



SPC-EU EDF10 Deep Sea Minerals (DSM) Project

Pacific ACP States Regional Training Workshop on Geological, Technological, Biological and Environmental Aspects of Deep Sea Minerals

13th – 17th August 2012, Tanoa International Hotel, Nadi Fiji.

Opening Remarks

Dr Russell Howorth

**Director of the Applied Geoscience and Technology Division of SPC, and
Chair of the Legal and Technical Commission of the International Seabed Authority**

Colleagues, old and new,

On behalf of Dr Jimmie Rodgers, the Director General of the Secretariat of the Pacific Community (SPC), and in my capacity as the Director of the Applied Geoscience and Technology Division of the SPC, I extend a very warm welcome to you all to this *Regional Training Workshop on Geological, Technological, Biological and Environmental Aspects of Deep Sea Minerals*.

This workshop is organised as an activity of the EU funded ‘*SPC Deep Sea Minerals Project*’ (*DSM Project*) which aims to provide guidance and technical assistance to Pacific ACP states here in the region. Please let me take this opportunity to extend sincere thanks to the EU for providing the financial support for this DSM Project, an outcome of which is to assist Pacific ACP states in their nationally-owned and nationally-implemented efforts to effectively tackle deep sea mineral issues whilst at the same time ensuring globally acceptable standards are met.

The global understanding of deep sea environments is very limited to say the least but it is growing. Commercial interest in deep sea minerals is encouraging further scientific study. Such studies must shape national policies and the regulation of deep sea minerals related activities. But there remain many unknowns. Nonetheless, the extraction of deep sea minerals presents an exciting new economic opportunity for Pacific island countries. But this must be balanced against other imperatives. Countries must protect the ocean environment, and preserve rare and/or fragile ecosystems and ocean habitats. Since there is still much to learn about the vast ocean and its deep sea environments and how they may be affected by deep sea exploration and exploitation activities, the precautionary approach must prevail. Ventures into deep sea mineral development must be undertaken carefully and thoughtfully; under close control and scrutiny – learning and adjusting as progress is made.

The region will therefore need a body of well informed scientists and technicians, able over time to perform elements of the work required to ensure a precautionary approach does prevail. I hope this workshop represents an important step on that journey. The aim of this week's training is to provide you, technical officers from your governments and other agencies with a better understanding of deep sea environments and minerals issues, sharing the current state of knowledge available geologically, biologically, technologically.

This workshop is just one of the activities of the DSM Project, which began in early 2011. The Project is timely, as interest in deep sea minerals in the Pacific region has escalated in recent years. The Project will run until 2014, and aims to strengthen in-country capacity in the management of deep sea minerals, with the ultimate aim to expand the sustainable economic resource base of Pacific ACP States.

Many of you will already know the DSM Project team: Akuila Tawake, Project Leader and your Chair for the workshop, Akuila is a geologist; Hannah Lily, the Project Legal Advisor, and Vira Atalifo, the Project Assistant. I am pleased to acknowledge joining the workshop this week is Dr Arthur Webb, a Deputy Director of the SOPAC Division with responsibility for the Ocean and Islands Programme. I am also pleased to acknowledge the presence of, two legal trainees currently working with the Project: Laniana Raikatalau from Fiji and Aisiena Taumoepeau from Tonga.

The Project offers technical assistance and support to the 15 P-ACP states, namely, Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor Leste, Tonga, Tuvalu, and Vanuatu. I am delighted to acknowledge representatives of all but two of those 15 countries here today, and in doing so I hope you will take the opportunity to learn from each other, as well as from other partners here this week.

I would also like to acknowledge other partners here, including members of civil society, regional and international organisations. Welcome and I thank you for your willingness to engage. I trust for you that this workshop will be a valuable experience and that you will also benefit from an inclusive, participatory approach. All of us have an important role to play in communicating to communities about deep sea mining, and in bringing the questions and the concerns of Pacific people to constructive dialogue with decision-makers.

I would like to welcome to this workshop, three world renowned experts - Dr. Jim Hein from the US Geological Survey, Professor Chuck Fisher from Penn State University, and Dr. Malcolm Clark from NIWA in New Zealand. They share between them decades of experience and an immense wealth of knowledge about the deep sea biology and geology. You are in for a treat this week. Jim, Chuck, Malcolm and I have known each other for many years and let me vouch that they bring a wealth of knowledge and experience and perhaps equally important they each bring a deep personal commitment to work with you all. I know you will leave this workshop fascinated by what they have to say.

Jim, Chuck and Malcolm, welcome again to another DSM Project activity and please upon returning home extend to your respective organisations my deep appreciation on behalf of us all, for the support your organisations are giving by making your time available.

I am also delighted to welcome to the Workshop: Kris Van Nijen from OceanfLORE and John Feenan of IHC Mining, who are joining us for the first time. They are from the private sector

and will provide for you an insight into the latest technology developments for deep sea mining. I am grateful to you both for joining the workshop, and for your willingness to sharing with the workshop delegates your knowledge. Engagement with the private sector is of course essential in order to move forward this emerging industry and to set the necessary and realistic parameters taking into consideration the need for a precautionary approach. Kris and John, I hope your participation in this workshop will be the start of a productive relationship with both yourselves and the companies you represent.

To date the Project has completed 13 national stakeholder consultation workshops across the region, and has plans to visit the remaining 2 countries (Papua New Guinea and Timor Leste) next month. At these events, a range of national stakeholders have discussed the potential benefits and challenges deep sea minerals present to the nation, and next steps for each country have been agreed. Following each country consultation the DSM team will work with an in-country focal point or committee to progress the Project in that country. I am pleased to see many of these focal points here today. They well know that capacity-building of personnel in this new and technical area was highlighted as a priority area in their country, as it was in all of the national consultations completed to date.

This training workshop is therefore aimed to respond to that need, and I am pleased to be with you this morning to bear witness to this key activity to build new skills and knowledge. This is the first technical training workshop of its kind, and will soon be followed by similar events focusing on legal and fiscal issues in recognition that proper management of deep sea minerals is an area demanding a multi-sectoral approach. Scientists, lawyers and economists; government, private sector and civil society, must work together.

I hope you will leave Nadi at the end of the week replete with cutting edge technical knowledge about deep sea minerals and will return home and share this new knowledge with your colleagues and contacts in your respective countries.

Before we proceed further into the workshop today, allow me briefly to take stock of where the region has come thus far. In the 1960s and 1970s, when explorers equipped with new scientific and technological tools worked to locate mineral deposits found on the deep seabed and to identify the potentially rich metal content in these deposits, excitement was generated about a potential new and untapped ocean resource.

In Montego Bay, Jamaica last month the 30th Anniversary of the opening for signature in 1982 of the UN Convention on the Law of the Sea was celebrated. UNCLOS when it came into force in 1994 gave to each coastal state exclusive sovereign right not only to explore for but also to exploit the deep sea minerals contained within its marine boundaries. For every Pacific island state, this area of seabed vastly exceeds its land territory, indeed for many 99 percent or more of their sovereign territory is ocean.

Surveys conducted throughout the 1980s and 1990s indicating abundant and promising mineral deposits in the region suggested a potential source of wealth, which if realised may provide an economic opportunity for Pacific island states to expand their narrow resource base and contribute to improving livelihoods.

In recent times, with continued exploration of deep sea minerals in the Pacific Ocean, ongoing developments in deep sea bed mining technology, increased commercial demand for the metals found in deep sea mineral deposits, and suggestions of recoverable rare earth

elements, the region finds itself with investment proposals to explore for, and ultimately to exploit seabed minerals within the EEZs of Pacific island countries as well as in the international seabed area ('the Area'). The Pacific island countries could therefore be at the forefront of an emerging deep sea minerals industry.

There are many firsts in the region already:

- The Cook Islands is one of the first countries in the world to have enacted legislation specifically designed to regulate mining of manganese nodules within their EEZ;
- Papua New Guinea is one of only two countries in the world to have issued a seabed mining licence within their EEZ. This is the Solwara 1 Project, undertaken by Nautilus Minerals. Forecasts have been made that mining operations may commence in the last quarter of 2013 and if so would be the first deep sea mining operation in the world.
- Several other Pacific Islands have or intend to issue exploration licences within their EEZs including Tonga, Fiji, Solomon Islands, Vanuatu, and Federated States of Micronesia.
- Nauru, Tonga and Kiribati have each sponsored companies that have in the past year been granted approved programmes of work by the International Seabed Authority within 'the Area' (seabed outside of national jurisdiction) – the first developing States to do so, alongside industrialised nations. These programmes of work are for 15 years.

I believe it is very exciting time to be in the Pacific region, a region that is looking to an emerging deep sea minerals industry both in areas of national and international jurisdiction. Indeed the opportunity these previously untapped resources may present for improving the economic well being of the Pacific people is substantial.

In this regard I must acknowledge that in my capacity as the current Chair of the Legal and Technical Commission of the International Seabed Authority, I am deeply privileged to be a member of the LTC with the support of the Pacific island countries.

The Legal and Technical Commission requires deep sea mineral activities to take place only within a strictly and defined process of best global environmental management practice that invokes risk assessment and incremental steps guided by a precautionary approach. Robust mechanisms to regulate such activities are required. At the recently completed ISA annual session in Kingston, Jamaica last month I was pleased to see the endorsement of an "*Environmental Management Plan for the Clarion Clipperton Fracture Zone.*" This will be used by the International Seabed Authority to monitor future exploration within the CCZ.

Likewise here in the region the DSM Project will be launching a Regional Legislative and Regulatory Framework for Deep Sea Mineral Exploration and Exploitation (or the 'RLRF' for short) at the Pacific Island Forum Leaders meeting in Rarotonga later this month.

I commend to you these recent developments at both the international and regional level. They will no doubt be tools to guide Pacific island governments as each works to establish national environmental and regulatory management regimes for deep sea minerals.

And to undertake such work, the best available data, information and knowledge will be required. It is in this regard this workshop is so timely and important.

You will see from the workshop agenda that the programme is packed. I have taken up more than enough time and let me now hand over to Akuila.

In closing, on behalf of Dr Rodgers and myself, I have the pleasure of declaring open this ***Regional Training Workshop on Geological, Technological, Biological and Environmental Aspects of Deep Sea Minerals.***