires all coastal States to ensure that hydrographic surveys are carried out and that nautical charts are published and kept up to date. Most nautical charts available for PICTs have not been updated since the Second World War, and some contain information dating back to the 19th century. Insufficient and outdated hydrographic information is a limiting factor in the development and safe use of the port, harbours, and coastal areas in PICTs.

Marine charting is also seen as a fundamental enabler and an important boost to many aspects of economic development. An assessment by the International Hydrographic Organisation (IHO) estimates that the return on an investment from having a national hydrographic program is on the order of 1:10. Similarly, a recent socio-economic study commissioned by the National Oceanic and Atmospheric Administration concluded that for every dollar the US spends on coastal mapping, the benefits they receive in return are worth more than US\$35. This demonstrates the contribution of hydrographic surveying to socio-economic development. The large cost-benefit ratio can generally be attributed to hydrography providing the foundation layer through which many other sectors derive second order growth.

Despite these urgent needs and potential benefits, most Pacific Island Countries and Territories lack the national capacity to plan and implement these activities. This is largely due to the fact that hydrographic surveys are expensive, require specialised technical skills, and are therefore beyond the capacity of the majority of Pacific Island Countries. Likewise, the regional hydrographic charting authorities of the US, UK, Australia, New Zealand and France are not substantially increasing resources for surveying in the region. However, SPC-SOPAC currently operates and maintains marine survey equipment worth approximately A\$1M, and routinely conducts several surveys per year for environmental or geosciences applications in member countries. SPC-SOPAC staff are not trained hydrographic surveyors, and the collected bathymetric data are not necessarily adequate for charting purposes. A range of activities are currently planned in order to strengthen the capacity of SPC to meet internationally recognised hydrographic standards.

With funding provided by AusAID under the Pacific Public Sector Linkages Program, one experienced SPC staff member will attend the Hydrographic Survey Category B (Cat B) course at the Royal Australian Navy (RAN) Hydrographic School, Sydney, from April 2013. This is a five month course which provides comprehension of hydrographic surveying for individuals with the skill to carry out the various hydrographic surveying tasks to an internationally recognised standard. The Cat B course will be followed up by a 2-3 week long technical attachment of SPC staff to AHS, to further provide the surveyor with experience in the operations of a national hydrographic service. The Activity will also assess SPC's current pool of marine survey equipment and make recommendations on purchases and/or upgrades for additional equipment in order to have full IHO-standard capabilities. AusAID and RAN will also assist by working with SPC to plan and conduct up to two hydrographic surveys based on priorities set by IHO technical visits to Kiribati and Solomon Islands.

The drive to improve the Region's capacity to conduct hydrographic surveying was large initiated through a Memorandum of Understanding (MoU) between the IHO and SPC signed in April 2011. Currently seven States within the SPC region are members of the IHO (France, Fiji, Papua New Guinea, New Zealand, United States of America, Australia, and Tonga), and these are also members of the South West Pacific Hydrographic Commission (SWPHC). All future hydrographic survey activities carried out by SPC will be coordinated with the regional hydrographic charting authorities, the SWPHC, and member countries. This provides the framework for the effective development and coordination of hydrography in the region, and will broaden the marine survey capabilities of OIP to include the supply of hydrographic data for inclusion in nautical charts for the benefit of maritime safety, protection of the marine environment and sustainable development of ocean and coastal areas, as required under SOLAS and UNCLOS.

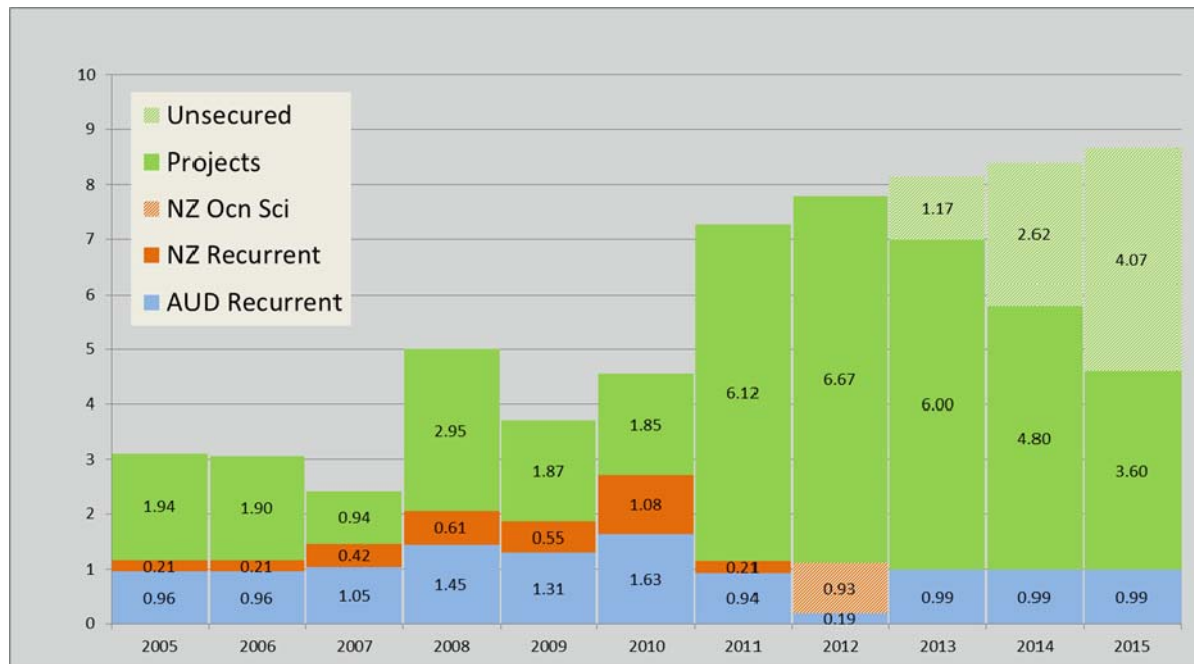
OIP Core Funding

The delivery of OIP's work programme is heavily dependent on project proposals and OIP has a long and successful history in raising the greater part of its yearly budget through competitive proposal development. Annex 1 of the OIP Full Narrative Report highlights these projects however this year, all major proposals have also been included to highlight the scope and magnitude of this potential work. It is often not understood that proposal development is a

hugely time consuming task for all senior staff as, in many cases, the donor agencies require very substantial commitments of time and effort in the design phase. OIP remains committed to strategic proposal development but it should be noted that OIP is rapidly reaching capacity in the number of projects it can implement responsibly under the present recurrent budget dynamic.

In 2012 the Regional Ocean Sciences Project (ROSP) contributed approximately 14% of the total OIP budget or about 17% of the total Project funds for 2012. It is important to consider the ROSP funds in the perspective of the broader budget dynamic of the Programme especially given SPC reallocations of AusAID recurrent budget for 2012. Without the ROSP the Ocean & Islands Programme could not have continued to operate effectively in 2012 and OIP staff have already capitalised on the opportunities the ROSP has brought by securing the highest OIP budget on record, and it follows that it has been a successful year of service delivery to members.

OIP’s strategic focus towards the assessment of shoreline and coastal zone vulnerability, particularly with reference to climate change adaptation needs in the region has been extremely successful and this is reflected in the growth of project funding. Climate change adaptation assessment and assistance requests by the membership, donors and other regional and CROP agencies has become a substantial component of the Programme’s work and present trends would suggest this growth in demand for such services will continue out to 2015 and beyond.



Summary of OIP funding dynamic 2005 – 2015 (2013 – 2015 are projected).

OIP is extremely well placed to sustain the growing demand for coastal vulnerability (climate change adaptation) assessments in the region but only with a requisite increase in core recurrent budget. This is because many technical assessment Projects are short term and many do not allocate (or allow allocation) of funding for salaries. This is particularly the case where PIC members raise funds to cover work costs of a technical assessment but routinely expect that OIP will provide staff time, instruments and equipment and subsequent data analysis and reporting tasks in-kind or free of charge (this is of course the essence of the CROP mechanism).

From this perspective OIP wishes to continue to honour and fulfil these expectations and recognises that OIP’s services are unique in the region; i.e. there are no alternatives to providing PICT’s with this type of support. The NZ Ocean Sciences Project has greatly facilitated OIP to meet demand in 2012, however there is no indication this project will continue

in 2013. Given that OIP, even with the NZ 2012 Grant, has been stretched to its maximum possible capacity in respect to in-kind delivery and project management, design and implementation; OIP requests constructive dialogue on sustained recurrent budget support which will enable the Programme to plan and meet demand.

WATER AND SANITATION PROGRAMME (WSP)

Strategic Review of WSP

The recent IER review of the SPC requested that *“SPC should conduct a review of the best placement of the Water and Sanitation Programme, taking into account the views expressed by members, and should provide an update at CRGA 42”*.

There are several initiatives underway that will contribute to this work including the revision of the Pacific Regional Action Plan for Sustainable Water Management (Pacific RAP) as well as the review of the SOPAC Strategic Plan (2011 – 2015). Furthermore, the WSP have worked on a draft TOR for the review which will be flagged internally as well as with technical and other relevant national counterparts.

This effort can be reported to the CRGA 42 by the Executive as a means of progress made and we await the decision taken at this meeting on next steps noting that time and resourcing are required to enable this to occur.

Access to Safe Drinking Water and Sanitation, a Human Right

At the 1st Division Meeting Council acknowledged the adoption of the United Nations Resolution 64/292 (July 2010) declaring the access to safe drinking water and sanitation as a fundamental human right and the associated responsibilities from governments to ensure that people enjoy these rights despite the challenges being faced in the region in achieving the MDG Targets on Water and Sanitation by 2015.

In response to the request from Council to support Member countries to fulfil the Human Rights Obligations for water and sanitation, in July this year the United Nations (UN) Office of the High Commissioner for Human Rights (OHCHR), Regional Office for the Pacific facilitated a visit by the UN Special Rapporteur on Water and Sanitation, Ms. Catarina de Albuquerque to the region. The primary role of the UN Special Rapporteur is to further clarify the content of human rights obligations in relation to access to safe drinking water and sanitation; 2) prepare a compendium of best practices related to safe drinking water and sanitation; 3) make recommendations that could help the realization of the Millennium Development Goals, in particular of Goal 7; and 4) submit annually a thematic report to the Human Rights Council (and also to the General Assembly through HRC resolution 12/8).

Through the support of the (UN) Office of the High Commissioner for Human Rights (OHCHR) the WSP were provided with an opportunity to meet and brief Ms Albuquerque on the water and sanitation sector in the Pacific region as well as specific country information ahead of visits to Kiribati and Tuvalu where she also met national counterparts. This information along with discussions at the country level will further support the formulation of this agenda in the region and we will continue to dialogue on this initiative and support any follow up reporting and resourcing as a result of this visit.

The need for a New Pacific Regional Water and Sanitation Strategy – “*Building a Framework for Water, Sanitation and Climate*”

Focussing specifically on regional efforts to revise the Pacific RAP, there has been significant activity in this area by linking in with the 4th Session of the Pacific Platform which will include Regional Water and Sanitation Consultations (RWSC) to be held in Noumea, New Caledonia from the 17th – 21 September 2012. An outcome of the consultation was an agreed process and framework for managing water and sanitation across the region moving forward.

This has been supported through the funding from the French Pacific Fund as well as the EU funded IWRM Planning Programme.

This is a step on the way to strategically reaffirming or repositioning the regional water and sanitation sector and a focus of work over the period 2013 will be to identify and secure resourcing to implement this decision with a view to tabling the final outcome at the Forum Leaders meeting in 2014.

The outcome from the RWSC and Platform will also contribute towards articulating the sector against the Joint Strategy for Disaster Risk Management and Climate Change planned for 2015 onwards.

Benchmarking of Water Utilities

The WSP has responded to this call from the membership to support the Pacific island water and wastewater utilities participating in the benchmarking exercise and actively collaborate with PWWA to help improve the performance of utilities.

The next steps of the Benchmarking exercise have already commenced which will include an inception phase to review the last exercise with a view to informing the new work plan, questionnaire and database drawing from these lessons learned. The second phase includes data collection and quality control the final step includes data analysis and presentation.

The WSP as a partner to the initiative and a member of the Steering Committee have been involved with the on-going discussions providing technical advice and support to the consultant and the PWWA as the primary implementers. This work and support is expected to continue for much of the rest of the work plan year.

Managing a Quality Water and Sanitation Programme

The Water and Sanitation Programme includes a combination of projects and programme support. The Pacific IWRM Programme the major project implemented in 2012 accounted for 62% of the staffing costs compared to the 38% provided through programme support.

It is a continual challenge maintaining core services in areas of the WSP on limited funding for staffing and operations and there is a need to balance requests from countries against resourcing support available outside of project funding.

In addition to this, in terms of project work which is often used as a short term catalyst to support longer term national and regional action, managing the change of projects coming to an end can sometimes be challenging as even though projects end there are specialist services that are still required by countries. Therefore resourcing services required beyond project timelines need to be thoughtfully considered in the exit strategy of projects.

Finally, each of the programmes need to account for unplanned work requested by countries and partners each year and a significant shift in the work plan can occur by taking on unplanned and often sometimes unavoidable work. For example the WSP has been involved in supporting countries through two significant disaster related events in terms of post disaster assessments.

This support is essential to informing national and regional short and long term response efforts therefore often taking priority in the work plan when required. This has meant however that other activities are not carried out as planned and managing this over the year is important to ensure that the agreed work plan is delivered as agreed.

DISASTER REDUCTION PORGRAMME (DRP)

Integrated Regional Strategy for DRM and Climate Change Adaptation & Mitigation

In 2011 the SOPAC Division and SPC CRGA endorsed a 'Roadmap' or a process towards the development of an integrated regional strategy for Disaster Risk Management and Climate Change by 2015. Following the meeting and subsequent approval by the SPC CRGA, SOPAC Division has in coordination with SPREP and UNISDR undertaken a series of consultations to commence the 'Roadmap' process. A detailed account is in the next section of this report.

2013 Joint Meeting of the Pacific Platform for DRM and Pacific Climate Change Round Table

Following consultations undertaken over the course of 2011 and 2012 it has been agreed between SPC and SPREP that in 2013 there will be a joint meeting of the Pacific Platform for DRM and the Pacific Climate Change Round Table. The main purpose of the joint meeting would be to allow stakeholders to contribute to the development of the integrated regional strategy for DRM and Climate Change which is targeted for completion by 2015. The joint meeting will also provide a useful hub to which a number of regional meetings, dealing with the issues of disaster and climate risk, could also be anchored such as the Pacific Meteorological Council and Regional Water and Sanitation Consultation.

SPC SOPAC Division, SPREP, UNISDR and other partners will collaborate to coordinate and facilitate this major meeting.

DRM Competency Framework

With the support of the Training and Capacity Building Working Group of the Pacific DRM Partnership Network work will be undertaken on the development of a DRM Competency Framework in 1 or 2 Pacific island countries. A competency framework identifies the 'minimum standards' of competence that are required at different levels (e.g. national, local government, provincial etc) and the development of this facility within a Pacific island country context will greatly enhance DRM capacity building efforts.

The SOPAC Division commenced preparatory discussions with a few strategic partners in the period following the Division meeting in 2011. It was agreed between partners that the SPC SOPAC Division would lead the initiative with the support of the NZ Ministry of Civil Defense & Emergency Management and UNOCHA. It was further agreed that two countries, Solomon Islands and Cook Islands be the focus of a pilot to establish a competency framework and under the 2012 budget F\$20,000 was set aside to facilitate in-country consultations and follow up for the initiative.

UNISDR Advisory Group for a Post-2015 Global Framework for DRR

The UNISDR is taking the lead to develop a global DRR framework to succeed the existing Hyogo Framework for Action which runs its course by 2015. In the Pacific the UNISDR has pledged to work closely with SPC and other development partners and it is anticipated that the integrated regional strategy for DRM and Climate Change come into play in 2015, the process for which has already commenced, will help to constitute the Pacific's contribution to the post-Hyogo framework.

The UNISDR has commenced the process of the post-Hyogo framework by launching an online dialogue on 27 August 2012 which will continue through to 30 November 2012. The dialogue is part of a macro process outlined in the diagram below, which all regions including the Pacific are contributing towards.

The UNISDR Advisory Group for the post-Hyogo framework has been formed and comprises 15 experts in various fields linked to DRM.

Details of the post Hyogo Framework process can be obtained through the following web link: <http://www.preventionweb.net/posthfa/>

Early Warning Working Group

Following the 2011 Pacific Platform for DRM, the SOPAC Division working closely with UNESCO agreed to take the lead in establishing a Pacific regional early warning working group to coordinate and complement the efforts of other working groups and Pacific Island Countries and Territories to assist in the development of early warning systems both at regional and national levels and to establish clear standard operating procedures for relevant agencies, as well as simplify and standardise early warning messages and alerts for inclusion in ongoing education and public awareness programmes.

The initiative is still being pursued in 2012 and further discussions will be undertaken in the context of the 2012 Pacific Platform for DRM.

Framework to guide Community-Based Disaster Risk Management (CBDRM)

There is a significant level of investment being made in community level DRM (and climate change adaptation) across the Pacific and SOPAC and other partner organisations have been concerned that such support reflects 'best practice' and that efforts undertaken through project initiatives are able to be sustained particularly by responsible national agencies.

Little progress has been made towards this initiative given the challenges in identifying a Chair for the CBDRM Working Group of the Pacific DRM Partnership Network. As of August 2012 both UNDP and Act for Peace have agreed to co-Chair the working group and to look into a framework to guide CBDRM amongst other potential initiatives.

Building Strategic Alliances to Strengthen Emergency/Disaster Preparedness and Response

Following an NDMO and DRP visit to the State Control Centre in Melbourne, Australia, in February 2012, there has been an ongoing collaboration between SOPAC, the Australasian Fire and Emergency Services Council, The Asia Foundation and the UN Office for the Coordination of Humanitarian Affairs to build a strategic alliance between members of the Pacific Islands Fire Services Association, Pacific NDMOs and AFAC members with the purpose of strengthening emergency/disaster preparedness and response in Pacific island countries.

A concept note for the establishment of a strategic alliance has been developed and will be discussed at the 2012 Pacific Platform for DRM in September 2012. It is anticipated that the concept will be endorsed by Regional Disaster Managers and thus resourcing will be required from 2013 to enable commencement of the alliance. The SOPAC Division is taking the lead role in this initiative.

Transition of the Pacific DRM (Training) Programme from The Asia Foundation to SPC SOPAC Division

The current Pacific DRM (Training) Program supported by The Asia Foundation with funding from the Office of US Foreign Disaster Assistance will run its course by July 2013. Over more than 10 years the TAF/OFDA programme, as it is commonly referred to, has provided DRM training at the regional as well as at the national levels in a number of Pacific island countries. The responsibility for the continuation of the training programme will rest with the SOPAC Division; and consultations have commenced internally to develop a new strategy for DRM training for 2013 and beyond.

Resourcing to Support Core Staff Positions

The Disaster Reduction Programme, as with other technical programmes in the SOPAC Division continues to be challenged to retain specialist skills in areas that would address the strategic needs of Members in relation to DRM. Approximately 43% (10 of 23 staff) of the overall staff in 2012 are funded through projects which will end in 2013 and therefore the ongoing delivery of services to Members is at significant risk. The table below highlights the range of specialist skills areas which are at risk. It is pertinent to note that these issues have been raised on an annual basis through reports to the SOPAC Division annual meeting (and previously to the former SOPAC Governing Council), and reports to donors and regrettably the issue has not been addressed.

Name	Area/Skills
EU EDF B Envelope – ends July 2013	
George Beck	Support in the establishment/strengthening of emergency operations coordination and communications, and water services capacities at national institutional and community level; project management expertise
John Tagiilima	Engineering advice and support in a range of DRM interventions; specialisation in water sector engineering; project management expertise
EU EDF 9 C Envelope – ends November 2013	
Frederique Lehoux	Leadership of DRM advocacy and technical advice and support to the French territories at national and sub national level; bilingual capacity for interface between SOPAC Division and the French territories
Yolaine Take	Dedicated administrative and financial management support to DRM initiatives for French territories; bilingual capacity for interface between SOPAC Division and the French territories
EDF 9 ACP-EU Natural Disaster Facility – ends December 2013	
Samantha Cook	Economic analysis of disaster impact, analysis of DRM investments; technical and policy advice and support in risk financing and insurance; technical advice and support in national DRM and sustainable development planning; DRM advocacy
Noa Tokavou	Disaster/emergency preparedness and response operational planning and coordination; national and community level DRM and public health technical advice and support; DRM training development and facilitation
Waisale Naqiolevu	DRM/Climate Change Adaptation and development planning technical advice and support; project management; monitoring, evaluation and reporting skills

Joy Papao	GIS/Remote sensing expertise; hazard mapping and risk assessments; technical advice and support for DRM interventions
Pacific DRM (Training) Programme under The Asia Foundation/Office of US Foreign Disaster Assistance – ends July 2013	
Emele Bola	Training course materials design and development specialisation; administrative and financial management support
Aminisital Koroi	Dedicated DRM training support in the North Pacific based in SPC northern regional office in Pohnpei; experience and skills in community level engagement in Federated States of Micronesia

While new funding opportunities (new projects) may emerge over the course of the coming year(s), the ongoing dependence on project funding to address core work areas is untenable and a solution must be found so that the Programme, and consequently the Division and the wider SPC, can maintain consistency in service delivery over an extended period of time.