The marine scientific research and marine environmental protection provisions of UNCLOS: implications for experimental activities that intentionally perturb the marine environment

Philomène VERLAAN, US
verlaan@hawaii.edu

The 1982 United Nations Convention on the Law of the Sea (UNCLOS) sets out extensive provisions for conducting marine scientific research (MSR) and for protecting the marine environment (MEP) which are applicable both within and outside areas of national jurisdiction. The obligation imposed by UNCLOS on states for MEP applies to all activities which may affect the marine environment, regardless of where they are conducted, including on the high seas, and regardless of whether they fall within the - undefined - concept of MSR under UNCLOS. Other international instruments further complement, enhance and implement the MEP provisions of UNCLOS and are continually evolving in response to our growing understanding of the ocean and the effects of our activities on it. The precautionary and polluter-pays principles as well as ecosystem-based management are examples. The MSR regime under UNCLOS has not seen a similarly productive evolution. To ensure that the right to obtain potentially commercially valuable information on resources within its marine jurisdiction remains with the coastal state, the MSR regime and state practice effectively remove over one-third of the ocean from scientific examination. This situation hampers the global community's ability to identify, investigate and assess the effects of the community's activities on the global marine environment, and to develop scientifically robust policies for its sustainable use. The disjunction between the MSR and MEP regimes is particularly evident in the case of experimental activities that intentionally introduce perturbations into the marine environment. These activities are multiplying both within and outside areas of national jurisdiction. Experimental marine field work conducted in the ocean at appropriate temporal, spatial and extractive (sampling) scales is essential to obtain data that can be interpreted, extrapolated and practically applied with confidence. Such work enhances our knowledge of the ocean and contributes valuable information on the marine environment. However, such work may also have significant environmental effects, which may even become synergistic or additive, with unknown consequences for the marine environment. This growing use of the ocean as a laboratory has global scientific, environmental, legal and policy implications. Examined here is the relationship between the MSR and the MEP provisions of UNCLOS in this context, both within and outside areas of national jurisdiction.