




**REINTERMEDIATION IN THE REPUBLIC OF SCIENCE:
MOVING FROM IP TO IC**

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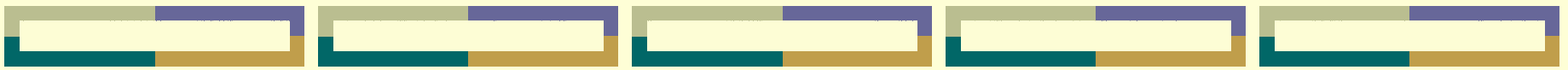




Public-domain information may be defined in legal terms as sources and types of data and information whose uses are not restricted by statutory intellectual property (IP) laws and other legal regimes, and that are accordingly available to the public for use without authorization.

Open access may be defined as proprietary information that is made openly and freely available on the Internet or on other media by the rights holder, but that retains some or all of the exclusive property rights that are granted under statutory IP laws. Open access may be provided by all types of public and private sector sources, including those in the public domain.





The Symposia convene experts and managers who are involved in the creation, dissemination, and use of S&T data and information (STI) to discuss:

- (1) the role, value, and limits of making STI available in the public domain for research and education,
- (2) the various legal, economic, and technological pressures on the producers of public-domain STI, and the potential effects of these pressures on research and education,
- (3) the existing and proposed approaches for preserving the STI in the public domain or for providing “open access”, and
- (4) other important issues in this area that may benefit from further analysis.

Symposium on the Role of S&T Data and Information in the Public Domain, 5-6 September 2002, Washington, DC.
See www.nationalacademies.org/biso for the results of that meeting. Edited *Proceedings* will be published in April.

Symposium on Open Access and the Public Domain in Digital Data and Information for Science, 10-11 March 2003, UNESCO Headquarters, Paris
See: www.codata.org for additional background and registration information.





Reasons for placing government-generated data and information in the public domain:


A government entity needs no legal incentives from exclusive property rights to create information. Both the activities that the government undertakes and the information produced by it in the course of those activities are a public good.

The government produces information on behalf of the taxpayers who paid for it. The moral rights in the information thus reside with the citizens.

Transparency of governance and democratic values are undermined by restricting citizens from access to and use of public data and information, and citizens' rights of freedom of expression or information are compromised by restrictions on redissemination of public information.


There are numerous positive externalities—especially through network effects—that can be realized on an exponential basis through the open dissemination of public-domain data and information on the Internet.





Motivations for public-interest research not dependent on the maximization of profits and value to shareholders through the protection of proprietary rights in information; rather, the motivations of academic and not-for-profit scientists are predominantly rooted in intellectual curiosity, the desire to create new knowledge, peer recognition and career advancement, and the promotion of the public interest.

These values and goals are best served by the maximum availability and distribution of the research results, at the lowest possible cost, with the fewest restrictions on use, and the promotion of the reuse and integration of the fruits of existing results in new research.



PRINT

(pre) Industrial Age

fixed

static

rigid

physical

limited content and types

local

linear

high marginal distribution costs

distribution physically difficult,

slow

copying cumbersome, not identical

single user

DIGITAL NETWORKS

post-industrial Information Age

transformative

interactive

flexible, extensible

“virtual”

unlimited contents and multimedia

global

non-linear, with time/space

collapsed

zero marginal distribution costs

effortless, immediate universal

distribution

copying easy and identical

multiple, concurrent users



Peer production of information is not dependent upon direct economic returns or intellectual property

protection for success. Instead, it is based on non-economic incentives or indirect economic returns, and on volunteer, community-based actions that may best be described as intellectual commons, rather than property. Other key aspects of peer production include:

A sufficiently compelling common objective that serves as an incentive to attract enough volunteer labor to make it work. This of course will vary depending on the nature of the problem to be addressed and other factors discussed below.

The establishment of the requisite amount of trust among the minimum set of participants.

Shared norms.

Rules of engagement that are consistent with or reinforce the shared norms and the establishment of trust.

An information product with sufficient modularity and granularity that makes it amenable to highly distributed, minimally managed production.

The costs and other barriers to integration are sufficiently low

