

GEOGRAPHIC INFORMATION LEGAL ISSUES

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Summary

Several areas of law affect access to and use of geographic information. Among the most influential are intellectual property (for example, copyright, patent, and trade secret), freedom of information (that is, freedom to access the records of government), and the information privacy of individuals. This article briefly summarizes the status of laws in these areas as they relate to access to geographic work products and data sets. It also discusses some of the policy arguments upon which national approaches to accessing geographic data have been predicated. Examples are drawn primarily from high-income nations, those in North America and Europe, since much of the emerging information law at the international level is arising from debates arising from conflicts of laws among these nations.

The article suggests that a liberal policy concerning copyright law and the general principle of open and unrestricted access to government information, while accounting for security concerns, are wise policy choices for most nations. These policy approaches, when tempered with appropriate means for protecting other core interests, have been beneficial in terms of supporting both fundamental democratic values and long-term economic advancement for nations.

1. Introduction

The general information policies of nations are often driven by motives such as encouraging an informed citizenry, promoting economic development, protecting national security, securing personal information privacy, supporting the effective functioning of democratic processes, and protecting intellectual property rights. In most nations, all of these motives are supported to varying degrees through a balance of competing yet complementary laws.

A basic policy assumption underlying much information law in high-income nations, particularly those in the West, is that the economic and social benefits of information are maximized by fostering wide diversity in the creation, dissemination, and use of information. Private and non-profit businesses, private citizens, local to national government agencies, and nonprofit organizations all contribute to this milieu of data suppliers, disseminators, and users. The belief, born through experience, is that diversification of sources and channels for the distribution of information establishes a social condition that allows economies and democracy to thrive. Accordingly, in the following sections this article examines three fundamental aspects of information law as it relates to geographic information: copyright law, freedom of information law, and privacy law.

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Substantial portions of this work have been drawn from Onsrud H.J. (1998). Access to geographic information in the United States, in: *Free Accessibility of Geo-Information in the Netherlands, the United States and the European Community: Seminar Proceedings* (ed. J.A. Zevenbergen), Delft: Delft University Press. Segments of Section 2 were drawn from Onsrud H.J. and Lopez X.R. (1997). Intellectual property rights in disseminating geographic data, products, and services: conflicts and commonalities among European Union and United States approaches, in: *European Geographic Information Infrastructures* (eds. I. Masser and F. Slag ), London: Taylor and Francis. Segments of Section 3 were drawn from Onsrud H.J. (1992). In support of open access for publicly held geographic information. *GIS Law* 1(1), Jan/March 1992, 3–6. Segments of Section 4 were drawn from Onsrud H.J., Johnson J., and Lopez X.R. (1994). Protecting personal privacy in using geographic information systems. *Photogrammetric Engineering and Remote Sensing* 60 (9), 1083–1095.

2. Copyright Law

A primary objective of copyright law is to encourage expression of ideas in tangible form so that the ideas become accessible to others and can benefit the community at large. Copyright restricts the use of creative works as an incentive for authors to bring forth knowledge, information, and ideas so that others in the community may exploit the knowledge for economic or social gain. When limited but substantial protection is provided to creative authors for making their work known, everyone in the community benefits.

In brief, copyright protection subsists in original works of authorship, and the author of the work is the owner of the copyright upon creation of the work or expression in tangible form. Copyright allows the holder to bar others from copying the work, creating derivative works, and displaying or performing the work in a public manner.

Because protection exists upon creation, modern international copyright conventions hold there is no longer a need to place a notice of copyright on a work in order to gain copyright protection. In most nations, if the author of a work is an employee and the

work was created within scope of his or her employment (that is, “work made for hire”), the employer is the assumed owner of the copyright.

In the case in the United States, copyright extends for the life of the author plus 70 years or 95 years from publication for corporate-created works. These terms are typically shorter in other nations.

There is no international registry for copyright. Registration is typically sought in a country of prime interest, with dependence on international laws and treaties for obtaining similar protections in other nations. Because works are immediately protected upon their creation, there is no need to register a copyright for the copyright to be valid. However, registering supplies documentation of your creation of the work as against other claimants, provides prima facie evidence of the validity of the copyright, and is typically a prerequisite for bringing an infringement action. In the United States, registration must occur within three months of publication or prior to infringement to enable claims for statutory damages and attorney’s fees. Similar benefits of registration are likely to accrue in other nations.

Copyright protects only expression, not facts, as expressed in the 1986 Berne Convention (US Treaty Doc. 99-27, KAV 2245). The expression protected must be the product of intellectual creativity and not merely labor, time, or money invested. Facts, algorithms, physical truths, and ideas exist for use by everyone. These may be extracted and used freely.

In the United States, if an authored work expresses a mere “modicum” of creativity, the work gains protection under copyright (*Feist Publications v. Rural Telephone Service Co.* 111 S. Ct. 1281, 1287, 1991). Thus, a very low level of creativity is required to gain protection. However, the protected elements of the resulting work are precisely those that reflect the intellectual creativity, and no more. Further, in the United States, “(t)he primary objective of copyright law is not to reward authors, but to promote science and useful arts. To this end, copyright assures authors the right to their original expression, but encourages others to build freely upon the ideas and information conveyed by the work. This result is neither unfair nor unfortunate. It is the means by which copyright advances the progress of science and art” (*Feist Publications v. Rural Telephone Service Co.*, 1991).

In other nations, the concept of a “moral right” or “natural right to the bounty of one’s efforts” may carry greater weight under copyright law. For instance, in some European nations, the level of creativity required to gain copyright protection is much higher but the protection may extend typically to the entire work and not just the creative elements of the work.

Regardless of the nation, copyright subsists usually in compilations of geographic facts if there is some creative “authorship” in the “selection, coordination, or arrangement” of the compilation. There is a modicum of creativity in the selection, arrangement, and coordination of almost any geographic data set. Thus, in the United States, wholesale copying of a competitor’s geographic data set without permission is typically illegal

under existing copyright law because, in the process of copying a data set, one is inevitably copying the creative elements of the work as well.

Because European nations required typically a higher level of creativity to acquire protection, the commercial and government sectors felt that many databases, such as geographic databases, were not protected adequately in Europe. Hence, they advocated explicit database protection legislation to protect databases above and beyond copyright law. In 1996, the European Community (EC) issued a directive requiring its Member States to pass national laws comporting with a new form of database right. All nations in the EC complied and the effects of the national laws are just beginning to be studied. A study titled *Across Two Worlds: Database Protection in the US and Europe* commissioned by Industry Canada to compare the effects of the EC versus the US approach shows that the new laws typically resulted in a onetime boost in database production and a onetime boost in the number of new firms entering the database industry. Further, an analysis of emerging court cases and interviews with those closely familiar with the new laws indicate that the benefits may be offset by:

- excessive protection for certain databases,
- new barriers to data aggregation,
- new opportunities for dominant firms to harass competitors with threats of litigation,
- increased transactional gridlock, and
- inadvertent impediments and disincentives for noncommercial database providers.

Thus, the new laws may be having the reverse effect of the intended goal of promoting long-term economic growth and the advancement of science. However, further studies accomplished over time will be needed to support or falsify the results of the initial studies.

Although some works, including many spatial data sets, are not protected to the extent their compilers would desire, alternative laws often might protect such works. Contract, trademark, trade secret, and misappropriation laws provide substantial protection for many data sets that lack creativity requisites for protection under copyright.

A major difference between the copyright law of the United States and that of other nations is that the United States expressly forbids Federal agencies from imposing copyright in the works of the agencies, thereby placing these information resources in the public domain. Due to their dominant power positions and fiscal incentives to do so, it is very likely that most government agencies would choose in their own best agency interests rather than in the interests of citizens generally if they had the ability to decide whether to impose copyright in government information. Thus public policy makers address the imposition of copyright in government works in political lawmaking forums. In the United States, the Copyright Act has long stated, “(c)opyright protection under this title is not available for any work of the United States Government” (17 U.S.C. § 105). The primary reason for not allowing Federal agencies to copyright public records was the fundamental belief that government copyright is the antithesis of “open access” whereby an informed citizenry can check official abuses. However, other values also are

at work, primarily that individuals ought to be able to derive benefit from public goods and that education (increased access to information) is inherently good in its own right. Thus the position of Congress has supported the development by individuals and private businesses of markets for government information, and has otherwise encouraged the distribution of government information in the public interest.

The United States appears to be unique in the world in taking this open access and nonproprietary stance for the records and products of its national agencies. However, a study for the European Commission in 2000 titled *Commercial Exploitation of Europe's Public Sector Information* states that it saw “compelling evidence of the benefits of the adoption of strong freedom of information, no government copyright, marginal cost recovery, non-exclusive licensing and explicit removal of restrictions on reuse of licensed public sector information.” On October 23 2001 the European Commission adopted a Communication with the goal of improving the exploitation of public-sector information throughout Europe.

The purpose is to remove the many barriers content companies are facing trying to develop the next generation of cross-border information services and products based on public sector information. The overall aim is to put these European companies on an equal footing with companies in other markets such as the United States, where simpler access and reuse regimes have led to a market up to five times larger than that in Europe. While the Communication comprises a set of European-level measures to facilitate the reuse of government information resources, the Commission is also considering easing the existing barriers through a directive.

Thus, nations in Europe may ultimately follow a national government data approach similar to that found in the United States.

Meanwhile, most national governments as well as most state and local governments in the United States feel that they have the option of imposing copyright in their public records if they choose to do so. In the United States, attempts by state and local governments at exclusive or restrictive publishing are typically severely limited by free speech rights of citizens. That is, citizens typically have the right to access public government records and divulge them. Antitrust laws are also very suspicious of state monopolies in information. Further, legal scholars have argued that under the patents and copyright clause of the US Constitution, Congress lacks the ability to extend copyright beyond that which is necessary to provide “incentives” to authors to make their works available.

When state or local government agencies collect information in response to a legislated obligation, it is the public need as defined by the legislative obligation that provides the incentive to gather information or create a public record. If copyright failed to exist, the information would still be collected. This being the case, copyright provides no incentive and the works may not be protected by copyright. Regardless of this, some local and state agencies are pursuing the imposition of copyright in some public records. Because of their value, geographic data sets are often included when this approach is taken.

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Biographical Sketch

Harlan Onsrud is Professor of Spatial Information Science and Engineering at the University of Maine, USA. His research focuses on the analysis of legal, ethical, and institutional issues affecting the creation and use of digital spatial databases and the assessment of the social impacts of spatial technologies. In his capacity with various National Research Council committees he has helped co-author and review several National Research Council study reports on information law and policy topics. Among the latest is a report of a study committee he chaired on "Licensing Geographic Data and Services." His primary teaching interests include course offerings in information ethics and information systems law.

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