# Report on:

# Towards a Business Case for a Pacific Climate Change Portal

# Summary Analysis by the SPREP Director

**Background**

There currently exists a significant amount of climate change information in the Pacific. This information is generated by national and regional institutions and organizations but is not shared within or between Pacific Island Countries in a coordinated manner. While regional and international organizations have been independently collecting climate change information in the region, there has to date been no agreed comprehensive region-wide cooperative mechanism for the collation and dissemination of climate change information up until the discussions on the subject in the context of the Pacific Climate Change Roundtable (PCCR).

In 2005, Pacific Island leaders endorsed the Pacific Islands Framework for Action on Climate Change (PIFACC) 2006-2015, in order to prepare the Pacific region against the adverse impacts of climate change and its negative implications on the sustainable development of Pacific island countries. The objective of PIFACC is to act as a guide to enhance the resilience of Pacific island people, their livelihoods and environment to the risks and impacts of climate change and to promote regional coordination and collaboration in support of PICTs.

In 2008, at the PCCR, the Pacific Climate Change Portal Working Group was formed to discuss the concept of the Pacific Climate Change Portal, its operational requirements and potential format. The aim of the portal is to not only act as a hub for climate change information and knowledge sharing but also assist decision makers with the provision of information concerning climate change adaptation and mitigation, identifying gaps in current programme activities and facilitate enhanced cooperation on climate change in the region. At the 2011 PCCR, the tasks relating to the portal were assigned to the Climate Change Information and Knowledge Management Working Group, which will be taking on an active role in the management and development of the portal.

Based on discussions in the Pacific Climate Change Portal Working Group terms of reference were established for a study on the portal concept and viability, which had clearly been identified by the working group and the PCCR. In addition the portal study is intended to address key issues of the portals functions which include:

* Access to climate change information in a timely manner and useable form
* Access to tools that will allow the widest utilization by a large variety of end users
* Facilitate enhanced communication and provide a forum for collaboration, maximizing synergies and reducing duplication between key stakeholders and
* Recognize the mandate of SPREP as the lead agency for consolidating and disseminating climate change information in the Pacific, through working with regional organizations and partners, and to highlight the contributions made by these partners in climate change activities in the region.

A Pacific Climate Change Portal study was recommended by the 2008 PPCR and is also linked to the requirement of PIFACC to establish as a monitoring tool, which was subsequently approved the 2008 and 2010 SPREP Meetings.

**Portal Business Study**

Geoscience Australia (GA) was contracted by SPREP in December 2010 to carry out this study.

The purpose of the consultancy was to formulate a business case for the development of the Pacific Climate Change Portal and suggest a range of feasible options for its design and implementation and from these options, recommend the most effective way forward.

The first draft from GA was submitted to SPREP in March 2011. GA was invited to participate and present the report to the 2011 PCCR in Niue, and valuable feedback was received from participants.

The final report followed in April, 2011 which was circulated to national and regional focal points. Apart from this it was circulated internally to SPREP Information Technology (IT) team, Information Resource Centre (IRC) and the Climate Change (CC) team for comments. All feedback has been incorporated into this document.

**Report Recommendations**

The report identified that the main drivers behind the success of the portal was: relevance of content, ongoing partnerships, adequate resources to ensure its sustainability and access to the portal.

The report offered a “start simple” solution with the following core elements:

1. A search function to interrogate databases of project activities and output matrices.
2. A forum for question and answers; and
3. A facility for unstructured searching of climate change information

For hosting, 3 options were assessed:

1. The use of cloud services offered by companies like Google and Amazon
2. The portal is hosted by a regional Climate Change business partner such as University of Hawaii which hosts the PI-GCOS, PI-GOOS and PI-HYCOS websites.
3. The portal is hosted by SPREP

The report proposed that 1 and 2 be investigated further. However, the preference of the Secretariat is to utilize option 2 for now, given that the University of Hawaii server has very large capacity that could be well utilized for now. In addition we have an ongoing partnership with the University of Hawaii that could be easily built on, and they were also engaged in the initial Portal Working Group and are aware of the developments. The current Memorandum of Understanding will have to be revised accordingly.

Two design options were also considered:

1. A content management system (CMS)
2. A customized coded application

The option preferred and recommended by the consultants was 1, which is also supported by the Secretariat.

In relation to the structure for operations the report opted for the centralized structure consisting of two full time employed (FTE) Information Management staff with the number increasing as the portal progressively develops. Additionally similar information management personnel recruited in seven PICTs with the aim to establish information exchange and to render effective partnerships was also recommended.

In making this recommended option, the consultants noted that there was a need to:

1. Build on existing information resources and tools.
2. a) Carry out further consultations with stakeholders at the PCCR including a user needs survey – this was carried out by GA.

b) SPREP to decide on who will take this forward.

c) Commence with implementation, addressing issues like fundraising, governance and partnership arrangements.

1. Conduct user needs survey with the intention to identify audience groups, types of information and products, capacity building needs and involvement of non-government groups
2. Begin with a simple portal comprising of the 3 main functions:
   1. Search capability for the project matrix
   2. Interactive fora linked to ALM[[1]](#endnote-2) and Solution Exchange
   3. Enterprise search capability of stakeholder web sites.
3. Establish formal partnerships with core stakeholders to ensure continuous functioning of the portal.
4. Make certain that core function of the portal is clear, defined and simple.
5. Adopt the centralized information resources structural model initially for 12-24 months with national staff in several PICTs.
6. Develop a conceptual framework for content management processes for the portal, quality control and role of administrators in relation to information management and upload.
7. Establish a Governance Committee for future directions of the portal.
8. National-regional collaboration,
   1. Review status of Information Management capacity building in PICTs,
   2. Raise awareness for Information Management in climate change,
   3. Improve access to data and promote data sharing nationally and sub-nationally,
   4. Develop national Information Management strategies for data compilation and dissemination
   5. Establish Information Management policy in collaboration with international partners to ensure country’s commitment in sustaining the portal.

**Director’s Evaluation**

**Pluses**

* **Overall outcome:**

The report addresses a majority of the portal’s business functions and provides feasible recommendations for the way forward for the portal. The inclusion of cost models for the preferred and non-preferred options in relation to hosting, governance and operational model gives an estimate of the overall costing for the portal. Furthermore it provides future strategies for collaboration with disaster management initiatives (Pacific Disaster Network).

Establishment of governance committee ensures that stakeholders are involved and continuously consulted in decisions relating to the portal’s development in the future.

SPREP also acknowledges that further consultations is required to not only gain the support of the PICTs on the portal but in addition build up the relevant capacity and raise awareness of the portal as it contributes to its success.

* **Report recommendations:**

The recommendations provide an action plan for SPREP on future action for the portal though the activities will need to be mapped out into a proper project timeline.

* **Technology rationale:**The favored option of a content management system (CMS) coincides with SPREP IT’s move to use the same open source software for the SPREP website re-development. They also have the capacity to provide technical support for the portal.
* **Cost analysis**

The preferred cost model gives an indication of the initial costs and revision will be carried out by the Business Analyst once the user needs survey is completed.

**Minuses**

* **Study methodology:**

There were concerns that users and the tools they have access to in order to contribute to the portal need to be identified.

User consultations in relation to expectations of the presentation of the information on the portal i.e search results and documents display.

Insufficient stakeholder consultations particularly with national focal points in PICTs. Their commitment to the concept of the portal would contribute toward the success of the portal. SPREP would therefore recommend an on-going process for stakeholder engagement alongside the development of the portal.

Insufficient investigation and incomplete inventory of existing information management resources and websites. This is understandable due to the time constraints of the consultancy.

* **Report analysis:**

Concerns were raised in relation to the use of the word “Towards” in the title of the report “Towards a Business Case…..”. The Secretariat feels that this is no longer applicable, as the report clearly demonstrated the “business case” therefore it should have been reflected in the title. Members at the PCCR also accepted the presentation by Geoscience Australia and supported SPREP’s efforts to continue development of the portal.

Issues raised seem to focus on how the portal can be successful rather than creating a working portal. Furthermore, technologies that intended users have access to in order to utilize information available on the portal need to be considered.

The nature of portal needs to be clearly stated, for example that it will require engagement from the national level to identify their information needs and ensure that information provided by the portal is useful and timely. If the favored option is a content management portal that requires countries to upload their own documents, there is the issue of information governance and quality. SPREP will need to engage with the PCCR knowledge management working group in this regard. Suggestions have also been made through the SPC/GIZ project that resources could be made available to build such capacity in-country, but SPREP would still need to provide the quality control before uploading is completed.

Formulation of in-country information policies is the foremost and significant step to take. Integrating information management/sharing in national policies are significant to the success of this information product.

The premise that technologies in the PICTs have been sorted is unrealistic. The assumption should be otherwise as this is the reality. Technology costs should also be reflected in the cost models.

It is also not clear how the user needs survey will be carried out as the costs for this phase only include the services of the business analyst and travel to 3 locations.

* **Report options:**

There was a concern in relation to recommended option for hosting of the portal. It has been confirmed by SPREP IT that SPREP’s ICT environment is sufficient to host the portal and technical support is available at SPREP. Note that SPREP’s bandwidth was upgraded to 2Mbps in 2007. However, the option of using the existing partnership between University of Hawaii and PI-GCOS and PI-GOOS would also be feasible.

Other options that could be explored in relation to the search function for both the matrix and resources are the “Google Customs Search” which can be used to create a customized search and enables the harvesting of information from different stakeholder websites. Another option is the use of Z39.50 which is another information management and searching tool.

There also exists many browser based tools that do language translation of websites into different but common languages.

The report predominantly focuses on information management and does not provide knowledge management options. There is other information and knowledge management systems that the portal may need to integrate with therefore it is premature to decide on the software and costs relating to these. These will be determined after the user needs survey.

* **Cost analysis:**

The report offers 2 options but it is not clear which is the preferred cost model. The costs do not reflect any follow up missions or refresher trainings.

**SPREP Director’s Recommendations**

**After reviewing the consultancy report the secretariat summarises the following next steps. It is therefore recommended that SPREP:**

1. Uses the recommendations from report as an action plan for the way forward for the portal.
2. Uses the prototype ([www.pacificportal.com.au](http://www.pacificportal.com.au)) provided by Geoscience Australia (with customized user interface to a more Pacific partnership theme) as a means to start simple with an updated matrix of projects from PCCR but populated with climate change information. The prototype can be revised after the user needs survey is carried out.
3. Revises the MOU regarding the facilities at the University of Hawaii to allow for the portal to be hosted together with the PI-GCOS and PI-GOOS sites, with control of uploading and management retained at SPREP.
4. While the portal is being developed, conducts on an on-going basis user needs analysis, identify gaps, assess and review data/information management mechanisms at a national and sub-national level. There will also be a need to address institutional barriers or issues, develop data sharing agreements as the work progresses. There is a need to ensure that the portal and its support staff and the regional organizations understand who the portal users are (in order to be able to make it user friendly) as the report clearly called for more work there (as did the PCCR in Niue).
5. Adopts preferred cost model to ascertain budget and apply for funding.
6. Conducts upgrade to portal after the user needs analysis.

The recommendations and options stated in the report seem to be clear and feasible however there are a number of risks that entail these options. Below is a risk matrix highlighting the risks and the corresponding recommendations for responding to these risks.

**Risk Matrix for Recommendations**

|  |  |  |  |
| --- | --- | --- | --- |
| **Recommendation No** | **Recommendation** | **Risks** | **SPREP Response** |
| 2a, 3, 4 | User needs survey | Conducting the user needs survey at this stage will prolong the portal deployment. The SPREP Strategic Plan 2011-2015 Target CC2.1.2 states that in 2011, a climate change portal will be developed. | SPREP to adopt prototype developed by Geoscience Australia and populate it with climate change information. The user needs survey will be carried out after portal deployment to gather improvements to the portal from users. |
| 7 | Centralised structure of operations | Long term financial resources will be required to ensure the portal’s sustainability in relation to staff recruitment/retention and equipment for PICTs to continually contribute to the portal.  High staff turnover in the PICTs as experienced by the Pacific Environmental Information Network (PEIN) project and other regional information networks e.g. Pacific Islands Marine Resources Information Systems (PIMRIS).  This is foreseen to result in a constant need to retrain or recruit new staff. Furthermore this will incur administration costs. | SPREP to carry out in country information management trainings. This will encourage the participation of 2 or more staff members including the designated portal person from key stakeholders to portal trainings, meetings, workshops etc. This will not only strengthen their organizational knowledge and capacity on climate information literacy and management, but could act as a backup in cases of staff turnover. It is not expected that the portal would cease operations at such times however.  Pacific Disaster Net does carry out PDN training in country and this can be further capitalized on. |
|  | The preferred option of hosting of the portal by a climate change partner | This option will require ongoing funding for hosting and technical maintenance. Furthermore it will require institutional arrangements and MOUs with a climate change partner to prevent institutional problems arising in the future. | SPREP presently has a partnership with the University of Hawaii (UH) which currently hosts the Pacific Islands Global Climate Observing System (PIGCOS - <http://www.pi-gcos.org/> ). All costs i.e hosting, storage and technical maintenance are borne by UH.  SPREP will maintain the content of the portal similar to the arrangements with PIGCOS.  This ensures sustainability, reduces costs and strengthens partnerships between the organizations. |

1. Adaptation Learning Mechanism [↑](#endnote-ref-2)