

SATELLITE EARTH OBSERVATION AS 'SYSTEMATIC OBSERVATION' IN MULTILATERAL ENVIRONMENTAL TREATIES

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1. OBJECTIVES

The aim of this paper is to identify the change in the role of scientific information in protecting the environment, or the global commons, through considering the significance of 'systematic observation' in multilateral treaty frameworks. The paper will examine the case for satellite Earth observation and will attempt to streamline a general obligation, through principles and rules of international law, to its implementation phase.

2. PROTECTION OF THE ENVIRONMENT AND SYSTEMATIC OBSERVATION

To protect the global common areas or interests of common concerns, *a general obligation of international environmental law for states to cooperate for the protection of the environment* has emerged. Particularly, in multilateral frameworks for the protection of the atmosphere, *there is an obligation for states to cooperate in research and systematic observation* to further the understanding and to reduce or eliminate the remaining uncertainties, in the context of the so-called 'precautionary principle (approach)'. International cooperation for *Satellite Earth observation, as an integral part of systematic observation*, should be regarded as an international obligation, as far as it concerns ozone and climate change.

3. RIGHTS AND OBLIGATIONS OF STATES IN SATELLITE EARTH OBSERVATION

The traditional legal frameworks governing space activities and national practices include several important rules concerning the environment, but have not been sufficiently updated to correspond to such information needs. Conflicts in states' rights involving equity and equality, natural resources and security, and information regarding those are yet to be solved.

4. CONCLUSION — TOWARDS EFFECTIVE IMPLEMENTATION

It is essential to establish a reliable and independent environmental information management, in which an international organization or body would play a significant role. The most effective way would be to give limited but strong authority to an international body, such as the Group on Earth Observations (GEO), taking an approach similar to the voluntary 'best-effort' cooperation of a Partnership. Procedural techniques for effective implementation should be organized at global, international and national levels. Synergy between space and environmental law is important, as both have in common the objective of regulating the human activity with respect to the global commons. The first phase should be to provide systematic observation from space in the ozone and climate change regime, and further steps would involve eventual crystallization of norms in space law.