

Potential employers on the Headhunter site typically pay \$50 to \$125 to post a single job in a single city. When a job seeker performs a search that returns more than one job, the results are ordered by the price paid by the employers. Jobs can be posted regionally or nationwide at rates 5- and 14-times the base price, respectively. Employers also can search for resumes by any of the categories mentioned above if they join the service – at a price of \$1,500 for 3 months to \$3,600 for a year. Job seekers can search Headhunter’s job postings for free, and can apply for jobs electronically or the old-fashioned way. Seekers can also post their resumes for free, and are given the option to upgrade their sort position – similar to the employer option – for \$10 to \$30 per month depending on the priority level.

Evaluating America’s Job Bank

The purpose of this case study is to examine whether America’s Job Bank is an appropriate activity for the Department of Labor to be sponsoring. Principles 2, 4, 10, and 12 seem particularly relevant for this case study.

America’s Job Bank could be justified under the second “green” light principle. According to Principle 2, improving the efficiency with which governmental services are provided is a proper governmental role. Although the Internet site was launched in the mid-1990s, the job-opening data themselves have been collected by states for more than 60 years, and states have shared their information to form a national database since 1979. From one perspective, therefore, America’s Job Bank is merely putting on-line information that had previously been publicly available, but more difficult to obtain.

A deeper question is whether the government *should* be collecting and disseminating job market information. Given the positive externalities from employment – including its impact on government revenues and expenditures – the government is justified in playing some role in collecting job market information.

While America's Job Bank thus seems justified under one of the green light principles, it is possible that it runs counter to one of the yellow light or red light principles. For example, Principle 4 states that the government should exercise caution in adding specialized value to public data and information. As it currently operates, however, America's Job Bank is fundamentally a source of information – not of substantial value added to that information.

Principle 10 states that the government should exercise substantial caution in entering markets in which private-sector firms are active. As discussed above, private-sector job market sites do exist, thus raising questions about whether America's Job Bank is an appropriate governmental activity. However, a crucial issue involves the definition of the "market." The private-sector sites seem skewed toward high-skill job seekers. For example, on Headhunter.net, the average salaries among jobs offered are \$50,000-100,000, and two-thirds of job seeker resumes have at least a 4-year college degree. In fact, the drop-down menu that allows job seekers to specify their degree status favors highly educated workers. It includes choices for none, college student, 2-year, 4-year, and graduate – but does not distinguish between high school diploma holders, high school dropouts, and seekers who are not currently students but have some college credit.

America's Job Bank, on the other hand, provides substantial coverage to less-skilled workers. For example, job seekers without a high school diploma find that they are eligible for over 425,000 full-time, at least six-months-a-year jobs in the nationwide job bank, compared to over 550,000 for high school graduates, and 650,000 for 4-year college degree holders. (The AJB does not limit against over-qualification. For example, if a job requires a high school education level, a college graduate's search will also turn up the position.) Since lower-skill workers are more likely to be unemployed than higher-skill workers, AJB provides a particularly valuable social service.¹⁵⁸

The final concern involves Principle 12, which states that the government should only be allowed to provide goods or services for which appropriate privacy and conflict-of-interest protections have been erected. America's Job Bank seems to have been designed with privacy concerns in mind. For example, its web site emphasizes that users are "in charge of how much information is given and when it will be given. None of your personal information will be released unless you take or have taken some action to release it. None of your personal information will be sold to mailing lists." Job seekers must agree to these provisions before using the service. A similar approval and similar privacy provisions are required for employers who are posting job offerings.

In summary, America's Job Bank seems consistent with the principles for government action.

¹⁵⁸ In March 2000, the unemployment rate for those with less than a high school diploma was 6.9 percent, compared to 3.4 percent for those with just a high school diploma and 1.6 percent for all college graduates.

Case Study: United States Postal Service eBillPay

On April 5, 2000, the United States Postal Service (USPS) announced that it would offer electronic billing and payment services. The new service is called USPS eBillPay. This case study examines the USPS's new activity in light of the principles delineated above.

Background on electronic bill presentment and payment (EBPP)

Electronic Bill Presentment and Payment (EBPP) involves the delivery of bills and the collection of payments via the World Wide Web or other digital means. In particular, EBPP comprises two services:

- First, EBPP services can consolidate all bills to a customer into a single website.
- Second, EBPP services then allow the customer to pay bills through direct debits from the customer's bank account. Customers can schedule specific dates for payment and request automatic monthly payments. For those billing vendors that do not accept electronic transfers, the EBPP service can draft checks on the customer's account and submit them.¹⁵⁹

Industry Profile

The EBPP market has two components: the user interface (i.e., the portal that customers use to pay their bills) and the financial payment infrastructure (i.e., the financial network by which

¹⁵⁹ Only court-ordered payments and state and federal taxes cannot be paid via EBPP.

funds are transferred from the customer to the billing vendor). Both components are actively provided by the private sector.

EBPP offers the opportunity for substantial cost savings in the payment process. Check clearance requires sorting, bundling, shipping, and reconciling 180 million checks each business day. Americans write about 63 billion checks every year.¹⁶⁰ According to the National Automated Clearing House Association, the average cost of processing a paper check is 35 cents, whereas the cost of processing an electronic payment is only 7 cents.¹⁶¹

The EBPP market still has substantial growth potential, since only one percent of all bill payments in 1999 were made on-line.¹⁶² Forrester Research predicts that 21 million Americans will use on-line bill payment services by 2004, accounting for 1.9 trillion annual electronic bills.¹⁶³

An established market of banks, brokerages, and web portals offers EBPP user interfaces at their sites, as well as other personal financial services. For example, Wells Fargo, Yahoo!, Bank of America, Charles Schwab, and Paytrust.com all offer EBPP. Table 1 shows consumer preferences for different types of EBPP user interfaces, as of spring 2000.

¹⁶⁰ See http://www.frbchi.org/pubs-speech/publications/BOOKLETS/electronic_money.

¹⁶¹ See <http://www.nacha.org/Facts/directdepositcost>.

¹⁶² Carrick Mollenkamp, "Entrepreneur's Tough Sell: Pay Your Bills On-line -- CheckFree Bought a Big Rival And Now Must Win Over Banks, Billers, Consumers," *Wall Street Journal*, February 18, 2000, page B1.

¹⁶³ Pete Hisey, "Outlicked in the on-line billing wars," *Credit Card Management*, 12:12, March 2000, pages 26-30.

Table 1: Current Demand Distribution in EBPP User Interface

	Percent of customers*
Bank	54
Quicken/Money	18
Brokerage	12
Web portal	10
AOL	9
Biller web site	6

* Sums to more than 100 percent because some customers use more than one site.

Source: GartnerGroup poll, reproduced from Russell Redman, "Market potential," Bank Systems & Technology; 37:4, April 2000, pages 8-9.

These various sites typically rely on other firms to route the financial payments. The oldest and largest provider of these infrastructure services is the CheckFree Corporation (www.checkfree.com), founded in 1981. In addition to providing the bulk of the infrastructure behind EBPP, CheckFree also maintains its own user interface.

The two principal competitors to CheckFree are Transpoint (a joint endeavor by Microsoft, First Data, and Citibank) and Spectrum (a bank consortium founded by Chase Manhattan Corporation, First Union, and Wells Fargo and including 11 other banks). In February 2000, CheckFree announced plans to merge with Transpoint.

While a number of smaller EBPP service providers exist,¹⁶⁴ most billing vendors rely on CheckFree or Spectrum. Due to the different technology platforms for making EBPP payments used by CheckFree, Spectrum, and other smaller competitors, many institutions sign up with multiple service providers to assure compatibility, which translates into increased investment costs for each platform. For example, although Wells Fargo, Chase Manhattan, and First Union

¹⁶⁴ For example, EBPP services are also provided by Billserv.com, Princeton eCom, and Paytrust.com. Competitor BlueGill was also bought recently by CheckFree.

co-founded Spectrum and continue to develop its EBPP technologies, they all employ CheckFree for their consolidated bill payment services.

CheckFree and most of the smaller competitors market their services as behind-the-scenes engines that allow user interface clients such as banks, brokerage houses, and web portals to retain name branding of the EBPP.¹⁶⁵ The attraction of this model is that bill-payment on-line becomes another vehicle through which user interface hosts can cultivate customer loyalty and market more products, in addition to cutting costs for printing and mailing of bills. CheckFree charges \$4 per month per user to its user interface clients, who then pass that charge on to customers at a markup or cover the cost in hopes of building a larger, more attached client base. Spectrum has focused on designing an open access platform for member banks to share billing information through a switching network for bills and provide EBPP, rather than designing a marketable EBPP service product.

USPS eBillPay

According to the Government Accounting Office, the movement from paper to electronic billing could represent a lost market of more than \$16 billion per year for the United States Postal Service (USPS), assuming that every bill now mailed is instead billed and paid on-line.¹⁶⁶ Billing statements currently represent 25 percent of the USPS revenue. In an attempt to replace some of this potential lost revenue, USPS partnered with CheckFree and a smaller provider

¹⁶⁵ Some do operate their own user interface but do not market this service aggressively.

¹⁶⁶ General Accounting Office, "U.S. Postal Service: Development and Inventory of New Products," GAO/GGD-99-15, November 24, 1998. The GAO cites an estimate from a former Postmaster General that bills and other payments account for one fourth – or roughly \$16.4 billion -- of the Postal Service's revenue.

(YourAccounts.com) to transform USPS.com into a one-stop bill payment website.¹⁶⁷ eBillPay provides the portal and CheckFree maintains the EBPP operations.

In essence, the USPS acts as a well-positioned advertising link for CheckFree, sharing the profits from customers acquired in return for mass advertisement through the USPS heavy-volume website and information at each branch office across the nation. The USPS already has client relationships with most billers and customers. Its marketing strategy for the eBillPay service emphasizes its reputation for trustworthy, rain-sleet-snow-or-hail service.¹⁶⁸ Its press release announcing the new service highlighted that the USPS is “the country’s trusted third party and universal service provider.”¹⁶⁹

Prices charged through USPS eBillPay are in the middle of the price range offered by its competitors in the spring of 2000. Despite common usage of CheckFree as the financial intermediary, different sites charged different amounts (see Table 2).

¹⁶⁷ Susan Straight, “As Tax Filers Go Electronic, Will the Post Office Go Hungry?” *Business Week* On-line, April 14, 2000, <http://www.businessweek.com/bwdaily/dnflash/apr2000/nf00414a.htm>.

¹⁶⁸ “Secure? Of Course! It’s the United States Postal Service,” <http://www.usps.gov/EBPP/splash.html>.

¹⁶⁹ “Postal Service Offers Electronic Billing and Payment,” Release Number 26, April 5, 2000, available at <http://www.usps.com>.

Table 2: EBPP Rate Comparisons

Website	Trial Period	Base Rate	Conditions	Extra Bills
USPS eBillPay	6 months free	\$6.00/month	Up to 20 bills	\$0.40 each
		\$2.00/month	\$0.40 each bill	
Paytrust.com	None	\$8.95/month	25 bills/month	-
CheckFree.com	3 months free	\$12.95/month	Up to 35 bills	\$2.95/10 bills
		Free	EBPP for subscribed billers only	
Bank One	1 month free	\$4.95/month	Unlimited	
Charles Schwab	None	\$6.95/month	Up to 20 bills	\$0.50 each
		Free	High end accounts	
Stanford Federal Credit Union	3 months free	\$5.00/month	Unlimited	
Wells Fargo	2 months free	\$5.00/month	Unlimited	
		Free	\$5K min balance	
Chase Manhattan		Free	Unlimited	
Yahoo!	3 months free	\$7.00/month	Up to 25 bills	\$0.40 each
		\$2.00/month	\$0.40 each bill	

Source: Data collected from firm websites as of April 30, 2000.

Some of these price differences reflected different levels of service. For example, the USPS eBillPay lacked a link to merge data from its site with personal financing software such as Quicken or Microsoft Money. Most other bank and brokerage sites and CheckFree.com did provide this capacity. As another example, Bank One did not charge penalties for insufficient funds to pay a bill; they merely canceled payment. On the other hand, eBillPay imposed service fees for insufficient funds (in addition to any fees charged by the customer's bank). Finally, other websites typically offered financial service management tools or search tools. Despite its apparent lower level of service, eBillPay did not offer the lowest price in the market.

Evaluating the USPS eBillPay Program

As noted above, OMB Circular A-76 limits the government's ability to engage in commercial activities that compete with the private sector.¹⁷⁰ However, the eBillPay program would be explicitly allowed under the "Market Tests of Experimental Competitive Products" section of the proposed Postal Modernization Act of 1999 (H.R. 22).¹⁷¹ If passed, this act would not only confirm the USPS's ability to provide EBPP, but also would allow the USPS to cross-subsidize eBillPay rates from other operations during an experimental period. However, given the short legislative session, the plethora of competing legislative imperatives, the substantial industry opposition, and the complexity of the issues involved, H.R. 22 was not passed by Congress this year. Nonetheless, the USPS intends to continue its EBPP activities.

The introduction of the eBillPay can be evaluated under the principles for governmental activity delineated above. Principles 2, 5, 7, 8, 10, 11, and 12 are relevant to judging whether the activity is appropriate for a government (or quasi-governmental) body.

The first question is whether the activity could be justified as fulfilling Principle 2 (improving the efficiency with which governmental services are provided is a proper governmental role). Could the provision of eBillPay be considered an internal efficiency action, in which the USPS is offering services to reduce the amount of labor necessary to achieve the USPS's charge to provide universal mail service? The fundamental question is whether electronic bill payment is a

¹⁷⁰ Specifically, Circular A-76 states that, "In the process of governing, the Government should not compete with its citizens. The competitive enterprise system, characterized by individual freedom and initiative, is the primary source of national economic strength." See Appendix A for Circular A-76.

governmental service. Even if physical mail delivery should be provided by the government (itself the subject of significant debate),¹⁷² the delivery of bills and payments electronically has revealed itself to be a competitive market provided by private-sector firms. Those who have on-line access do not seem to experience difficulty in obtaining electronic bill payment services.

Furthermore, the eBillPay program by itself will not provide universal access to electronic bill payment services: To use the service, individuals must have access to the World Wide Web, and the eBillPay program by itself does not provide such access. Indeed, a persistent “digital divide” exists in terms of Internet access between the information-rich (e.g., those with higher incomes, those with more education, and dual-parent households) and the information-poor (e.g., those who are younger, have lower incomes and education levels, or live in rural areas or central cities). For example, households with incomes of \$75,000 or more in urban areas are over *20 times* more likely to have access to the Internet than those at the lowest income levels living in rural areas.

The eBillPay program by itself would do nothing to narrow these gaps. Even if eBillPay were supplemented by other programs that did help to narrow the digital divide, a legitimate question exists as to the appropriate bounds for universal service objectives. As Professor Dan Spulber of Northwestern University recently noted, “The Postal Service raises its traditional argument of universal service, namely that only the government can provide a low-cost service that’s available to all. And I think that’s not really the case. The private sector is fully capable. I

¹⁷¹ H.R. 22 is available at <http://thomas.loc.gov>. In the absence of this legislation, some would argue that the USPS lacks statutory authority to provide its eBillPay service.

mean, where does it stop? At some point, the same arguments could be used to justify the Postal Service delivering pizza.”¹⁷³

The eBillPay is thus difficult to justify under any of the “green light” principles. Since private-sector firms are already active in EBPP, it also does not qualify under Principle 5. And since those private-sector services seem to entail sufficient privacy and security protections, there is no need for direct government action under Principle 7 (the government has the responsibility of ensuring that mechanisms exist to protect privacy, security, and consumer protection on-line).

Principle 8 (the government should promote network externalities only with great deliberation and care) is somewhat more complicated. The EBPP market seems to be characterized by network externalities: the more billing vendors who participate, the more valuable the service is to consumers – and vice versa. But the private sector seems to be developing EBPP standards itself, and does not necessarily need further impetus from the government.

Furthermore, USPS’s association with CheckFree may inadvertently determine the standard used in EBPP. In particular, Spectrum is challenging CheckFree as a viable platform for EBPP infrastructure. Despite CheckFree’s current dominance as the standard for service provision, many unclaimed customers exist to support Spectrum’s growth and challenge to CheckFree in service provision. But the potential number of CheckFree end-users from a successful USPS eBillPay website could be enough to raise economies of scope to the point that Spectrum could

¹⁷² See J. Gregory Sidak and Daniel F. Spulber, *Protecting Competition from the Postal Monopoly* (AEI Press: Washington, 1996). See also J. Gregory Sidak, editor, *Governing the Postal Service* (AEI Press: Washington, 1994).

not price competitively against CheckFree. Even if eBillPay does not ultimately provide CheckFree with a larger end-user base, the magnitude of the USPS as a client for CheckFree could influence the decisions of other billers to employ CheckFree as well, possibly distorting choices of firms in the EBPP service provision market. In summary, the activity thus does not seem to be justified under the “yellow light” principles.

The “red light” principles raise significant questions about the eBillPay program.¹⁷⁴ For example, Principle 10 states that the government should exercise substantial caution in entering markets in which private-sector firms are active. As noted above, many private-sector firms are active in the EBPP market. The ability of EBPP to consolidate bill payment and the existence (often) of a fixed cost to the consumer implies that it is unlikely that a consumer will employ more than one EBPP service. As a result, the potential field of customers, while still large and uncommitted, is finite. Despite USPS spokesperson Mark Saunders argument that “There is room in this marketplace for everyone,”¹⁷⁵ the ultimately finite nature of the market means that current competitors in the user interface market consider the entry of USPS a possible threat in their race to attract as many consumers as possible to their website. Prudential Securities recently argued that “the entry of USPS into the marketplace would create a tidal wave more

¹⁷³ National Public Radio, “US Postal Service Plans To Let People Pay Their Bills On-line With A New Service,” *All Things Considered*, April 7, 2000.

¹⁷⁴ The General Accounting Office has raised additional questions about the Postal Service’s e-commerce activities. In testimony before Congress, Bernard Unger of GAO “identified three problem areas relating to USPS management of its e-commerce area: inconsistencies in identifying e-commerce and related initiatives and in reporting the status of these activities, which made it difficult to obtain a complete and accurate picture of USPS’ e-commerce activities; inconsistencies in following the required process for reviewing and approving its e-commerce initiatives, which raised questions as to whether the initiatives were appropriately planned and reviewed; and deficiencies in the financial information USPS provided for the e-commerce activities, which raised concerns about the accuracy and completeness of the financial reporting for e-commerce activities.” See testimony of Bernard Unger, General Accounting Office, before the Subcommittee on International Security, Proliferation, and Federal Services, Senate Committee on Governmental Affairs, “U.S. Postal Service: Electronic Commerce Activities and Legal Matters,” September 7, 2000.

¹⁷⁵ Shruti Dati, “USPS launches on-line bill payment service,” *Government Computer News*, April 17, 2000.

than sufficient to swamp fledgling businesses without the vast resources and established brand equity of the postal behemoth, and the threat of its entry might reasonably deter investors from funding startups however meritorious and innovative their offerings might be.”¹⁷⁶

Principle 11 states that governmental activities that are intended to maximize net revenues or reduce competition should raise substantial concern – either because the activity is not appropriately governmental, or because the public-sector entity is not properly performing its role. For example, if the USPS were attempting to provide universal electronic bill payment service through the eBillPay program, its pricing strategy seems inconsistent with that objective: To promote universal service, even among those with access to the Internet, the USPS would have adopted a lower quality-adjusted price than others in the market. The USPS has created eBillPay because it is concerned that the projected loss in paper bill revenue to electronic payments will affect its ability to subsidize its responsibility for universal mail service. But cross-subsidizing universal mail service by entering a commercial market does not necessarily represent sound public policy. Furthermore, the eBillPay program may reduce competition in the EBPP market.

Finally, Principle 12 states that the government should only be allowed to provide goods or services for which appropriate privacy and conflict-of-interest protections have been erected. A significant question is whether the privacy rules that apply to the rest of the U.S. Postal Service will be extended to the eBillPay program. Industry leaders have expressed concern that data

¹⁷⁶ Prudential Securities, “Washington E-commerce Report: U.S. Postal Service Plans Aggressive Move into Cyberspace – Including a Possible Dot-Com IPO,” January 26, 2000, page 3.

collected as part of the eBillPay program could be shared with other government agencies with no notice, permission, or due process.¹⁷⁷

In summary, the principles described above appear to raise significant questions about whether the eBillPay program is an appropriate activity for a government agency to undertake.

¹⁷⁷ See, for example, letter from Edward Black, William Archey, and Ken Wasch to Representatives Richard Arme, Billy Tauzin, and Robert Goodlatte, June 23, 2000.

Case Study: Lexis-Nexis

The Lexis-Nexis group is a private-sector entity that provides fee-based legal, business, and government information products. It boasts the largest collection of public records in the United States. Lexis-Nexis adds enhancements to this information, such as indexing, linkages, and segmentation. The Lexis branch of the group is geared to the legal profession, and the Nexis business unit is primarily intended for business leaders, government officials, and academics.

The fundamental question raised by Lexis-Nexis is whether it provides services that *should* be provided by the government. It is thus a different type of case study: one in which the question is not whether an activity that the government is undertaking is appropriate, but rather whether the government should be undertaking an activity that it is not currently.

It is worth noting that WestLaw, another private-sector provider of legal information, raises similar issues to those raised by Lexis-Nexis. We focus here on Lexis-Nexis, but many of the same questions would be relevant to an analysis of WestLaw's activities.

Background on Lexis-Nexis

Lexis began in 1973 as the first commercial, full-text legal information service, and was designed to improve the efficiency of legal practitioners' research. Nexis, the news and business arm, was added in 1979 and has grown to be the largest such on-line information service provider. The Lexis-Nexis company was originally founded as the Data Corporation in 1966, was bought by Mead Corp. in 1968, and was recently acquired by Reed Elsevier.

For a fee, Lexis allows a researcher to search for Federal and state cases by party name or citation. It also provides categories – such as Federal Cyberlaw – to browse. Lexis also provides up-to-date searchable Federal and State codes, and indexes four sources for Federal Regulations: the Federal Registry, the Code of Federal Regulations, the Federal Acquisition Regulations (FAR), and the US Attorney General Opinions. For completeness, Lexis also has a searchable database of European Union law.

Lexis provides searchable Tax Code documents such as the Internal Revenue Bulletin, the Internal Revenue Code, Treasury regulations, and various IRS Actions and Memoranda. (Lexis also provides non-government documentation on taxes from publishers like the ABA.) Lexis also indexes patents from 1971 to present, although coverage from January 5, 1971 through December 3, 1974 is incomplete.

Lexis also includes a secondary literature service, which includes news articles from legal newspapers, magazines and newsletters, as well as also articles from law reviews. One of Lexis's substantial advantages is that this literature service is integrated with the other legal search capabilities – so that, for example, the various academic articles written about a specific question involved in a specific case can be easily accessed. In addition, Lexis includes a career information area, including the Martindale-Hubbell directory of lawyers, law school directories, and tips on choosing a law school.

Government provision of legal information

Surprisingly, much official legal information is not easily available from official government sources. Until April 2000, the Supreme Court did not even have its own homepage; instead, one was hosted at Cornell Law School's Legal Information Institute (LII) site.¹⁷⁸ The LII site has all Supreme Court decisions from 1990 through today indexed and searchable. For cases decided before 1990, selected historic decisions are posted at LII. The Supreme Court's website points users to government sites that provide free access to Supreme Court decisions between 1937 and 1975. These decisions are available and searchable by case number and key word on two government web sites (FedWorld and GPO Access).

State courts generally have their own home pages, but are often slow and difficult to navigate. These sites often include very recent decisions but lack significant archives. For example, California posts its decisions immediately but, until recently, those decisions were removed from the site after 100 days and web users were redirected to Westlaw.com's fee-based service to access them. Some states and all Circuits of the U.S. Courts of Appeal have websites hosted by law schools.

The government has several of its own law-related sites linked from Thomas, the Library of Congress's search engine for Congressional actions. The Government Printing Office (GPO) Access web site allows users to search five different versions of the U.S. Code – each version has another year included, so one can search for laws in effect in January of any year 1995-1999.

¹⁷⁸ The new Supreme Court homepage (www.supremecourtus.gov) is still in its infancy. Many topics are well covered: there is information about visiting the Court and about the Justices, and Bar Admissions forms are

The databases, however, are often updated with a lag. GPO also provides access to the Federal Register back to 1995, and has searchable access to the Code of Federal Regulations.

The IRS website has issues of the Internal Revenue Bulletin downloadable in .pdf format back to 1996, but the Bulletins are not easily searchable. The IRS website does not provide indexed versions of IRS General Counsel Memos, or Actions on Decisions and Technical Memos, although they are accessible for experienced users through the electronic-FOIA Reading Room.

The U.S. Patent and Trademark Office's website offers searches of all U.S. patents by keyword, classification or patent number back to 1976. (As noted in Section I, by the end of 2001, every patent since the 1700s will be available on-line, and by the following year, more than 14 million Japanese and European patents will be too.¹⁷⁹) Trademarks are also easily searchable at the Patent and Trademark Office site. Copyrights are searchable at the Library of Congress web site, although the interface is difficult to use and the Copyright Office does not offer any assistance with it.

Evaluating what legal information services the government should provide

In evaluating what legal information the government should provide, Principles 1, 2, and 4 appear to be particularly relevant.

available on-line. Other pieces could use improvement: for example, most links are cumbersome downloadable .pdf files and not interactive pages.

¹⁷⁹ Remarks of Secretary of Commerce William M. Daley, E-GOV 99 Conference, July 1, 1999, available at: <http://www.doc.gov>.

Principle 1 states that providing public data and information is a proper governmental role. Therefore, some governmental role is warranted in furnishing legal and other information. The key question is the precise scope of that role. For example, should the government provide all the services currently provided by Lexis-Nexis, or is the appropriate governmental role more limited than that?

Principle 2 states that improving the efficiency with which governmental services are provided is a proper governmental role. There is significant room for improvement in the efficiency with which even basic legal information is disseminated on-line. For example, although the famous *Roe v. Wade* (1973) decision turns up in both Lexis and at the Fedworld's 1937-75 decision database, more difficult cases are either absent or hard to find on government sites. The Supreme Court's 1988 *Hazelwood v. Kuhlmeier* decision (denying First Amendment privileges to school-sponsored student newspapers) was not available on a government website, but it was written up as a selected historic decision on Cornell's LII site linked from a government page. The U.S. District Court decision in *United States of America v. State of Missouri* (1975), which de-segregated suburban St. Louis schools, was also not available on the public sites.

Indeed, the Center for Democracy & Technology identifies court briefs from the Department of Justice and Federal Circuit Court web sites as two of the top 10 "most wanted" categories of governmental data that should be put on the Web, but are not. As the Center argues, "The federal Circuit and District Courts have been slow to embrace the Web. Only 5 of the 12 Circuit Courts of Appeals have Web sites providing access to opinions at no cost. While a number of