Best Practices for Deep Seabed Mining
Lessons from the U.S. Surface Mining Control and Reclamation Act

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What can we learn from terrestrial mining?

- Fundamentally different from deep seabed mining
- In terms of its environmental impact
- Because conventional reclamation is not possible
- But *we can learn much about good process* in managing mining from the U.S. Surface Mining Control and Reclamation Act
- It offers many *innovative and exemplary processes* that can be adapted to regulating deep seabed mining
Elements of a Good Regulatory Program

1. An agency with comprehensive regulatory authority over mining;
2. A robust and public-facing planning and permitting process;
3. Comprehensive performance standards for exploration and mining activities developed with input from relevant stakeholders; and
4. Inspection and enforcement protocols and strategies to ensure compliance with permit conditions and all regulatory standards.
The Organizational Structure of the ISA

- The key elements of the ISA includes—
  - The Assembly (all UNLCOS member states – equal voting rights)
  - The Council (36 members elected by and from the Assembly)
  - The Legal and Technical Commission (LTC) (Elected by the Council)

The LTC is the key because once it finds that the conditions for approval are met it must recommend approval. Moreover, its recommendations on substantive decisions – contract approvals and enforcement actions – can only be overturned by a 2/3 supermajority of the Council.
• The LTC is designed as a professional, expert body that makes recommendations on the merits. The Council must vigilantly oversee the LTC to keep politics out of their recommendations.

• *Impartial technical staff* to assist the LTC will be critical.

• And the ISA must adopt strict standards that promote transparency and ensure that a recommendation of approval reflects all elements of a good.
Planning and Contracting

- After a comprehensive ESIA process, contracts or permits must reflect that process and include clear standards describing how exploration and mining activities will be conducted and how problems encountered will be addressed. Contracts must include:
  1. Small scale testing requirements
  2. Comprehensive reporting requirements
  3. Adaptive management protocols
  4. A commitment to the precautionary principle
  5. Opportunities for public oversight and engagement
Informal and Formal Contract Review

• Before the LTC makes a recommendation on a contract, the public should be given to review the proposed contract and LTC recommendations.
• As with SMCRA, the ISA should allow interested stakeholders to request an informal conference with the LTC before any final recommendations are made.
• Formal review of final decisions by the Seabed Disputes Chamber should also be afforded to all interested stakeholders after approval of a contract.
Designing Performance Standards

• Assessing how different mining techniques and methods will impact marine resources is extremely difficult, especially at the outset of a new mining program
  • *The small-scale testing* requirement (hopefully carried out by the Enterprise) before full-scale mining proceeds could yield valuable information for designing good standards
  • *Using SMART (specific, measurable, achievable, realistic, and time-bound) metrics* to assess whether standards are being met
  • Critical to engage relevant stakeholders in setting metrics
Inspection & Enforcement Program

• Only with regular inspections will we know if a contractor is violating the terms of the contract/performance standards?
  • Rotating inspectors assigned to live on-board vessels
  • Live, continuous, on-board cameras showing mining activities
  • Detailed regular (at least monthly) monitoring reports assessing compliance with SMART metrics/describing enforcement action
  • Opportunities for stakeholders to file complaints and have them promptly and fairly addressed
  • Whistleblower protections for employees