
RESEARCHING TELECOMMUNICATIONS LAW ON THE INTERNET

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The Internet can place a wealth of valuable information at a researcher's fingertips. To research a legal topic such as telecommunications law on the Internet, a researcher should first focus on the types of information sought. Federal government information, in particular, is rapidly finding its way onto sites on the World-Wide-Web ("WWW" or the "Web"). Federal statutes and legislative history have a distinct place on the Internet, as do regulations and court opinions. Administrative orders and forms are found in yet another place, and one must look even further for news and articles. If a researcher is clear on which of these types of documents are sought, he or she need only access the appropriate pages directly, as will be explained in the rest of this essay. If a researcher seeks to engage in a broader search for telecommunications law, or any legal topic, there are some particularly useful starting points, which will also be discussed in this essay.

STARTING POINTS FOR TOPICAL RESEARCH

One of the most helpful places to begin a search for WWW sites related to a legal subject is FindLaw.¹ FindLaw's home page serves as a menu from which a researcher may connect to on-line resources in several categories. When seeking information devoted to a specific topic, the "Legal Subject Index" should be selected. The Legal Subject Index page presents a number of topical

menu choices, including telecommunications law. When the researcher selects a topic, links to several categories of web resources are provided, including WWW sites, primary materials, publications, and government agencies. Once an item from one of these categories is chosen, the researcher exits the FindLaw site and enters another site that provides content pertaining to the chosen topic. FindLaw serves as a finding tool for law resources on the Web, analogous to the way in which a library catalog functions as a finding tool for library materials. Thus, for the most part, FindLaw does not provide content, rather it provides links to content found elsewhere on the WWW.²

A thorough search for topical legal information should involve a visit to FindLaw and several other sites known for collections of subject matter links related to law.³ Cornell Law School's Legal Information Institute provides another useful starting point for topical research by offering a collection of links in the area of telecommunications law.⁴ Legal researchers should also visit Hieros Gamos, which is an enormous directory of Internet legal resources, with menus for over 200 legal topics including telecommunications law.⁵ Each category provides links to relevant legal Web pages from the United States government, state governments, foreign governments, supranational organizations, publications, discussion groups, and other Internet resources. The House of Representatives Internet Law Library also provides a listing of

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¹ *FindLaw* (visited Oct. 14, 1997) <<http://www.findlaw.com>>.

² *FindLaw* is not completely devoid of content, however. In fact, it provides the most complete free database of United States Supreme Court opinions on the Internet to date. Its collection dates back to 1893 (volume 150).

³ *Yahoo* (visited Oct. 14, 1997) <<http://www.yahoo.com>>

is an excellent general WWW subject directory that includes law among its hundreds of topics. Researchers might turn to *Yahoo* when their project involves a topic tangentially related to law, or for non law related purposes.

⁴ *Legal Information Institute: Communications Law Materials* (visited Oct. 14, 1997) <<http://www.law.cornell.edu/topics/communications.html>>.

⁵ *Hieros Gamos Guide to Communications Law* (visited Oct. 16, 1997) <<http://www.hg.org/communi.html>>. The communications law section only indirectly discusses the technology of communication, computers, and intellectual property.

links to web sites containing federal, state, foreign, and secondary telecommunications law information.⁶

LEGISLATION

The *United States Code* ("U.S.C.") can be searched on the Internet through a variety of hosts. Title 47 U.S.C., Telegraphs, Telephones and Radiotelegraphs, can be found at the Cornell Law School Web site,⁷ as well as the House of Representatives Internet Law Library.⁸ Both versions are over a year old, but may quickly be updated through the use of the Law Revision Counsel's *United States Code Classification Tables*.⁹ A search through the Code at the Cornell or House of Representatives sites yields a relevant Code section. That section's number is checked against the Classification Tables. If the section has been amended since the on-line publication date of the U.S.C., a new public law number will be revealed. In order to update the section, consult the new public law and incorporate any changes into the Code text.

U.S. public laws can be found on the Internet in at least two places. One popular location is the Thomas site¹⁰ developed by the Library of Congress; the second is GPO Access¹¹ which provides many federal government depository items on-line.

The Telecommunications Act of 1996¹² (the "96 Act") is on-line in many different locations. One

of the most useful locations for browsing purposes is the FCC Web site.¹³ Here, communications law researchers can locate the full text of many documents pertaining to the implementation of the 96 Act, including FCC reports, orders, and speeches, as well as the text of the Act. Additionally, researchers can download a WordPerfect version of the text of the Communications Act of 1934, as amended by the 96 Act. The same page provides researchers with their choice of text (viewable on-line) or WordPerfect (downloadable) versions of the FCC's proceedings to implement the Act. Another place to find the 96 Act on-line is the Wisconsin Department of Public Instruction's web page which features links to the text of the Act and many related documents.¹⁴ Moreover, it includes links to Congressional committee reports, FCC materials, and summaries by telecommunications experts.¹⁵ Thus, an up-to-date version of certain statutes and legislative materials can be found through the comforts of a home computer, without a trip to either a library or through use of a more expensive on-line service.

REGULATIONS

GPO Access¹⁶ is a useful resource for locating federal regulations in both the *Code of Federal Regulations* ("C.F.R.") and the *Federal Register*. This site recently made great strides to update and expand its collection of on-line C.F.R. titles.¹⁷ To conduct a search under Title 47 (Communica-

⁶ *The U.S. House of Representatives Internet Law Library Communications Law* (visited Oct. 16, 1997) <<http://law.house.gov/94.htm>>.

⁷ *United States Code Title 47 - Telegraphs, Telephones, and Radiotelegraphs* (visited Oct. 14, 1997) <<http://www.law.cornell.edu/uscode/47>>. The *United States Code* can be searched in its entirety at the Cornell site, *United States Code* (visited Oct. 14, 1997) <<http://www.law.cornell.edu/uscode>>, through the use of a simple search form.

⁸ *The U.S. House of Representatives Internet Law Library U.S. Code (searchable)* (visited Oct. 16, 1997) <<http://law.house.gov/usc.htm>>.

⁹ *Table of United States Code Sections Amended, Enacted, Omitted, Repealed, or Transferred* (visited Oct. 16, 1997) <http://law.house.gov/tbl_cd.txt>.

¹⁰ *Thomas* (visited Oct. 14, 1997) <<http://thomas.loc.gov>>. Public laws and bills are easily selected from the main menu on the Thomas home page. The archive of available bills and public laws dates back to the 93rd Congress (1973-1974). They may be located by number, searched by key words, or through the use of other document fields, such as sponsor, committee or subject term.

¹¹ *GPO Access* (visited Oct. 14, 1997) <http://www.access.gpo.gov/su_docs/aces/aces002.html>. *GPO Ac-*

cess contains the text of the public laws from the 104th and 105th Congresses which can be searched by number or key word.

¹² Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56.

¹³ Telecommunications Act of 1996 (visited Oct. 14, 1997) <<http://www.fcc.gov/telecom.html>>.

¹⁴ *Information on the 1996 Federal Telecommunications Act* (visited Oct. 14, 1997) <<http://www.dpi.state.wi.us/dpi/dlcl/pld/telact.html>>.

¹⁵ Legislative history research can be accomplished on the Internet through the Library of Congress' *Thomas*. See *supra*, note 10. This site provides the texts of bills, public laws, committee reports, the *Congressional Record*, and select committee hearing transcripts from recent years. It also features a summary and status page for each bill, notifying legislative researchers of where a particular bill stands in the legislative process.

¹⁶ *GPO Access* (visited Oct. 14, 1997) <http://www.access.gpo.gov/su_docs/aces/aces001.html>.

¹⁷ A specialized search page for the Code of Federal Regulations can be found at *The National Archives and Records Administration - Code of Federal Regulations* (visited Oct. 14, 1997) <

tions) for C.F.R. sections, click the box preceding the title, then click on the "Continue" button. On the next screen, place a key word search in the search box, then click on the "Submit" button. Search results appear on the next screen listing the citation, date, size and relevancy score for each of the found items. Researchers are given the option to look at either a summary or the full text of each item, or to download the item in portable document format.¹⁸ Similar to a search in the *Code of Federal Regulations*, The *Federal Register* can be searched from its own search form page.¹⁹ It can be searched using key words and connectors, and can be restricted by date or section with the click of a button. Search results are viewed in exactly the same manner as the C.F.R.

FCC HOME PAGE

The FCC offers a wealth of information for communications law professionals. Its Web site²⁰ is a valuable research tool for both beginning and seasoned communications law researchers. This site can help researchers sort through and organize the various documents and data available from this agency. As one might expect, the FCC has embraced Internet technology as a means of disseminating information quickly and efficiently.

The FCC's Bureaus and Offices have their own

home pages, where one may locate pertinent documents.²¹ Additionally, some documents can be found under the heading of "Miscellaneous" which appears on the FCC home page.

One of the most important FCC documents for communications law researchers and practitioners is the FCC's *Daily Digest*. This tool allows readers to follow new administrative action in the telecommunications field. Moreover, this publication may serve as the key to the FCC information door, as it provides summaries and lists of new FCC documents, including orders, reports, news releases and public notices. Although the *FCC Daily Digest* can be purchased in paper format, technology has become an important part of its distribution. A new issue is available at noon each day, and can be obtained in a variety of ways:

1. Fax: It can be faxed through a fax-on-demand service by calling (202) 418-2830 and following the instructions on the line. More instructions for this service can be found on the Internet at <http://www.fcc.gov/ftp/reference_tools/fax-on-dem.txt>.

2. E-mail: The *Daily Digest* may be sent to an e-mail box each day by subscribing to the FCC's list-server. To subscribe, send an e-mail message to subscribe@info.fcc.gov. The subject line of the e-mail message should be left blank. The body of the message should read "subscribe digest Your

search.html>. At this time all titles of the U.S. Code do not exist on-line, however, Title 47 (Communications), is available.

¹⁸ Portable document format (".pdf") documents retain the original formatting of documents. They are often used with on-line government documents, and are especially useful with forms, where retention of original formatting is essential. .Pdf documents must be viewed with the Adobe Acrobat Reader program, which can be downloaded free of charge from the Adobe web site at *Adobe Systems Incorporated* (visited Oct. 14, 1997) <<http://www.adobe.com>>.

¹⁹ *National Archives and Records Administration 1995, 1996 and 1997 Federal Register* (visited Oct. 14, 1997) <http://www.access.gpo.gov/su_docs/aces/aces140.html>.

²⁰ *Federal Communications Commission Home Page* (visited Oct. 14, 1997) <<http://www.fcc.gov>>.

²¹ FCC Bureaus and Offices:

the *Cable Services Bureau* (visited Oct. 14, 1997) <<http://www.fcc.gov/Bureaus/Cable/WWW/csb.html>> regulates cable television;

the *Common Carrier Bureau* (visited Oct. 14, 1997) <<http://www.fcc.gov/cbb>> regulates telephone and telegraph;

the *International Bureau* (visited Oct. 14, 1997) <<http://www.fcc.gov/ib>> regulates international and satellite communications;

the *Mass Media Bureau* (visited Oct. 14, 1997) <<http://www.fcc.gov/mmb>> regulates television and radio broadcasting;

the *Wireless Telecommunications Bureau* (visited Oct. 14, 1997) <<http://www.fcc.gov/wtb>> regulates private radio, cellular telephone, and pagers;

the *Compliance & Information Bureau* (visited Oct. 14, 1997) <<http://www.fcc.gov/cib>> investigates violations and answers questions;

the *Office of Engineering & Technology* (visited Oct. 14, 1997) <<http://www.fcc.gov/oet>> manages the spectrum and provides leadership to create new opportunities for competitive technologies and services;

the *Office of Inspector General* (visited Oct. 14, 1997) <<http://www.fcc.gov/oig.html>> conducts and supervises audits and investigations relating to the programs and operations of the agency;

the *Office of Plans and Policy* (visited Oct. 14, 1997) <<http://www.fcc.gov/Bureaus/OPP/welcome.html>> assists, advises and makes recommendations to the Commission with respect to the development and implementation of communications policies;

The *Office of General Counsel* (visited Oct. 14, 1997) <<http://www.fcc.gov/ogc>> serves as the chief legal advisor to the FCC; and

The *Office of Communications Business Opportunities* (visited Oct. 14, 1997) <<http://www.fcc.gov/Bureaus/OCBO/ocbo.html>> works to promote opportunities for ownership and employment in the communications industry for small business.

Name", where the subscriber's name is substituted for the words "Your Name." More information about the FCC's *Daily Digest* listserv can be found on the Internet at <http://www.fcc.gov/ftp/reference_tools/listserv.txt>.

3. FTP (File Transfer Protocol): The WWW can be used to access current issues of the *Daily Digest*. It usually appears at the FCC's FTP site²² by noon each business day.

4. FCC Home Page: The link to the *Daily Digest* from the FCC home page is generally updated by 1:30 p.m. each business day. The *Daily Digest* web page also includes a calendar. Researchers need only click on a desired date to proceed directly to the *Daily Digest* for that date.

When the *Daily Digest* contains a reference to a document, the full text of the document can be found at the FCC Web site. The FCC publishes many types of documents. News releases contain brief, unofficial summaries of FCC orders or other actions. Orders are the official statements of FCC action. Full text copies of orders dating from mid-1994 are available on-line. However, it should be noted that on-line copies are not considered official, as only those copies printed by the FCC are the official version. Notices of Proposed Rule Making ("NPRMs") can be found at this site, in addition to speeches by FCC officials. Fact sheets on controversial or technical topics are also available on-line. Those considering attending a meeting at the FCC will find this site's current agenda of open meetings helpful. Moreover, FCC staff members can be located on-line with the FCC staff telephone directory. Finally, FCC forms, with their original page formatting intact, can be found at this site, in portable document format.²³

For a topical approach, there are many "hot topics" areas at the FCC Web site that allow researchers to locate information about certain communications related subjects in one convenient place. Some of these topics include digital television, children's television, and bandwidth. Here, researchers can also locate the full text of

many documents pertaining to the implementation of the 96 Act, such as the Act itself, related FCC reports, orders, and speeches.

For additional assistance in locating relevant and helpful information, the FCC Web site offers two different search tools. The first, the FCC Digital Index, allows a search through *Daily Digest* entries for FCC documents from March 1996 to present. The second, the FCC Word Search Tool, goes even further by allowing a search for keywords in FCC documents that appear in HTML or ASCII formats.

The FCC uses Internet technology to provide and collect information. It offers the Quick Start Comment Filing system, allowing individuals the choice of using the Internet to submit informal comments on selected FCC proceedings. Comments submitted using this system can also be researched on-line. More details can be found at the FCC Internet Comment Pages.²⁴

OTHER AGENCIES

Several other federal agencies deal with telecommunications and may provide valuable information for researchers on-line. Generally, speeches, press releases, policy statements, and other related information can be found at agency Web sites. For instance, the National Telecommunications Information Administration's ("NTIA") mission is to provide assistance to state and local entities in developing information infrastructures throughout the nation. It works toward accomplishing this mission by providing information through its web site.²⁵ The Office of Spectrum Management²⁶ is a division of NTIA. The Information Infrastructure Task Force,²⁷ created by the White House, consists of representatives of several agencies. Its purpose is to develop comprehensive technology, telecommunication, and information policy. Information on telecommunications and technology standards are on-line at the Web sites of the National Institute of Standards and Technology,²⁸ the American National

²² (visited Oct. 15, 1997) <ftp://ftp.fcc.gov/pub/Daily_Releases/Daily_Digest>.

²³ See *supra* note 18.

²⁴ *FCC Comment Pages* (visited Oct. 14, 1997) <<http://www.fcc.gov/comments/commurls.html>>.

²⁵ *NTIA Home Page* (visited Oct. 14, 1997) <<http://www.ntia.doc.gov>>.

²⁶ *NTIA Office of Spectrum Management* (visited Oct. 14, 1997) <<http://www.ntia.doc.gov/osmhome/osmhome.html>>.

²⁷ *Information Infrastructure Task Force* (visited Oct. 14, 1997) <<http://iitf.doc.gov>>.

²⁸ *National Institute of Standards and Technology* (visited Oct. 14, 1997) <<http://www.nist.gov>>.

Standards Institute,²⁹ and the International Organization for Standardization.³⁰ Other technical information can be found at the Web site of the White House Office of Science and Technology Policy.³¹

An international organization dealing with telecommunications, the International Telecommunication Union³² coordinates global telecommunications networks and services. Its Web site offers statistical data, frequency management software, press releases, publications catalogs, meeting schedules and a telecommunication terminology database called TERMITE. Moreover, the Intelsat agreement and other Intelsat information can be found on-line.³³

JUDICIAL OPINIONS

The Internet is not a recommended choice for comprehensive caselaw research about a particular subject. Judicial opinions do exist on the Web, but few collections date back very far. The Internet, however, may be a good place to look for a recently decided case, without incurring the costs of a more expensive on-line service.³⁴ Cornell Law School's Legal Information Institute contains a Web page on communications law related resources that links to communications cases from the United States Supreme Court, the United States Courts of Appeals, and the New York Court of Appeals.³⁵

ARTICLES

The *Federal Communications Law Journal*, published by the Indiana University School of Law - Bloomington and the Federal Communications Bar Association, offers the full text of its articles on-line.³⁶ Its collection dates back to volume 46 (1993-1994). The articles can be browsed by volume/issue or can be searched using key words.³⁷ These hypertext articles offer scholarly analysis of a wide variety of the latest communications law related issues. Another on-line law journal from the communications law field is *COMM/ENT: Hastings Communications and Entertainment Law Journal*.³⁸ This site contains Tables of contents and abstracts of articles dating back to volume 17 (1994-1995) in addition to the full text of selected articles.

The *Media Law & Policy Bulletin*³⁹ contains articles about communications law from the Communications Media Center at New York Law School. Its on-line archive dates back to Spring 1993.

Law Journal Extra!,⁴⁰ presented by the New York Law Publishing Company, is one of the WWW's leading daily legal news sites. Its practice areas section includes communications law⁴¹ and media law.⁴² Within each topic, interested readers can find headline news, columns, links to on-line cases and statutes, e-mail forums, memos by attorneys practicing in the field, and a list of hypertext links, all related to the topic of choice. Communications law practitioners and researchers should

search on the Internet (visited Oct. 15, 1997) <<http://www.lcp.com/The-Legal-List/TLL-home.html>>.

³⁵ *Legal Information Institute: Communications Law Materials* (visited Sept. 7, 1997) <<http://www.law.cornell.edu/topics/communications.html>>.

³⁶ *Federal Communications Law Journal* (visited Oct. 14, 1997) <<http://www.law.indiana.edu/fclj/fclj.html>>.

³⁷ The entire body of on-line law journal articles can be searched at once using a search engine at the web site of the *University Law Review Project* (visited Oct. 14, 1997) <<http://www.lawreview.org>>.

³⁸ *Hastings Communication & Entertainment Law Journal* (visited Oct. 14, 1997) <<http://www.uchastings.edu/comment>>.

³⁹ *Index Media law & Policy Bulletin- Communications Media Center* (visited Oct. 14, 1997) <<http://www.cmcnyls.edu/public/MLP.HTM>>.

⁴⁰ *Law Journal EXTRA!* (visited Oct. 14, 1997) <<http://www.ljx.com>>.

⁴¹ *Law Journal EXTRA! Communications Law* (visited Oct. 14, 1997) <<http://www.ljx.com/practice/communications/index.html>>.

⁴² *Law Journal EXTRA! Media Law* (visited Oct. 14, 1997) <<http://www.ljx.com/practice/media/index.html>>.

²⁹ *American National Standards Institute* (visited Oct. 14, 1997) <<http://www.ansi.org>>.

³⁰ *Welcome to ISO Online* (visited Oct. 15, 1997) <<http://www.iso.ch>>.

³¹ *White House Office of Science and Technology Policy* (visited Oct. 14, 1997) <http://www.whitehouse.gov/WH/EOP/OSTP/html/OSTP_Home-plain.html>.

³² *International Telecommunication Union (ITU) Home Page* (visited Oct. 14, 1997) <<http://www.itu.ch>>.

³³ *INTELSAT: Welcome to INTELSAT* (visited Oct. 14, 1997) <<http://www.intelsat.int>>.

³⁴ General collections of on-line cases are found in a number of different locations. United States Supreme Court opinions dating back to 1893 are located at *FindLaw* (visited Sept. 7, 1997) <<http://www.findlaw.com/casecode/supreme.html>>. A search for United States Court of Appeals decisions should begin at Emory Law School's *U.S. Federal Courts Finder* (visited Oct. 14, 1997) <<http://www.law.emory.edu/FEDCTS>>, where cases from the last few years can be found. Not all states have begun putting cases on the Internet. United States district court opinions are few and far between. Look for links to district court opinions at *American Law Sources On-line (ALSO!)* (visited Oct. 14, 1997) <<http://www.lawsources.com/also>> or The Legal List: Re-

visit this site as part of a daily Internet routine to remain apprised of the latest developments in their field.

Many newsletters pertaining to the field of communications law can be found on the WWW. Bulletins from the Communications Media Center at New York Law School contain news alerts related to communications and media law.⁴³ Telecommunications Reports International, Inc.'s Netline,⁴⁴ has telecommunications headline news and reports updated daily, and sometimes twice daily. This site also offers an on-line subscription to a variety of newsletters in the communications field.

Law firms also are utilizing the WWW to keep clients knowledgeable about communications matters. Information technology and communications law attorneys at the global law firm of Baker & McKenzie have placed client alerts on the world wide web in the form of the Baker & McKenzie Global Update.⁴⁵ These articles report new developments in communications and information technology law, and other related fields. Pepper & Corazzini, L.L.P., a law firm specializing in telecommunications and Internet law, has placed memos on the Internet that relate to many aspects of telecommunications law.⁴⁶ Similarly, Cole, Raywid & Braverman, L.L.P., a Washington, D.C., firm specializing in telecommunications law, publishes articles on-line about recent developments in communications law and related fields.⁴⁷

ASSOCIATIONS & ORGANIZATIONS

A number of professional associations and orga-

⁴³ *Index Bulletins- Communications Media Center* (visited Sept. 7, 1997) <<http://www.cmcnyls.edu/public/Bulletin.HTM>>.

⁴⁴ *Netline* (visited Oct. 15, 1997) <<http://www.brp.com/netline/netline.html>>.

⁴⁵ *Baker & McKenzie IT/Communications Global Update* (visited Oct. 14, 1997) <<http://www.baker.com/hk/ipit/alert.html>>.

⁴⁶ *Pepper & Corazzini Informational Memos* (visited Oct. 15, 1997) <<http://www.commlaw.com/pepper/Memos/memos.html>>.

⁴⁷ *Cole, Raywid & Braverman Recent Developments* (visited Oct. 14, 1997) <<http://www.crblaw.com/memos.htm>>.

⁴⁸ *Federal Communications Bar Association* <<http://www.fcba.org>>. As of Nov. 20, 1997, this web site is temporarily unavailable due to pending revisions.

⁴⁹ *Forum on Communications Law* (visited Oct. 14, 1997) <<http://www.abanet.org/forums/communication/home.html>>.

⁵⁰ The ABA's home page is also worth viewing and can be found at the *ABA Network* (visited Oct. 14, 1997) <[nizations provide useful information on-line. The Federal Communications Bar Association maintains a presence on the WWW.⁴⁸ This site provides information regarding the organization and membership. The Forum on Communications Law of the American Bar Association can be found on the WWW.⁴⁹ This site describes the Forum's purpose, permits direct e-mail contact with its leaders from the leadership directory page, and provides a calendar of educational programs. Moreover, two new features are expected to appear: on-line tables of contents from its newsletter, the *Communications Lawyer*, and a list of communications law related links.⁵⁰](http://</p>
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The American Communication Association,⁵¹ a national professional organization in communication studies, provides on-line resources in the fields of communication studies and communication law, including First Amendment issues. Researchers can also find an on-line reference desk at this site, providing access to electronic reference resources.

OTHER SITES

The University of Michigan supplies the WWW with some of the highest quality on-line research resources available.⁵² The field of telecommunications law is no exception. University of Michigan Professor, Jeffrey MacKie-Mason, manages Telecom Resources, one of the Internet's most comprehensive lists of links to telecommunications related sites on the Internet.⁵³ The links are organized into over two dozen major categories,

www.abanet.org>. The ABA site provides information about the organization as a whole, as well as all its various entities. Part of this site is LAWlink, a selected hypertext list of links to legal research starting points. LAWlink is found at *LAWlink (TM)* (visited Oct. 14, 1997) <<http://www.abanet.org/lawlink/home.html>>.

⁵¹ *American Communication Association* (visited Oct. 14, 1997) <<http://www.uark.edu/depts/comminfo/www/ACA.html>>.

⁵² For example, the University of Michigan Documents Center has a Legislative Histories site called *Legislative Histories in the U.S. Congress* (visited Oct. 15, 1997) <<http://www.lib.umich.edu/libhome/Documents.center/frames/legishis.html>> which provides an excellent hypertext guide to compiling a legislative history using on-line resources. It also has a superb guide to *Statistical Resources on the Web* (visited Oct. 15, 1997) <<http://www.lib.umich.edu/libhome/Documents.center/stats.html>>.

⁵³ *Telecom Information Resources on the Internet* (visited Oct. 14, 1997) <<http://www.spp.umich.edu/telecom/telecom-info.html>>.

such as Telecom Policy and Regulation, Telecom Operating Companies, and Telecom news and Headlines. A communications law researcher would be hard pressed to find a relevant Internet site that does not have a link from one of Professor MacKie-Mason's pages.

The Internet also contains information regarding telecommunications industry language. The *Glossary of Telecommunications Terms*, also known as Federal Standard 1037C, is available on the WWW.⁵⁴ This on-line glossary presents an easy point and click version of its print cousin. The page is designed so that researchers may see a list of words in one frame, definitions in another frame, and a third frame holding a main menu for easy maneuverability. Also included is Appendix A, providing a hypertext list of relevant acronyms and abbreviations, allowing the capability to link directly to the definitions of those terms on the list that appear in the glossary. Appendix B furnishes a topical index which divides the defined words into major categories.

FINDING THE NEEDLE IN THE HAYSTACK

If none of the sites described above prove fruitful for a particular research project, a search engine may provide a means to helpful information. Generally, search engines are best suited to locating Web pages that use very specific terms like "radiodetermination-satellite service," rather than more general terms like "satellite" because a search engine will look through millions of Web

pages to find every page that has mentioned a certain term. While it may seem difficult to conduct an effective search, there are certain methods of constructing more precise search statements for more precise results.⁵⁵ One search engine devoted entirely to finding legal resources is LawCrawler,⁵⁶ which might be useful when seeking very specific telecommunications law information.

The Internet has such a vast amount of information that it is impossible to describe, or even index, everything available for a particular topic. Sometimes the research well comes up dry, even after a thorough search of the major research sites. Electronic mail discussion groups, also known as listserv lists, can prove enormously helpful in locating sought information. If a document exists somewhere on the Internet, then someone must know about it. Chances are that someone will be a subscriber to the e-mail discussion group that most closely relates to the topic at hand. There are several e-mail discussion groups concerning communications law topics.⁵⁷ The best place to find an e-mail discussion group about a legal topic of interest is *Law Lists* by University of Chicago's Lyonette Louis Jacques.⁵⁸

CONCLUSION

A wide variety of easily navigable Web sites can aid in locating relevant information. Increasing amounts of data and documents are becoming available on-line every day. Despite its popularity, the Internet is still in its infancy, and needs time

⁵⁴ *Federal Standard 1037C* (visited Oct. 14, 1997) <http://www.its.bldrdoc.gov/fs-1037/dir-001/_0065.htm>.

⁵⁵ For a description of the contents of the WWW's major search engines and instructions for their use, see Diana Botluk, *Search Engines: What's Your Flavor?*, LLRX: LAW LIBRARY RESOURCE XCHANGE (Apr. 21, 1997) <<http://www.llrx.com/features/search.htm>>.

⁵⁶ *LawCrawler* (visited Oct. 14, 1997) <<http://www.lawcrawler.com>>.

⁵⁷ E-mail discussion groups (and instructions for inclusion in each):

- COMLAW-L@acc.wuacc.edu (Washburn Communications Law list)

Send the following message to listserv@lawlib.wuacc.edu: sub comlaw-l Yourfirstname Yourlastname

- ROUNDTABLE@cni.org (Telecommunications Policy Roundtable Forum)

Send the following message to listproc@cni.org: subscribe roundtable Your Name

- TELECOMREG@relay.adp.wisc.edu (Telecommunications Regulation; discussion of cable, broadcasting, telephony, and data transmission regulation)

Send the following message to listserv@relay.adp.wisc.edu: subscribe telecomreg Your Name

- TPR-NE@mitvma.mit.edu (Telecommunications Policy Roundtable - Northeast)

Send the following message to listserv@mitvma.mit.edu or listserv@mitvma.bitnet: subscribe tpr-ne Your Name
Participation in the following telecommunications forums is available directly through a web browser:

- Coalition for Networked Informations Copyright & Intellectual Property Forum (visited Oct. 14, 1997) <<http://www.ljx.com/public/maillinglists/cni-copyright/index.html>>.

- ">Cyberia (visited Oct. 14, 1997) <<http://www.ljx.com/public/maillinglists/cyberia-l/index.html>>.

- ">Technology Transfer in International Development (visited Oct. 14, 1997) <<http://www.ljx.com/public/maillinglists/wwwdevel-l/index.html>>.

- ">Telecommunications Regulations (visited Oct. 14, 1997) <<http://www.ljx.com/public/maillinglists/telecomreg/index.html>>.

⁵⁸ *Law Lists Info* (visited Oct. 14, 1997) <<http://www.lib.uchicago.edu/~llou/lawlists/info.html>>.

to grow as a repository of information. The Internet is thus not yet a replacement for a traditional library or well-established on-line service such as Westlaw or Lexis. While the Internet has its treasures, it also has its limitations. Many of its collections of materials lack any significant archive of documents prior to the mid-1990's. Those resources that do exist on-line can some-

times be difficult to search, view, or even access. For now, it appears researchers can use the Internet to its fullest potential by utilizing it as a supplement to traditional research sources, to keep informed of developments in particular fields of law, and to communicate with others who have the same research interests.