ISA Expert Workshop Deep-Sea Mining

Risk management standards for regulatory frameworks and the ecosystem approach

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UNECE's major aim is to promote pan-European economic integration bringing together 56 countries from the European Union, non-EU Western and Eastern Europe, South-East Europe and Commonwealth of Independent States (CIS) and North America.

The UNECE Group of Experts on Risk Management in Regulatory Systems

- Established in 2010 by the Working Party on Regulatory Cooperation and Standardization Policies.
- Experts from 13 countries participating with perspectives from authorities, standards-setting organizations, conformity assessment bodies, universities and research institutions as well as business companies.
- Goal is to improve the management of hazards that have the potential to affect the quality of products and services, and/or cause harm or damage to people, the environment, property and immaterial assets through the use of risk management in regulatory and management activities.
Risk Management in Regulatory Framework

The coherent application of risk management to regulatory work is intended to develop a well-balanced system, as opposed to one that veers between two extremes:

a) Excessive or over-regulation, i.e., regulations that are too stringent with respect to the risk they set out to address, and

b) Insufficient regulations, which fail to address risk and unnecessarily or inordinately expose citizens and economic operators


Policymaking and Management Contexts

**Policymaking**
- Stakeholder engagement expressed concerns
- Scientific research and evidence of trends
- Assessments identify potential consequences
- Establish policy goals and objectives
- Monitor environmental trends

**Management**
- Identify the courses of action to achieve policy objectives
- Establish the outcomes for the management measures
- Implement measures to achieve the objectives
- Conformity assessments of the operational controls
ISO Standards

- **ISO 31000:2009 Risk Management Standard**
  - Risk management process
  - Applicable to legislation and regulatory analysis
  - Support ecosystem approaches to managing environmental risks

- **ISO Guide 73:2009 Risk Management Vocabulary**
  - Vocabulary and definitions (Risk: effect of uncertainty on objectives)
    applicable in the management of risk within a legislative and regulatory context

  - Controls assessment applicable to legislation and regulatory analysis
  - Identifies gaps, redundancies and overlaps in regulations, standards and guidelines
ISO 31000 Risk Management SDG’s

- The SDG’s set the goals and the context for the risk management process
- Technical standards and national legislation are used to reduce risk as defined as “Effect of uncertainty on objectives”
- Technical standards and national legislation carry into effect the objectives of the SDG Targets
- Regulations, standards and guidelines are mechanisms of implementation
Risk Management Process

- What are the management measures needed to reduce the uncertainty of achieving an objective?

- Risk is set in the policy objective.

- Integration of the risk assessment function within the policy objectives.

- Without objectives, it is an assessment of a current situation or potential consequences.
Serious harm to fish is the death of fish or any permanent alteration to, or destruction of, fish habitat.

Avoid: completely prevent serious harm to fish.

Mitigate: reduce the spatial scale, duration or intensity of serious harm to fish.

Offset: Counterbalance the serious that cannot be avoided.
Risk Analysis
Preventing, Mitigating, Restoring

Risk Manager: What are the prevention controls needed to maintain the status? What are the mitigation controls to reduce the changing functions?

Scientist: What is the current status of the ecosystem components and functions?

**Maintaining Status**

- Function maintained although there may be changes in the status and can resist or rapidly compensate

**Changing Function**

- Function systematically changes and recovery expected

**Loss of Function**

- Function no longer supported and recovery no longer secure

Parallel Processes
Risk Management Process

- MSFD set the environmental basis
- MSPD set the socio-economic basis
- Each process is lead independently by a competent authority
- MSPD depends on the MSFD to address MSP environmental considerations

Prevention Strategies

Program of Measures

Ax VI Input controls: management measures that influence the amount of a human activity that is permitted
Ax VI.1 Input control
Ax VI Spatial and temporal distribution controls: management measures that influence where and when an activity is allowed to occur
Ax VI.1 Spatial and temporal distribution control

Human activities and demands on natural ecosystem services

Good Environmental Status not achieved or maintained

Environment

Annex III Table Pressures

Ax V Monitoring programmes to assess the impact of the measures
Ax V Monitoring programmes

Ax IV Setting operational targets relating to concrete implementation measures
Ax IV Environmental targets

Transboundary and cross sectoral management and coordination impediments

Ax VI Management coordination measures: tools to ensure that management is coordinated
Ax VI.4 Management coordination measures

Ax VI Measures to improve the traceability, where feasible, of marine pollution
Ax VI.1 Management coordination measures

Ax VI Economic incentives: management measures which make it in the economic interest of those using the marine ecosystems to act in ways which help to achieve the good environmental status objective
Ax VI Economic incentives
Ax VI.6 Economic incentives

Ax VI Communication, stakeholder involvement and raising public awareness
Ax VI.6 Communication and stakeholder involvement

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The management perspective

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<td>Legislation and public policies</td>
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<td>When do we need to do this?</td>
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<td>What do we need to do?</td>
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