Environmental Aspects of cobalt-rich ferromanganese crust and polymetallic sulphide crust development - Framework established by the code



International Seabed Authority Workshop. Kingston, Jamaica 31st July - 4th August 2006

The Legal and Technical Commission

Article 165, para 2 (e)

 The LTC is to make recommendations to the Council of the Authority on the protection of the environment, taking into account the views of recponsised experts in that field

Relevant workshops/LTC sessions

- June 1998
- September 2004
- 10th ISBA session
- 11th ISBA session
- March 2006
- July/August 2006

September 2004 Workshop -

"Polymetallic sulphides and crusts: their environment and considerations for the establishment of environmental baselines and an associated monitoring programme".

- Define the biological components
- Facilitate reporting by contractors
- Provide guidance to contractors re. plan of work

Results - ISBA/11/LTC/2

- Based on current scientific knowledge, may need to be modified
- Type of mining system not certain, assumptions made
- Provided recommendations for procedures/practices
- Baseline data: geochemical, biological and physical required
- Test mining impacts
- Cooperative research
- Recommendations to close gaps in knowledge

Draft regulations on Co-rich crusts and PMS

- Redrafting of ISBA/6/A/18
- Regulation 5
- Regulation 7
- Regulations 33 38

Regulation 5 Protection and preservation of the marine environment during prospecting

1. Each prospector shall take necessary measures to prevent, reduce and control pollution and other hazards to the marine environment arising from prospecting as far as reasonably possible using for this purpose the best practicable means at its disposal. In particular, each prospector shall minimize or eliminate:

(a) adverse environmental impacts from prospecting; and

(b) actual or potential conflicts or interference with existing or planned marine scientific research activities, in accordance with the relevant future guidelines in this regard.

2. Prospectors shall cooperate with the Authority in the establishment and implementation of programmes for monitoring and evaluating the potential impacts of the exploration and exploitation of polymetallic sulphides and cobalt crusts on the marine environment.

3. A prospector shall immediately notify the Secretary-General in writing, using the most effective means, of any incident arising from prospecting which poses a threat of serious harm to the marine environment. Upon receipt of such notification the Secretary-General shall act in a manner consistent with regulation 35.

Regulation 7 Confidentiality of data and information from prospecting contained in the annual report

1. The Secretary-General shall ensure the confidentiality of all data and information contained in the reports submitted under regulation 6 applying mutatis mutandis the provisions of regulations 38 and 39, provided that data and information relating exclusively to environmental monitoring programmes shall not be considered confidential.

4. Contractors, sponsoring States and other interested States or entities shall cooperate with the Authority in the establishment and implementation of programmes for monitoring and evaluating the impacts of deep seabed mining on the marine environment. When required by the Authority, such programmes shall include proposals for areas to be set aside and used exclusively as impact reference zones and preservation reference zones. "Impact reference zones"

Draft regulations 34-36

• Language change - introduction of phrase "threat of serious harm" rather than previously "harmful effects"

4. Contractors shall take all measures necessary to ensure that their activities are conducted so as not to cause damage by pollution to the marine environment under the jurisdiction or sovereignty of other States, and that pollution arising from incidents or activities in its exploration area does not spread beyond such area.

2. Data and information that is necessary for the formulation by the Authority of rules, regulations and procedures concerning protection of the marine environment and safety, other than equipment design data, shall not be deemed proprietary.

March 2006 workshop -"Cobalt-Rich Crusts and the Diversity and Distribution Patterns of Seamount Fauna

Aims

- Assess patterns of diversity and endemism of seamount fauna including the factors that drive these patterns;
- Examine gaps in current knowledge of these patterns with a view to encouraging collaborative research to address them, and
- Provide the Legal and Technical Commission with recommendations to assist it to develop environmental guidelines for future contractors.

Results

Limited knowledge of seamount fauna on crusts in the region identified as highest potential;

More sampling was needed in this region;

Many seamounts sampled at the time of the workshop were not the right type;

It was uncertain how many of those sampled had a cobalt-rich crust - most seamount surveys in the SW Pacific had been on small-sized features, not large guyots identified as the most likely targets;

Seamounts at the right depths for crust formation (at the oxygen minimum zone) needed further sampling

July/August 2006 workshop

- Current marine exploration/mining
- Perspective of potential contractors
- Comparison to land-based programmes
- TBC

LTC Sessions 11/12

- 11 deferred consideration of the environmental guidelines as it considered it premature until the draft regulations were finalised
- 12 review this position, report on the March 2006 workshop and the July/Aug 2006