A cornerstone of the human rights movement is establishing the rule of law; without the rule of law, the very meaning of the term “rights” dissipates. A foundational principle of the rule of law is governmental transparency, i.e., governments operating not secretly, but openly. One aspect of this transparency is ready access to the law. Having open and public laws that are relatively easily available is an important aspect of efforts to create or enhance the rule of law. This article addresses the human right of access to the law and how using technology can enhance this access.

Creating the rule of law worldwide is a major aim of many disparate groups ranging from human rights advocates\(^1\) to massive multi-national corporations seeking to use law to help establish business environments to their liking,\(^2\) and including governmental aid agencies,\(^3\)

---


\(^3\) The rule of law is one of the four democracy initiatives of the US Agency for International Development (USAID). The other three are elections, civil society, and governance. USAID, Democracy and Governance, http://www.usaid.gov/democracy/ (accessed March 8, 2001). USAID’s statement of its official purpose is: U.S. foreign assistance has always had the twofold purpose of furthering America's foreign policy interests in expanding democracy and free markets while improving the lives of the citizens of the developing world. Spending less than one-half of 1 percent of the federal budget, USAID works around the world to achieve these goals. USAID, This Is USAID, http://www.usaid.gov/about/ (accessed March 8, 2001). See also, Ruth Greenspan Bell, EPA’s International Assistance Efforts: Developing Effective Environmental Institutions and Partners, 24 Envtl. L. Rep. (Envtl. L. Inst.) 10,593 n. 4 (Oct. 1994).
international aid and development agencies, and specialized groups like environmental non-governmental organizations (NGOs). USAID describes the rule of law as follows:

The term "rule of law" embodies the basic principles of equal treatment of all people before the law, fairness, and both constitutional and actual guarantees of basic human rights. A predictable legal system with fair, transparent, and effective judicial institutions is essential to the protection of citizens against the arbitrary use of state authority and lawless acts of both organizations and individuals. In some states with weak or nascent democratic traditions, existing laws are not equitable or equitably applied, judicial independence is compromised, individual and minority rights are not realized, and institutions have not yet developed the capacity to administer existing laws. Weak legal institutions endanger democratic reform and sustainable development in developing countries.

Without the rule of law, a state lacks (a) the legal framework necessary for civil society to flourish; (b) adequate checks on the executive and legislative branches of government; and (c) necessary legal foundations for free and fair electoral and political processes. Beyond the democracy and governance sector, the accomplishment of other USAID goals relies on effective rule of law. For example, civil and commercial codes that respect private property and contracts are key ingredients for the development of market-based economies. USAID's efforts to strengthen legal systems fall under three inter-connected priority areas: supporting legal reform, improving the administration of justice, and increasing citizens' access to justice.

Some scholars have critiqued attempts to impose a western model of the rule of law because reformers often have failed to adapt the model to local historical and cultural traditions.

---


Nonetheless, even those advocating a more pliable notion of the rule of law do not advocate abandoning the idea altogether and none of them argue against the particular attribute of the rule of law on which this article is built, i.e., transparency.\(^8\)

Transparency refers to a cluster of related ideas, including governmental action in the open, the availability of information (particularly law), and accuracy and clarity of the information.\(^9\) Official action, which includes the content of laws and regulations, the processes of enacting law, and the processes involved in enforcing the law, is transparent to the extent that the information relating to those processes or that content is readily available to interested or affected persons. Mock phrases it more formally:

Transparency is a measure of the degree to which the existence, content, or meaning of a law, regulation, action, process, or condition is ascertainable or understandable by a party with reason to be interested in that law, regulation, action, process, or condition.\(^10\)

The idea of promoting transparency globally is relatively uncontroversial and constant. Edward S. Knight highlights this stability as follows:

The market reform efforts that accompanied the apparent resolution of the Latin American debt crisis and the emergence of "transition economies" in Eastern Europe appeared somewhat more optimistic and less self-reflective than those we witness today. Of course, today's policy makers are informed by the intervening traumas of Mexico, Thailand, Korea, Indonesia, Russia, and now Brazil, which have shown that transitions and exit strategies are rarely straight-line or one-way. However, amid changing theories about proper regimes for exchange rates, capital flows and debt restructuring, one thread remains fairly constant: the rule of law and the importance of a stable, transparent, and equitably enforced system of norms and rules to the functioning of local and global markets alike, whatever economic theory they follow.

Thus, the goals of law reform initiatives set up under the auspices of multilateral development institutions and bilateral agencies over the past decade [were] echoed in the reports issued last fall [1999] by three working groups formed by Finance Ministers and Central Bank Governors from twenty-two systemically significant economies in response to the crisis in Asia. The reports stress transparency,
regulation, and the importance of effective, equitably enforced, domestic insolvency and debtor-creditor regimes.\textsuperscript{11}

The United States is hardly immune from transparency-as-clarity violations; reading any random section of the nearly opaque (at least to lay citizens) United States tax code suffices for this point. David Franklin has provided these two additional examples:

Impenetrable statutes and regulations are hard to square with the rule of law, which presupposes that governing norms will be reasonably transparent to average citizens. This is more than just an academic concern. Earlier this year [1998], for instance, the Ninth Circuit held that certain INS documents relating to deportation and document fraud were so unintelligible that they deprived aliens of due process. Judge Stephen Reinhardt concluded that "the documents are so bureaucratic and cumbersome and in some respects so uninformative and in others so misleading that even those aliens with a reasonable command of the English language would not receive adequate notice from them."\textsuperscript{12}

Now the White House is getting into the act. On June 1, 1998, the Clinton administration issued an Executive Memorandum announcing that from now on all government regulations must be written in "plain language."\textsuperscript{13} According to the Memorandum, plain language is characterized by common, everyday words (except for necessary technical terms), "you" and other pronouns, the active voice, and short sentences. At a press conference announcing the initiative, Vice President Gore cited an existing OSHA regulation providing that "ways of exit access and the doors to exits to which they lead shall be so designed and arranged as to be clearly recognizable as such."\textsuperscript{14} This, he said, is to be replaced by a somewhat simpler version: "An exit door must be free of signs or decorations that obscure its visibility." Even so, Gore wondered aloud whether it might not be still better to say, "Don't put up anything that makes it harder to see the exit door."\textsuperscript{15}

But my aim is not to engage in the briefly delightful, but quickly unchallenging game of “find the opacity”;\textsuperscript{16} nor is it to address the transparency of governmental processes per se. Instead, my focus is on the aspect of transparency concerned with the availability of the law to lawmakers, to scholars, to foreign and domestic investors, to development agencies, and most critically, to citizens.

Having the law available domestically is very valuable to the citizens, businesses, and lawmakers of the state. Even having the law available merely as a legislative service to the

\textsuperscript{12} \textit{Walters v. Reno}, 145 F.3d 1032, 1041 (9th Cir. 1998).
\textsuperscript{14} 29 C.F.R. § 1910.37 (2001). Two and one-half years after the announcement and after the singling out of this particular convolution, the regulation is still on the books.
\textsuperscript{16} Unchallenging because examples are so plentiful that they are easy to find.
national legislature would be immensely valuable in many states because unlike the situation now, the law would all be gathered in one place and instantly available to staff and legislators.

Making the law available internationally would further increase the value of it. Scholars studying comparative law would find their work significantly easier to do. Businesses seeking to invest overseas would be better able to make investment decisions based in part on the content of the law more easily. At least as importantly, having the law online and available internationally would allow states to examine and, as appropriate, adopt or adapt or reject legal solutions tried in other states.

In the United States, published versions of much of the law can be found in relatively nearby government offices and public libraries, in innumerable commercial publications, and online in both free versions and commercial versions. This general openness and availability of access to the law does not exist in every country. William L. Andreen illustrates some aspects of the transparency problem in the context of environmental regulation:

Consultants retained by a donor and commissioned by a government body to review environmental and natural resource legislation with a view to participating in the drafting of some new legislation are entering a virtual mine field. Not only is the legal and cultural terrain complex, but the institutional dynamics can be treacherous. Simply collecting the necessary information can be a tremendous challenge since legal treaties, government organization manuals, and compilations of relevant law seldom exist or if they do, their existence is either unknown to the consultant or, if known, almost impossible to find. All too often, consultants will lack the time, the ability, or perhaps even the desire to accurately assess the overlapping legal and institutional responsibilities existing within the government. Thus, either advertently or inadvertently, many proposed reforms will favor one or another institution, ministry or donor—a fact that will not only doom the entire exercise to likely failure, but will produce even more cause for institutional distrust. Donors and governments alike, moreover, may eventually grow weary of even trying to craft appropriate laws and institutional structures.

For these reasons, successful law reform projects are not terribly common. Reports and proposals are written by a seemingly endless chain of consultants who often work in isolation, producing work lacking continuity and destined to gather dust.

These same attributes apply as much to the non-environmental law in many countries as they do in the area of environmental law. Correcting this problem is part of what transparency is all about. In some countries laws are the province of only those who are “in-the-know” with others.

left out. This can lead to arbitrary and capricious enforcement of what are in essence secret laws, lack of confidence in the legitimacy of the legal system, and lack of conformity of behavior by people to the laws. As stated by Perritt, “legitimacy of public institutions increases when the public knows what the institutions are doing. Compliance with the law increases when the law is available.”

There are many obstacles to solving the access-to-law transparency problem. These obstacles include cultural and historical traditions relating to non-access to law and to governments operating in secrecy, lack of economic resources, insufficiently large numbers of people with sufficient expertise (lack of know-how), and sometimes an under-appreciation of the value of transparency. Among numerous such examples, a clear tie between history and a reticence toward full transparency is seen in Eastern Europe. According to Perritt, the “reluctance of some [Eastern European] governments stems from the communist era in which public access to information about government activities either was unnecessary or was actively opposed.”

However, the situation is far from hopeless. The increasing (albeit uneven) recognition of human rights worldwide coupled with new technologies, more openness by many governments, and efforts by NGOs portend a more transparent future.

Ready access to the law is a human right. Although no treaty states the right exactly this way, the right exists both from core international human rights documents and at least arguably from the recently adopted custom of an increasing number of nations.

Article 19 of the Universal Declaration of Human Rights (UDHR) provides:

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers. This right explicitly includes the rights “to seek [and] receive information.” The laws of a state are a kind of information.

The International Covenant on Civil and Political Rights also provides a right of access to information. It essentially repeats and then expands upon the provisions of Article 19 of the UDHR.

1. Everyone shall have the right to hold opinions without interference.
2. Everyone shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of his choice.
3. The exercise of the rights provided for in paragraph 2 of this article carries with it special duties and responsibilities. It may therefore be subject to certain restrictions, but these shall only be such as are provided by law and are necessary:

---

21 Perritt, supra n. 20 at 899.
22 Perritt supra n. 20, at text accompanying n 8.
For the respect of the rights or reputations of others;

(b) For the protection of national security or of public order (ordre public), or of public health or morals.\(^{24}\)

Once again the right to “seek [and] receive . . . information . . . of all kinds” is explicitly stated. The limits set in paragraph three would not apply to limit access to laws. The law itself cannot be kept secret to protect national security, or at least not most laws. Furthermore, these exceptions are explicitly made narrow and any limits must not merely be convenient to those in power, but necessary.

The right of access to law is also implicit in other provisions of the International Covenant on Civil and Political Rights. For example, the provisions regarding criminal procedure imply that the laws are public. The right “not to be subjected to arbitrary arrest and detention”\(^{25}\) carries with it the right to the grounds for arrest and the procedures for arrest being “established by law.”\(^{26}\) It is a very short step to the inference that those laws should be open and publicly known and available. Other rights such as equality before tribunals\(^{27}\) can only be effectively monitored and insured if the laws under which people are charged are public. Furthermore, within each state the law is specifically required to protect everyone against “arbitrary and unlawful interference with his privacy, family, home or correspondence.”\(^{28}\) The best protection of such rights is a combination of sound law and public awareness of the law.

Provisions of the International Covenant on Economic, Social and Cultural Rights\(^{29}\) also support the right to public access to the law. In order to realize nondiscrimination in employment, rights to unionize, rights to social security, and the like, the laws need to be public and open and available for inspection by citizens. Laws should be neither secret nor difficult to obtain nor available to just an elite, privileged few.

Regional treaties contain similar provisions\(^{30}\) and many states’ laws explicitly make the law publicly available.\(^{31}\) As noted by Perritt, in Sweden the right of access to official documents is stated in the Swedish constitution.\(^{32}\) In the United States and in its constituent states, openness of the law and availability to it are a matter of custom as well as of positive law such as the federal Freedom of Information Act\(^{33}\) and analogous state versions of it.\(^{34}\)

---


\(^{25}\) *Id.* at art. 9.

\(^{26}\) *Id.*

\(^{27}\) *Id.* art. 14.

\(^{28}\) *Id.* art. 17.


\(^{31}\) *See* Perritt, *supra* n. 20 at text accompanying nn. 52-79 (reviewing the informational rights of Russia, Slovakia and Hungary.).

\(^{32}\) *Id.* at n. 13 *citing* Swed. Const. (The Instrument of Government, 1989), ch. 2, art. 1 (2) (guaranteeing freedom of information), and Swed. Const. (Freedom of the Press Act), ch. 2, art. 2 (guaranteeing access to official documents).

States seeking to improve transparency and the rule of law and to give effect to the right to access to the law do not need to act without help. For example, USAID's efforts to strengthen legal systems around the world fall under three inter-connected priority areas: supporting legal reform, improving the administration of justice, and increasing citizens' access to justice. It is this last aspect that the Law Library of Congress is helping to address through its Global Legal Information Network and through its collection of links to the laws of various nations online.

Many constitutions and some laws of various nations are available online now. However, in some instances, particularly for the developing world, the online sites are hosted not by the governments of the states themselves, but rather by other institutions such as a university, often in the United States. In addition, laws other than constitutions, including legislation, administrative regulations, and executive orders, are much less available than are constitutions. Much remains to be done.

With the maturing of several technologies, open and wide access to the law of any state can be created quite quickly provided the will, know-how, and money can be found. These technologies include in particular the world wide web, relatively inexpensive computers and disk storage space, powerful database management software, and various display, structuring and print software (including HTML, PDF, and XML), and the development of rapid, inexpensive broadband telecommunications.

Because of the nature of the internet and telecommunications, law online can be made available internationally as easily as domestically. Fiber optic cables, increasing availability and sophistication of satellite communications technology, and continuing efforts to build communications infrastructure around the world all make the use of internet technologies to distribute law more feasible.

The world wide web is based on a set of computer protocols (rules to which programs must comply to work) and implementing software which allows users to navigate from one network

39 Perritt, supra n. 20 at . See also, Henry H. Perritt, Jr., The Internet as a Threat to Sovereignty?: Thoughts on the Internet's Role in Strengthening National and Global Governance, 5 Ind. J. Global Legal Stud. 423, 435-36 (1998).
40 See, e.g., Alec Klein, AOL to Open Netscape Office In India's Tech Center: Internet Company Plans to Invest $100 Million Over Five Years, Wash. Post E05 (March 6, 2001).
computer to another through a graphical user interface. The underlying programs and protocols (TCP/IP and http, among others) are invisible to the user. Through a system of uniform resource locations (urls – essentially internet addresses) and links, the user can “travel” to remote sites all around the world in a matter of seconds in many cases.

The programming language for creating webpages and websites, html, is relatively easy to learn. In fact, there are many authoring programs which allow users to create webpages without knowing html; the programs are much like using a word processor. In fact, major word processing programs like WordPerfect and Microsoft Word allow the author to save files in html format. Because most laws are mostly text, and because the authoring programs are quite straightforward to learn and use, creating html versions of laws and regulations and tribunal decisions is not a difficult task today. If an html version of the law is created, and if that html file is copied to a computer that is connected to the internet as a server, the law can be provided for everyone in the world to read. However, simple flat text files or flat html files do not take advantage of the power of the medium. At a minimum links and searching capabilities need to be added. As discussed below, by using more advanced technology like xml, even more power can be encoded into legal documents.

One concern of some people regarding html versions of laws is that they do not look like the hard copy versions, which are still considered the official versions of the law. The relatively limited capabilities of html generally do not allow the capture of text pages that look like and are paginated like the print versions. One alternative to straight html files is to use the Open Book software. OpenBook essentially embeds gif images of each printed page within an html shell and adds a series of links between the pages and an html table of contents. This sleight of hand creates an online version which retains the appearance of and pagination of the hard copy of the book.

Another approach is to use Adobe Acrobat software to create pdf (portable document format) files. As described by Adobe:

Adobe® Portable Document Format (PDF) is the open de facto standard for electronic document distribution worldwide. Adobe PDF is a universal file format

---


42 National Academy Press, *About the NAP Mission and Open Book Interface*, http://www.nap.edu/info/site.html (accessed Mar. 16, 2001). NAP describes Open Book as follows: The Open Book page image presentation framework is not designed to replace printed books, nor emulate HTML. Rather, it is a free, browsable, nonproprietary, fully and deeply searchable version of the publication which we can inexpensively and quickly produce to make the material available worldwide. For most effective printing, use the "print" button available via the OpenBook tool block, above. The 300 x 150 dpi PDF linked to it is printable on your local printer.

that preserves all of the fonts, formatting, colors, and graphics of any source document, regardless of the application and platform used to create it. Adobe PDF files are compact and can be shared, viewed, navigated, and printed exactly as intended by anyone with a free Adobe Acrobat® Reader™. You can convert any document to Adobe PDF using Adobe Acrobat 5.0 software.\textsuperscript{43}

An advantage of pdf is that it can capture documents for display and printing exactly as they are laid out in hard copy. Unlike image files (like OpenBook’s gif pages), in pdf the text can be searched and linked indexes can be created. PDF files also have another advantage: they can be made relatively secure from tampering compared to certain other formats. This can help insure the accuracy of the law as provided online. One significant downside of PDF files is tying one file to another. PDF linking and searching tools are not quite as powerful as one would desire for legal resources. PDF files tend to be large and require greater storage and print resources by users than do some other files. They also take longer to download because of size. Another problem is deciding just what constitutes the document. Is it to be the whole title of the code, or a part, or chapter, or article, or section? The choice affects the size of the document, the ability to download, and the ability to search among the various sections or other parts of the statute or regulation.

A relatively new technology, xml,\textsuperscript{44} will make online legal resources even more valuable than the current flat html files or than pdf files heretofore available online (although the pdf technology is being converted to be xml compliant). “XML” stands for eXtensible Markup Language. In essence, xml allows documents to be tagged with information about the document which will allow the document which is readable in an internet browser like Netscape 6.0 or higher or Internet Explorer 5.0 or higher to be handled by computers with far greater flexibility and power than ever before.

Not incidentally, xml uses Unicode,\textsuperscript{45} a character set which “provides a unique number [for the computer to use] for every character, no matter what the platform, no matter what the program, no matter what the language.”\textsuperscript{46} Unlike ASCII or other smaller text-coding sets of numbers, Unicode allows computers and programs to read and understand text in all languages and scripts including not only those using the Roman alphabet, but also those using Cyrillic, Greek, Arabic, Devanagari, and East Asian character sets (e.g., Mandarin, Korean, and Japanese). Using Unicode and xml would allow laws to be published in their original language in their original script while at the same time allowing those laws to be tagged with information about what the law is about (e.g., freedom of access to information). Regardless of the language in which the laws are published, the xml tags could be in the most prevalent language used in computer programming, English. Thus a researcher who knows no foreign language could find laws in all languages which relate to a particular key concept. Then an interpreter could be found as needed.


The tagging can include not only html information relating to style and display features (like italics, color, lists, and tables), but also information about the structure of the document itself and information about what is contained within the document. Using xml parts of the document can be identified as headings, definitions, citation, topics, and much, much more. In short, meaning can be delivered along with form.\textsuperscript{47} This in turn allows researchers to search for information based on meaningful key words, not just text strings.

For example, if the UDHR were tagged with meaningful information, and one of the tags was “human rights,” then an automated search would find all documents in a particular database or xml-tagged set of documents with that topic tag. Not only could one find the UDHR, but, if the UDHR were tagged internally with more precision, and if one of the tags was “free speech”\textsuperscript{48}, one could find Article 19 by searching for that concept even though the word “speech” does not appear in Article 19 at all.

If the XML markup (loosely, “tagging”) is done properly and consistently, then generalized searches of multiple databases and xml-coded documents available through the web could be done across the entire world.\textsuperscript{49} Someone wanting to find all of the religious freedom laws could send an xml-compliant search and receive back a list with links to all such laws from every country. A state’s law-publishing credo should be “Tag once, use often,” where “use” refers to searching, publishing in various media, revising, and so on.\textsuperscript{50} Adoption of a uniform set of tags for marking up law would have immediate and long-term benefits.\textsuperscript{51}

This world-wide accessibility of national and international law is being advanced by the Global Legal Information Network (GLIN) project of the Law Library of Congress (LLOC) as a not- INCIDENTAL by-product of performing its primary responsibility of serving “as the foreign, comparative, and international law research arm of the U.S. Congress, the Judiciary, and Executive Agencies.”\textsuperscript{52} In order to perform its primary mission of serving its U.S. governmental


\textsuperscript{48} The tag itself would be invisible to the reader, but the code would look something like this <FreeSpeech> Article 19 </FreeSpeech>. The reader would see only “Article 19,” but the document could be searched by computer for the <FreeSpeech> tag.

\textsuperscript{49} I have been involved in creating the XML document type definition (DTD) for the GLIN database. If one or as series of consistent, related DTDs are adopted for encoding legal documents, then the significant potential of xml and online legal resources can be released. The lead author of our DTD is Prof. Konstantinos Kalpakis of the University of Maryland at Baltimore County. Our annotated DTD has been published as an Unofficial Note with the Legal XML group.

\textsuperscript{50} Vendors, such as Thompson Publishing (Westlaw), would add value by adding richer tags, but the basic laws would be more accessible as a public service to general users.

\textsuperscript{51} Thompson Publishing uses xml for its Westlaw database. The LegalXML organization hosted a conference on Congressional Organizations’ Application of XML aimed at working with stakeholders in the legislative branch who have a hand in handling legal documents including the “Library of Congress’s Congressional Research Service and the Law Library (GLIN), the Clerk of the House, the Government Printing Office, Office of Legislative Counsel, the Senate, and the House Information Resources.” LegalXML, \textit{COAX Conference Announcement} (March 20, 2001).

clients, the LLOC needs a library of foreign and international law. Obtaining current copies of foreign law has never been easy and is expensive.

Dr. Rubens Medina, Law Librarian of Congress, saw an opportunity and conceived of the idea of putting foreign law online. In the past eight years, GLIN has moved from being a concept to being a functioning part of the Law Library of Congress. The LLOC describes GLIN as follows:

The Global Legal Information Network (GLIN) maintains and provides a database of laws, regulations, and other complementary legal sources. The documents included in the database are contributed by the governments of the member nations from the original official texts which are deposited, by agreement of the members, in a server initially at the Library of Congress of the United States of America. The basic elements of this database are: (1) full texts of the documents in the official language of the country of origin; (2) summaries or abstracts in English; and (3) thesauri in English and in as many official languages as are represented in the database. The summaries or abstracts are linked electronically to the corresponding full texts. Currently, information can be searched in English using the instructions appearing on the screen. GLIN is interested in enlisting new partners for the network, and all governments or their designated agencies are invited to participate.\(^{53}\)

GLIN is working primarily with developing countries which are being supported in part by the World Bank.\(^{54}\) Consequently, most of the GLIN participants are developing countries.\(^{55}\) Wealthier countries can more easily afford to develop their own online resources which should be made available to the general public. Although all of the GLIN materials are available to all GLIN members \textit{inter se}, only limited parts of the GLIN databases are available to non-member guest visitors. Thus GLIN as currently operated serves a limited number of stakeholders interested in comparative law and in access to the law. Furthermore, it is up to each country to determine the extent to which its portion of the GLIN database is available to its citizens. At present GLIN is generally available only to the members and only to limited authorized users within each state which typically means the GLIN team plus legislative and executive support offices.

GLIN is in its early stages of development and suffers from certain typical beta-version limitations including an unwieldy interface, unduly complex and limited search procedures using thesauri, uneven database content, sometimes cryptic summaries of laws, and the like. Some, indeed most of these difficulties are caused in large part by the substantial underfunding of the endeavor.\(^{56}\) Others are related to the disjunction between the vision and the technological limits of handling data, particularly data in many languages.\(^{57}\)

\(^{54}\) \textit{A Digital Strategy}, supra n. 42 at 68.
\(^{55}\) For example, some of the 17 GLIN member states (as of September 2000) are Brazil, Korea, Kuwait, Lithuania, Mauritania, Romania, Uruguay, and Tunisia.
\(^{56}\) \textit{A Digital Strategy}, supra n. 42 at 68.
\(^{57}\) \textit{Id.}
Nonetheless, GLIN is in the process of moving from its infancy into adolescence. A significant software upgrade is planned under which GLIN will begin to convert data to being xml-compliant. This will substantially improve the ability to handle metadata and to search the underlying databases. Problems remain with respect to limitations on input and tagging tools and with the user interface, but ongoing developments should result in improvements in both of these areas.

As the technology matures, and if additional funds begin to flow to GLIN or similar projects worldwide, the technological limitations of making law available, accessible, and searchable online should be reduced. To be truly compliant with the human right of access to the law and for law to be fully transparent many states that still regard their laws not only as proprietary, but also as to some degree secret, must undergo a substantial and perhaps difficult mind-shift. States must make their laws openly and freely available and should use all reasonable technological means to do so. This includes using xml encoding and online publication of the law. Access to their nation’s law is a citizen’s human right. This access should be provided not only in hardcopies distributed widely, but also online.

Access to the law is one area where technology can improve human rights. GLIN is a very good start. Though neither its genesis nor its primary functions are to serve human rights, it does help advance human rights through making laws accessible. GLIN, together with similar endeavors by others, has great potential to transform opacity into transparency, to make real the human right of access to law.

Steven D. Jamar is a Professor of Law and the Director of the Legal Reasoning, Research, and Writing Program at Howard University School of Law. The author wishes to thank Dean Alice Gresham Bullock and Howard University School of Law for supporting my work on this article through granting me a sabbatical leave. The author especially wishes to thank Dr. Rubens Medina, Law Librarian of Congress, for his support in granting me a Research Fellowship at the Law Library of Congress for the 2000-2001 academic year, Dr. Janice Hyde, Director of the Global Legal Information Network project of the Law Library of Congress for her valuable contributions with respect to those aspects of this article, and Dr. Konstantinos Kalpakis for his patient work with me regarding my learning XML.

58 See generally, id. at 133-140.