

## 11 Abstract

### **Deep Seabed Mining in the Area: Environmental Aspects of the Legal Framework**

The thesis focuses on the environmental aspects of regulation of deep-seabed mining in areas outside national jurisdictions, collectively referred to as the Area. Deep Seabed Mining (DSBM) is a potential future method of commercial extraction of non-renewable resources, metals and rare earths, collectively referred to as Minerals, conducted at depths between one and six kilometres below the ocean surface. Like all other mining operations, these activities would affect the surrounding ecosystems and the ocean environment as a whole, which is already under considerable pressure from other human activities.

Effective protection of the marine environment therefore requires sophisticated legislative and policy framework to avoid irreversible and unacceptable consequences, including loss of genetic resources, biodiversity and deepening threats to climate stability. The diverse set of rules that govern the DBSM has been shaped over the last 50 years by various interest groups and under the influence of the latest scientific knowledge and technological developments. Its backbone are the United Nations Convention on the Law of the Sea (UNCLOS) and the 1994 Implementation Agreement. The provisions of Part XI of UNCLOS establish a specialised autonomous international organization, the International Seabed Authority (ISA), whose members are *ipso facto* all Parties to UNCLOS, and give it the mandate to develop rules, regulations and procedures, to take other necessary measures, and to administer and monitor compliance with them in order to ensure effective protection of the marine environment.

The Convention further obliges States Parties to adopt regulations and administrative measures within their legal systems to ensure compliance with the rules by the entities under their sponsorship. These entities may carry out activities in the Area only under sponsorship by a State Party to UNCLOS and after concluding a contract with ISA in which they undertake to comply with the obligations set out in ISA's regulations.

The legal regime has been developing in a unique context, where it is formed before first mining activities have occurred. However, this gap is now closing as key documents relating to the commercial phase of mining are still being drafted.

Key words: deep seabed mining, the Area, non-renewable resources, non-living resources of the Area, international environmental law, International Seabed Authority, protection of ocean environment, Areas beyond national jurisdictions