

Promoting Access to, and Exchange of, Data and Information Related to Climate Change: a Legal Perspective

Executive Summary

by

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The context for data sharing includes the fact that technologies and practices related to climate change are developing much more quickly than the law. Law is, by design, reactive, whereas technology is, by intent, proactive. Practices are, of necessity, responsive and evolutionary. Climate transcends all organizational elements of legal institutions, jurisdictions, and competencies. In short, it is extremely complex.

Complexity is compounded by the fact that data sources are numerous. Space – based platforms include environmental, weather, remote sensing, and navigation satellites. Aerial platforms include aircraft, balloons, sondes, etc. There are also a wide variety of other in-situ platforms: ground-based sensors, buoys, CTDs, and human-made measurements.

On the legal side, the landscape for data is equally complex and involves many legal systems. At the international level there are various relevant treaties; principles; and, binding and nonbinding agreements. At the national level there are constitutions, laws, regulations, and codes. Many nations have smaller political units like states, cantons, and provinces, etc. that have additional local municipal laws that can also govern data acquisition and access.

At the international level, some of the most important relevant instruments include the Kyoto Protocol; the U.N. Principles Relating to Remote Sensing of the Earth from Outer Space (Principles); WMO Resolution 40; the Montreal Protocol; the Agreement Between US NOAA and EUMETSAT on Joint Transition Activities Regarding Polar-orbiting Operational Environmental Satellite

Systems; the Disasters Charter; and, the Group on Earth Observations Data Principles (in Progress).

Access and exchange strategies ought to be considered in the short-term, medium-term, and long-term. They are not mutually exclusive, and ought to be considered as complements to one another. Short-term strategies ought to seek to strengthen coordination and communication among data providers. They can build on scientific conventions such as openly publishing and certifying data sets. Medium – term strategies ought to distinguish between the scientific and commercial (however defined) value of data. Typically, commercial value decreases over time as scientific value increases. The most important aspect of long-term strategies is to establish and maintain open archives. Examples of institutions that employ these strategies include the World Data Centers, WMO, and the U.S. National Satellite Land Remote Sensing Data Archive.

The single most important component of any policy that is intended to promote data access and exchange is a presumption of openness. That is it should be presumed that all data is subject to open access. Generally, this is starting point of existing laws and policies. To promote access, the presumption ought to be institutionalized. Agreements should include specific open access language and, if necessary, recognize the need for some legitimate exceptions, such as, personal privacy; indigenous rights; conservation and protection of sensitive ecological, archaeological, or cultural resources; national security; and, propriety interests. However, these exceptions ought to be clear and limited and should not outweigh the presumption of openness. Precise “sunset clauses” should be set for each and every period of restricted access. There should be a specific end date applicable for each and every restriction.

To encourage participation in data sharing, there should be

attribution of all significant data and information sources. Inconsistent definitions for critical terms like “remote sensing”, “raw data”, “value-added”, etc. should be clarified and harmonized to the degree possible. All laws and policies regarding data sharing should be published in open, accessible, public sources.

Regarding satellite data there are some very specific current trends. Overall, access to data is the presumed norm with exceptions for national security. For high-resolution systems the number and kind of exceptions are growing worldwide. However, for medium to low-resolution data, access is growing and data from them are more openly available. The Principles and the nondiscriminatory access policy are routinely acknowledged in various laws, policies, and agreements. However, regarding high-resolution systems, the Principles and the nondiscriminatory access policy are being more narrowly construed in national laws.