





Circum-Pacific Deep Sea Mining Workshop Science, Technology And Resources (STAR) Network Fiji 4 June 2016 Announcement

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Background

Akin to the ocean that overlies it, the seafloor represents 70% of the Earth's surface. Encompassed in it, the deep-sea environment has an extremely diverse geology and range of resources, for which there is strong interest worldwide and in particular in the Southwest Pacific. These include deep-sea mineral deposits consisting of seafloor massive sulphides, phosphate and manganese nodules, and cobalt-rich ferromanganese crust.

The deep sea also hosts a wide range of habitats and faunal communities associated with some of the mineral deposits, and which support unique and diverse biota. Deep-sea ecosystems are recognised as being fragile, and susceptible to impacts from human activities. Hence, the international community has prioritized the importance of conservation of the ocean and its living resources. Accordingly, international law requires all States to ensure the marine environment is protected should seabed-mining activities occur under their jurisdiction or control. The challenge currently facing national and inter-governmental agencies is therefore to facilitate development of mining operations while ensuring that environmental sustainability is not compromised.

Marine scientific research (MSR) is recognized by all as being essential to develop environmentally sound exploration and exploitation of deep-sea minerals, as there is still a lack of basic knowledge about the deep sea and the structure and function of its ecosystems. The various mineral deposits are associated with habitats that differ in their physical and ecological characteristics. They will require the development of specific technologies for extraction, and there will be differing environmental impacts. MSR is critical for describing the physical and biological nature of the environment, in order to inform decision-makers and to assist with the development of impact mitigation strategies and effective environmental management plans for any proposed DSM activities.

There is a considerable MSR effort occurring in many countries around the world, and the exchange of information and collaboration between researchers is important to ensure this growing body of knowledge is used as effectively as possible. This is the underlying motivation for hosting the proposed workshop.

Workshop Objectives

This workshop is intended to brief participants with up-to-date information on the status of deep-sea mining (DSM), current thinking about approaches to mining activities, and international experience with methods, environmental awareness, and policy for future mining activities.

The key objectives of the workshop are to present the various environmental issues and concerns associated with deep-sea mining, with a particular focus on the Southwest pacific region, and discuss the actions taken or envisaged by states and the international community to respond to these. The following key questions will be addressed:

- 1. What are the **environmental issues**? There are major concerns over the potential impact of DSM on the environment and, therefore, these need to be considered seriously at the earliest stages of any exploration or mining activity. Here we will review the various steps and actions required to optimise environmental management of DSM. In particular, we will discuss the procedures for developing Environmental Impact Assessments (EIA) for DSM, and the requirements for rigorous scientific information. Guidelines for developing EIA in regard to DSM were developed over the last few years by the ISA, SPC and New Zealand government and will be reviewed at the workshop.
- 2. How can DSM **Marine Scientific Research** provide information that is most appropriate to the advancement of exploration and exploitation of deep-sea minerals? A number of guidelines and recommendations have been published recently about the specific issues of developing and undertaking marine scientific research for DSM purposes. These recommendations were

developed by the ISA, SPC and the New Zealand government and tackle the specificities of the proposed and potential mining areas, in the Southwest Pacific and New Zealand regions. This objective will also include input from several management agencies in evaluating what level of MSR is necessary for meeting legal and regulatory requirements. Experiences from Papua New Guinea, New Zealand, and the ISA are useful here.

3. What **recommendations** should be given by the workshop participants to states and organisations considering DSM activity? In particular, how much, and what MSR is necessary to comply with legislation, ensure effective environmental management for sustainability of ecosystems, yet be practical and realistic for DSM companies or small countries to undertake. This discussion will be based on a number of recent studies and will be presented to the workshop participants in a manner that will facilitate moving forward using intelligent and environmentally sound methods for DSM exploration and exploitation.

Committed and Interested Sponsors

- CPC Circum Pacific Council
- STAR Science, Technology And Resources network
- NIWA National Institute of Water and Atmospheric Research (?)
- SPC Secretariat of the Pacific Community (?)
- PaceNet Plus programme (?)
- Fugro(?)
- Stabbard Marine(?)
- ISA (?)

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An agenda will be sent out soon. Those interested in participating in this workshop are encouraged to contact the Secretary of STAR Steering Committee, Lala Bukarau at redit.mlb@gmail.com or any of the Organizers/Facilitators listed above.