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Unsolicited Commercial E-Mail and the Telephone Consumer Protection Act of 1991

DAVID E. SORKIN†

INTRODUCTION

Congress enacted the Telephone Consumer Protection Act of 1991¹ (TCPA) in response to abuses by the telemarketing industry.² The TCPA regulates the use of automatic telephone dialing systems³ and prerecorded calls,⁴ and requires telemarketers to maintain “do-not-call” lists.⁵ The TCPA also prohibits the sending of unsolicited advertisements to telephone facsimile machines⁶—so-called “junk faxes.”⁷

The “junk faxes” Congress had in mind were advertising messages sent to conventional fax machines by means of stan-

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1. Telephone Consumer Protection Act of 1991, Pub. L. No. 102-243, 105 Stat. 2394 (1991) (codified as amended at 47 U.S.C. § 227 (1994)).

2. See S. REP. NO. 102-178, at 3 (1991), *reprinted in* 1991 U.S.C.C.A.N. 1968, 1970; see also 137 CONG. REC. H11,314 (daily ed. Nov. 26, 1991) (statement of Rep. Markey) (“We are sending instructions over to the FCC that we want them to begin the process here of shutting down the abuse of the telephones and fax machines that have grown over the last half a decade.”).

3. See 47 U.S.C. § 227(b)(1)(A), (D) (1994).

4. See 47 U.S.C. § 227(b)(1)(B).

5. See 47 U.S.C. § 227(c); FCC Restriction on Telephone Solicitation Rule, 47 C.F.R. § 64.1200 (1996).

6. See 47 U.S.C. § 227(b)(1)(C).

7. See 136 CONG. REC. H5820 (daily ed. July 30, 1990) (statement of Rep. Markey) (“[W]ith the growth in use of the fax machines has come ‘junk fax,’ the electronic equivalent of junk mail.”).

dard facsimile protocols.⁸ But the TCPA's definition of "telephone facsimile machine" is extremely broad:

The term "telephone facsimile machine" means equipment which has the capacity (A) to transcribe text or images, or both, from paper into an electronic signal and to transmit that signal over a regular telephone line, or (B) to transcribe text or images (or both) from an electronic signal received over a regular telephone line onto paper.⁹

A personal computer equipped with a standard modem and a printer (or a scanner) would qualify as a telephone facsimile machine under this definition.¹⁰ Many computer users have argued that "junk e-mail" is therefore prohibited by the TCPA,¹¹ and some have even brought lawsuits against e-mail marketers based upon the TCPA.¹²

The Ninth Circuit has upheld the constitutionality of the TCPA's restrictions on prerecorded calls and unsolicited fax advertisements,¹³ though some commentators have questioned the validity of the distinction between commercial and noncommercial messages.¹⁴ A federal district court in Pennsylvania has

8. See *infra* note 20 and accompanying text.

9. 47 U.S.C. § 227(a)(2).

10. See *infra* text accompanying notes 53-57.

11. See, e.g., Daniel Akst, *Junk Mail: The Battle Continues*, L.A. TIMES, May 27, 1996, at D1; Mark Eckenwiler, *Just the Fax, Ma'am*, NETGUIDE, Mar. 1996, at 37; Bob Henry, *Does Fax Ad Prohibition Bear on E-Mail Spamming?*, COMMUNICATIONS WEEK, Nov. 25, 1996, at 40; Steven William Rimmer, *Death to Spam: A Guide to Dealing with Unwanted E-Mail*, Sept. 22, 1997, <<http://www.mindworkshop.com/alchemy/nos-pam.html>> (on file with author and the *Buffalo Law Review*); Russ Smith, *What's Covered by the TCPA?*, Sept. 7, 1997, <<http://www.russ-smith.com/whats.html>> (on file with author and the *Buffalo Law Review*); Mark J. Welch, *Broadcast Fax and Junk Email Illegal*, Sept. 23, 1997, <<http://www.ca-probate.com/faxlaw.htm>> (on file with author and the *Buffalo Law Review*).

12. Section 227(b)(3)(B) of the TCPA provides for statutory damages of \$500 for each violation. Robert Arkow of California filed a small claims action against CompuServe in February 1995 based upon this provision, seeking \$1,000 in statutory damages for two unsolicited e-mail advertisements he received from CompuServe, and an additional \$1,000 in punitive damages based upon his claim that he had previously notified CompuServe of his desire not to receive such messages. The parties settled under undisclosed terms. See Robert A. Cronkleton, *Junk on the E-Mail*, KANSAS CITY STAR, Mar. 12, 1995, at F2; Bruce V. Bigelow, *Infuriated Client Sues over Junk E-Mail*, SAN DIEGO UNION-TRIB, Feb. 19, 1995, at H1; Bill Husted, *Return to Sender*, ATLANTA J. & CONST., Feb. 15, 1995, § E, at 2; Eckenwiler, *supra* note 11.

13. See *Moser v. FCC*, 46 F.3d 970 (9th Cir. 1995) (rejecting First Amendment challenge to ban on prerecorded calls to residences), *rev'g* 826 F. Supp. 360 (D. Or. 1993); *Destination Ventures, Ltd., v. FCC*, 46 F.3d 54 (9th Cir. 1995) (rejecting First Amendment challenge to ban on unsolicited fax advertisements), *aff'g* 844 F. Supp. 632 (D. Or. 1994).

14. See, e.g., Deborah L. Hamilton, Note, *The First Amendment Status of Commer-*

adopted a narrow construction of the term "unsolicited advertisement," holding that it does not include solicitations for employment.¹⁵ To date, however, no court has determined whether the ban on unsolicited fax advertisements also applies to advertisements transmitted by electronic mail.¹⁶

Part I of this Article describes facsimile machines and electronic mail. Part II discusses construction of the TCPA, including an examination of its language and legislative history. Policy arguments for and against application of the TCPA to electronic mail are considered in Part III. Part IV explores alternative methods of addressing the problems raised by unsolicited commercial e-mail.

I. FACSIMILE MACHINES AND ELECTRONIC MAIL

A. *Facsimile Machines*

A fax machine can transmit a copy of a printed document over an ordinary telephone line in a matter of minutes or seconds. Facsimile technology is over 150 years old, but fax machines became ubiquitous only in the late 1980s.¹⁷ There are

cial Speech: Why the FCC Regulations Implementing the Telephone Consumer Protection Act of 1991 Are Unconstitutional, 94 MICH. L. REV. 2352 (1996); Paul S. Zimmerman, Note and Comment, *Hanging Up on Commercial Speech: Moser v. FCC*, 71 WASH. L. REV. 571 (1996); Howard E. Berkenblit, Note, *Can Those Telemarketing Machines Keep Calling Me? - The Telephone Consumer Protection Act of 1991 After Moser v. FCC*, 36 B.C. L. REV. 85 (1994).

15. See *Lutz Appellate Servs. v. Curry*, 859 F. Supp. 180 (E.D. Pa. 1994).

16. Robert Arkow's suit terminated in an undisclosed settlement. See *supra* note 12. While it is possible that other courts have addressed unsolicited e-mail claims under the TCPA, searches of federal and state case law and relevant Internet discussion forums revealed no such reports as of December 1996.

This Article focuses on unsolicited e-mail messages that are commercial in nature. While most opponents of unsolicited bulk e-mail do not distinguish between commercial and noncommercial messages, see, e.g., Scott Hazen Mueller, *Serving Spam*, Dec. 19, 1996, <<http://www.hotwired.com/braintennis/96/51/index3a.html>> (on file with author and the *Buffalo Law Review*), the TCPA applies only to "unsolicited advertisement[s]." 47 U.S.C. § 227(b)(1)(C) (1994). In any event, most unsolicited bulk e-mail currently seems to be commercial in nature. See Abby Franquemont-Guillory, *Unsolicited versus Commercial Email*, Sept. 24, 1997, <<http://www.vix.com/spam/others/uce.html>> (on file with author and the *Buffalo Law Review*); Steven William Rimmer, *Death to Spam: A Guide to Dealing with Unwanted E-Mail*, Sept. 22, 1997, <<http://www.mindworkshop.com/alchemy/nospam.html>> (on file with author and the *Buffalo Law Review*).

17. See Richard G. Barrows, *Fax Law - A Compendium of Reported Cases*, LAW PRAC. MGMT., Nov./Dec. 1991, at 28; Patricia Bordman, *Telefacsimile Documents: A Survey of Uses in the Legal Profession*, 36 WAYNE L. REV. 1361, 1361-62 & n.6 (1990). The facsimile machine was invented in 1842. See Barrows, *supra*, at 28.

now several million fax machines in use in the United States,¹⁸ and billions of faxes are sent each year.¹⁹

A conventional fax machine scans a printed document, dials a telephone number that connects it to another fax machine, and transmits the digitally encoded document image to the other machine, which prints out a copy of the document. The encoding is done using one of several industry-standard protocols, most commonly the Group III standard, which requires about thirty seconds to one minute to transmit each page.²⁰

As fax machines became more common in offices in the late 1980s, creative marketers began sending unsolicited advertisements by fax.²¹ Owners of fax machines complained about the cost and inconvenience of these "junk faxes," and in response many states and eventually Congress imposed restrictions on unsolicited faxes.²² The TCPA now requires marketers to receive

18. See Jerry Hirsch, *The Fax: It's Not Just for Business*, ORANGE COUNTY REG. (California), Jan. 31, 1994, at D23 (25 million fax machines and fax modems in U.S.); Phil Waga, *Fax Machines Making Couriers Obsolete*, GANNETT NEWS SERVICE, Dec. 8, 1992, available in LEXIS, News Library, US File (10.1 million fax machines in 1991, up from 300,000 in 1983); 136 CONG. REC. H5818 (daily ed. July 30, 1990) (statement of Rep. Markey) (2 million fax machines).

19. See 136 CONG. REC. H5818 (daily ed. July 30, 1990) (statement of Rep. Markey) (30 billion pages are faxed each year).

20. See Bradford W. Hildebrandt, *The Use of Facsimile by Law Firms*, N.Y.L.J., Mar. 11, 1986, at 4; George Pajari, *Comp.dcom.fax FAQ: Glossary and Background Information*, June 16, 1995, <<http://www.faximum.com/faqs/fax.glossary>> (on file with author and the *Buffalo Law Review*). The Group III designation refers to a standard defined by the International Telephone and Telegraph Consultative Committee (CCITT), now known as the International Telecommunication Union's Telecommunication Standardization Sector (ITU-T), and the Electronic Industries Association (EIA), which publishes a U.S. version of the standard. See ITU-T, RECOMMENDATION T.4: STANDARDIZATION OF GROUP 3 FACSIMILE APPARATUS FOR DOCUMENT TRANSMISSION (rev. 1993); ELECTRONIC INDUSTRIES ASS'N, EIA-465: GROUP 3 FACSIMILE APPARATUS FOR DOCUMENT TRANSMISSION (1981).

21. A Congressional committee considering a predecessor bill to the TCPA noted that an advertiser with a single fax machine could send tens of thousands of unsolicited messages per week. See H.R. REP. 102-317, at 6-7 (1991). Businesses received an average of three to four unsolicited faxes per week before the TCPA was enacted. See Edwin J. Broecker, Note, *FAX unto Others . . . : A Constitutional Analysis of Unsolicited Facsimile Statutes*, 23 IND. L. REV. 703, 704 n.8 (1990). Fax advertising was used by many different types of businesses. See, e.g., 135 CONG. REC. E1462 (daily ed. May 2, 1989) (statement of Rep. Markey); 137 CONG. REC. S9840 (daily ed. July 11, 1991) (statement of Sen. Hollings). One of the leading fax advertisers was Sanford Wallace, who now runs Cyber Promotions, an e-mail marketing firm. See Jana Sanchez-Klein, *Meet the Most Hated Man on the Internet*, BALT. SUN, May 28, 1996, at 1D.

22. Connecticut enacted the first statute banning unsolicited fax advertisements in 1989; several other states followed with similar legislation. See Robert Estill, *Junk Fax Glut Stirs Cry for Ban*, SAN DIEGO UNION-TRIB., Nov. 12, 1989, at A1. The federal TCPA was passed by Congress in November 1991 and signed into law by President George Bush on December 23, 1991.

permission from fax machine owners before sending advertising material by fax.²³

B. *Electronic Mail*

An electronic mail ("e-mail") message is a computer file transferred from one computer to another.²⁴ A computer can send and receive e-mail messages and other data over an ordinary telephone line using a modem.²⁵ Electronic mail can also be exchanged among computers on a local area network or between separate networks that are interconnected.²⁶ The Internet, a very large network of computer networks, provides such interconnectivity to millions of computers around the world. An electronic mail message can be transmitted between two computers on the Internet within minutes or seconds, though in rare instances a message may take several hours or even longer to arrive.²⁷

23. See 47 U.S.C. § 227(a)(4), (b)(1)(C) (1994).

24. See generally Brian G. Gilpin, Note, *Attorney Advertising and Solicitation on the Internet: Complying with Ethics Regulations and Netiquette*, 13 J. MARSHALL J. COMPUTER & INFO. L. 697, 721 (1995) ("Electronic mail is transmitted over phone lines, local area networks, fiber optic networks, satellite links, or a combination thereof").

25. Like a fax machine, a modem converts data to an audible signal that can be transmitted over a telephone line. A modem normally uses an asynchronous full-duplex modulation scheme and maintains a constant transmission speed throughout a connection, however, while a fax machine uses a synchronous half-duplex scheme and switches to a lower speed to transmit control information between pages. See George Pajari, *Comp.dcom.fax FAQ: Frequently Asked Questions about Fax*, Nov. 8, 1996, <<http://www.faximum.com/faqs/fax.questions>> (on file with author and the *Buffalo Law Review*). While some data modems use proprietary compression schemes, most comply with industry standards such as V.34, a standard for 28.8 kbps modems. See ITU-T, RECOMMENDATION V.34 (1994).

A computer-based fax modem combines the capabilities of a fax machine and a data modem, and can communicate with both types of devices. Most computers sold today include a fax modem. See Jerry Hirsch, *The Fax: It's Not Just for Business*, ORANGE COUNTY REG. (California), Jan. 31, 1994, at D23.

Users of computer bulletin board systems (BBSs) commonly exchange e-mail over telephone lines. Individuals can also send and receive e-mail using commercial online services and Internet service providers, both of which normally offer dial-up connections.

26. Interconnections between major networks, now commonplace, were once a primary basis for selecting an e-mail provider. See Brock N. Meeks, *E-Mail Economics*, BYTE, Apr. 1, 1989, at 151 (noting that only two of four popular e-mail services profiled were interconnected to one another).

27. Other e-mail systems vary in transmission speeds. A message sent between two computers on the same local area network normally arrives almost instantaneously. A message sent between subscribers of two different FidoNet BBSs, on the other hand, typically arrives the day after it is sent, because FidoNet BBSs connect to one another via telephone calls made late at night. See Daniel Akst & James Weissman, *The Other Internet - FidoNet Turns Local BBSes into Part of a Global Network*, NETGUIDE, Sept. 1,

Telephones (and fax machines) operate using a dedicated circuit for the duration of each communication, as do some electronic mail networks. On the Internet, however, each e-mail message or other communication is divided into packets of data that are transmitted dynamically along whatever route is deemed most expedient at the time.²⁸

There are many different protocols for electronic mail messages. Bulletin board systems and local area networks frequently use their own proprietary protocols for internal messages. Electronic mail messages are transmitted over the Internet using the Simple Mail Transfer Protocol (SMTP).²⁹ Commercial applications often use more complex protocols.³⁰

Various encoding schemes can be used to convert graphic images, sounds, and even video into data that can be transmitted as e-mail. An e-mail message ordinarily originates in digital form, as a text document created in a word processor or e-mail program. However, it is possible to scan a printed document and encode it digitally (either as a graphic image or as plain text, generated using optical character recognition software), in order to transmit it as an e-mail message.

With the recent rapid expansion of the Internet, e-mail use has increased dramatically. Tens or hundreds of billions of e-

1995, at 57.

28. See, e.g., Dan L. Burk, *Federalism in Cyberspace*, 28 CONN. L. REV. 1095, 1097 (1996); Alexander Gigante, *Black Hole in Cyberspace: The Legal Void in the Internet*, 15 J. MARSHALL J. COMPUTER & INFO. L. 413 (1997); Henry H. Perritt, Jr., *Dispute Resolution in Electronic Network Communities*, 38 VILL. L. REV. 349, 352 n.7 (1993).

29. See Martin Grossmann, *Some Words About X.400, SMTP, and VMS-Mail*, Oct. 24, 1995, <http://psiclc.psi.ch/www_aco_hn/docs/mail/protocols.html> (on file with author and the *Buffalo Law Review*); *SMTP Resources Directory* (András Salamon & Brad Knowles eds.), Jan. 8, 1997, <<http://www.dns.net/smtprd/>> (on file with author and the *Buffalo Law Review*); *Free On-line Dictionary of Computing* (Denis Howe ed.) <<http://wfn-shop.princeton.edu/foldoc/>> (spot: electronic mail, simple mail transfer protocol) (on file with author and the *Buffalo Law Review*). The SMTP specification appears in Jonathan B. Postel, *Simple Mail Transfer Protocol*, Aug. 1982, <<http://ds.internic.net/rfc/rfc821.txt>> (on file with author and the *Buffalo Law Review*).

30. The X.400 protocol, for example, was defined by the International Telephone and Telegraph Consultative Committee (CCITT), which is now the telecommunication standardization sector of the International Telecommunication Union (ITU-T). See *Free On-line Dictionary of Computing*, supra note 29; ITU-T, RECOMMENDATION F.400/X.400: MESSAGE HANDLING SERVICE: MESSAGE HANDLING SERVICE AND SYSTEM OVERVIEW (rev. 1996). Electronic data interchange (EDI) transmissions generally use the American National Standards Institute (ANSI) X12 standard; EDIFACT, the global standard; or a proprietary data exchange standard. See *Free On-line Dictionary of Computing*, supra note 29 (spot: X.400, International Telecommunications Union); BENJAMIN WRIGHT, THE LAW OF ELECTRONIC COMMERCE § 1.1.4, at 1:8 (2d ed. 1995).

mail messages are transmitted over the Internet each year.³¹ Much of the Internet's growth has occurred in the commercial sector, in part because the Internet provides businesses with a low-cost, highly efficient means of disseminating information. Businesses ranging from multinational corporations to individual entrepreneurs have established "home pages" on the World Wide Web to advertise and support their wares. Companies use electronic discussion forums³² to communicate with groups of people, and electronic mail to communicate with individual customers, suppliers, and stockholders.

Much of the advertising matter now found on the Internet, particularly that transmitted by electronic mail, is viewed by many Internet users as irrelevant and unwanted. In part this is a result of the history of the Internet as a noncommercial network, and the lingering anti-commercial culture of the Internet.³³ Largely, however, the reaction is based upon the intrusiveness, inconvenience, and expense of receiving unsolicited e-mail advertisements. The economics of the Internet are also of little help: it can be cheaper to send an advertising message everywhere than to target it to a narrow group of prospects,³⁴ and it may be more effective to force an advertising message

31. See, e.g., *Nothing but Net; Quit Stalling. Read This. Get on the Net.* WASH. POST, Apr. 24, 1995, at R6 (1 billion/month); David Hoye, *E-Mail Hits 1 Billion Sent Each Month*, PHOENIX GAZETTE, May 8, 1995, at C1 (same, up from 230 million/month in 1992); Julie Schmit, *Pacific Bell Speeds Email on Internet*, USA TODAY, Dec. 18, 1995, at 6B (1 billion/day); Scot Lehigh, *Lost in the (E-)Mail*, BOSTON GLOBE, Nov. 24, 1996, at D1 (stating that 560 billion e-mail messages are sent per year).

32. "Electronic discussion forums" include Usenet news groups, mailing lists, chat areas, web-based discussion areas, and other forums in which messages are exchanged among groups of people. Some of these use electronic mail to transport the messages, while others use different communication protocols. This Article is concerned more with individual and bulk e-mail messages than with messages posted to discussion forums, though some of the same technology and protocols (such as listserver software programs) may be involved.

33. While anticommmercialism is partially a relic of the academic and research-oriented network that preceded the Internet, it has probably been perpetuated by the nature of many early Internet advertisers, including lawyers, pornographers, multilevel marketers, and snake-oil vendors. See *infra* notes 104-107 and accompanying text.

34. A single Internet e-mail message can be addressed to multiple recipients, and can be sent at very little cost to the sender. See James Gleick, *Hold the Spam*, N.Y. TIMES, Dec. 22, 1996, § 6, at 22 ("[H]umanity has never before encountered a form of advertising that costs its senders so little . . . Anyone with an Internet connection and a list of E-mail addresses can send millions of letters for, roughly, nothing."). As one e-mail advertiser explained: "It's just as cost effective for me to send to 6 million e-mail addresses as to 1 million e-mail addresses, so why bother being selective?" Simson Garfinkel, *Spam King! Your Source for Spams Netwide!*, WIRED, Feb. 1996, at 84, 88 (quoting Jeff Slaton).

into recipients' electronic mailboxes than to hope that they will search out the advertiser's home page on the Web.³⁵ Internet users often find themselves drowning in "junk e-mail" as a consequence,³⁶ and have responded to these unwanted and unsolicited messages in a variety of ways, including threatening to file suit under the TCPA.³⁷

C. Comparison of Fax and E-Mail

The primary objections to unsolicited fax advertising are the cost and inconvenience imposed upon the recipient.³⁸ Unsolicited e-mail imposes similar burdens upon the recipient, a point often made by proponents of a ban on such messages. The magnitude of the burden imposed by each unsolicited e-mail message is much less than that imposed by an unsolicited fax. However, it is easier and less expensive to send large numbers of unsolicited advertisements by e-mail than by fax. Unsolicited e-mail therefore may ultimately place a much greater burden upon recipients than unsolicited fax transmissions.

The sender of a fax ordinarily pays only for the telephone call to the recipient's fax machine. An advertiser can therefore send fax advertisements for a few cents each. The recipient, on the other hand, must supply the paper and ink or toner needed to produce the printed copy of the document. Older and less expensive fax machines require special thermally activated paper or costly thermal transfer ribbons; more expensive machines use laser or inkjet technology to print on plain paper.³⁹ A recent sur-

35. Cf. Jon Udell, *Push Me, Pull You*, BYTE, Sept. 1, 1996, at 117 (complaining that many people send large documents by e-mail rather than simply posting them on the web).

36. One e-mail marketer, Cyber Promotions, sends over two million e-mail advertisements each day. See James Coates, *Electronic Junk Mail Cluttering Cyberspace: America Online Sued for Blocking Pitches*, CHI. TRIB., Sept. 23, 1996, at C1. As early as 1991, *The Wall Street Journal* reported that one executive "decided not to read his e-mail when he printed it out one day and had 30 feet of messages." William M. Bulkeley, *Sifting the Junk Out of E-Mail*, WALL ST. J., Feb. 28, 1991, at B1; see also Rochelle Sharpe, *Work Week*, WALL ST. J., Nov. 22, 1994, at A1 (noting that top executives receive up to 300 "junk e-mail" messages per day).

37. Other common responses include requesting or demanding to be removed from the sender's mailing list, directing "flames" or mailbombs to the sender, and complaining to the sender's Internet service provider or in a public discussion forum. See *infra* note 129.

38. See notes 83-85 and accompanying text.

39. See Jan Norman, *Reasonable Facsimiles*, ORANGE COUNTY REG., Mar. 25, 1996, at D14; *Just the Fax?*, CONSUMER REP., Sept. 1996, at 28. It is possible to receive a fax without printing it out at all, using either a computer-based fax modem or a fax machine which holds received faxes in memory or forwards them to another machine. See Michael

vey estimates the cost of printing each page on modern consumer-oriented fax machines at about 4 to 12 cents.⁴⁰ The recipient also bears the cost of wear and tear on the receiving fax machine, as well as administrative costs incurred in logging and routing incoming faxes and replenishing paper and ink supplies.⁴¹

Unlike faxes, electronic mail messages normally are not printed out automatically; therefore, the cost of paper and ink usually is not included in the cost of receiving e-mail. The cost of receiving e-mail via the Internet depends primarily upon the recipient's means of accessing the Internet. Most Internet users with dial-up connections pay either an hourly rate or a flat monthly rate, in addition to any applicable telephone charges.⁴² Employers, educational institutions, and libraries generally pay their Internet providers based upon bandwidth (capacity), and e-mail traffic probably has little effect on bandwidth needs in most instances.⁴³ Another cost component is disk space for storage of incoming e-mail messages on the recipient or provider's

M. Parker, *Fax Pas: Stopping the Junk Fax Mail Bandwagon*, 71 OR. L. REV. 457, 461 n.18, 481 (1992) (discussing use of computer-based fax modems to filter incoming faxes); Hildebrandt, *supra* note 20, at 4 (discussing forwarding of faxes). Often, however, these approaches can cost more in time and equipment than they save in fax machine supplies. See Norman, *supra*; Parker, *supra* note 18, at 461.

40. See *Just the Fax?*, *supra* note 39, at 28 (stating that more expensive fax machines that employ laser printing technology can print at a slightly lower cost).

41. See Hildebrandt, *supra* note 20 (noting that most law firms simplify recordkeeping by charging a fixed cost per page for faxes sent, and not charging at all for those received, based upon the fact that faxes sent and received usually involve the same clients).

42. Larger online services and national Internet service providers generally have local access numbers in most major cities, but individuals in less populated areas often must pay long distance charges. In areas with local measured telephone service, individuals may pay for calls to local access numbers, either by the call or by the minute. Such costs do not apply to faxes, because telephone charges for fax transmissions are normally borne by the sender.

In 1996 most consumers paid hourly rates for access to commercial online services. See Wendy R. Leibowitz, *Do Junkmailers Have Right to Send Unwanted E-mail?*, NAT'L L.J., Oct. 21, 1996, at A7. The industry trend, however, seems to be toward flat-rate access, and most online services and Internet service providers now offer flat-rate access, at least as an option. In December 1996, America Online, the largest online service, shifted most of its subscribers to flat-rate accounts. See Peter H. Lewis, *New Flat Rate Creates Surge In Use of America Online*, N.Y. TIMES, Dec. 3, 1996, § D, at 2. But some providers are reconsidering flat-rate access, and many charge a higher rate for untimed accounts than they do for those with hourly fees. See Elizabeth Weise, *Some Providers Turn Back Clock*, DAYTON DAILY NEWS, Jan. 11, 1997, at 4B.

43. See *Wide-Area Networks: Update and Prognosis, Part 2*, SEYBOLD REP. ON DESKTOP PUB., May 20, 1996, at 4, available in 1996 WL 9310538.

computer system.⁴⁴

Internet users do bear costs for receiving e-mail messages, although increasingly these costs are borne by the user's online service or Internet provider, and subsequently may be passed along to the individual user in the form of increased subscription or access charges. Users can reduce some but not all of these costs by filtering out unwanted messages or deleting them on sight.⁴⁵ Ultimately, the costs involved in transmitting an e-mail message are divided roughly in half between the sender and the recipient,⁴⁶ although one paying long-distance telephone charges or an hourly access rate likely will bear relatively more of the cost, and a bulk e-mailer likely will bear less.⁴⁷

44. Some providers assess charges for disk space consumed by stored files including e-mail messages, in addition to charges for time spent online. Others impose disk space quotas or even delete incoming messages when such quotas are reached. See, e.g., Gulf Coast Internet Co., *Acceptable Use Policies*, Dec. 4, 1996, <http://www.gulf.net/acceptable_use_policies.html> (on file with author and the *Buffalo Law Review*). One bulk e-mailer maintains a reserve fund to reimburse recipients of its advertisements for surcharges assessed by their Internet providers, but claims that such surcharges are extremely rare. See Robert Hicks, *Profiting from Electronic Bulk Mail: Use an Aggressive Approach That Respects Internet Users*, DM NEWS, Aug. 5, 1996, at 35.

45. Unlike faxes, incoming e-mail messages can be filtered by the recipient relatively easily, depending upon the recipient's e-mail software. Sophisticated filtering programs can sort incoming messages by sender, subject matter, and other parameters, and can discard messages from unrecognized senders unread. See Hiawatha Bray, *Getting Rid of Junk E-Mail*, BOSTON GLOBE, Sept. 26, 1996, at D1; Daniel Akst, *Info-Overloaded? Maybe It's Time to Embrace the Miracle of Filters*, L.A. TIMES, Aug. 19, 1996, at D1; Bulkeley, *supra* note 36 (stating that some Internet users maintain multiple e-mail addresses for different purposes to help them prioritize messages that they receive).

While it is easy to delete unwanted e-mail messages, it is much more difficult to refuse delivery of such messages in the first place. The receiving mail server (normally a computer maintained by the Internet service provider or online service, not the end user) can refuse connections from known bulk e-mailers, but doing so may block all incoming messages from other subscribers of such "rogue" sites, and bulk e-mailers frequently circumvent such measures by forging mail headers and routing messages through intermediate computers. See *CompuServe, Inc. v. Cyber Promotions, Inc.*, No. C2-96-1070 (S.D. Ohio Oct. 23, 1996) <<http://www.jmls.edu/cyber/cases/cs-cp1.html>> (on file with author and the *Buffalo Law Review*). America Online recently instituted a feature that automatically deletes incoming messages from known bulk e-mailers, but AOL's mail system apparently still accepts delivery of each message before deleting it. See *Cyber Promotions, Inc. v. America Online, Inc.*, 948 F. Supp. 456 (E.D. Pa. 1996); Coates, *supra* note 36.

46. See Sally Hambridge, *Netiquette Guidelines* at 5 (Network Working Group Request for Comments No. 1855), Oct. 1995, <<http://ds.internic.net/rfc/rfc1855.txt>> (on file with author and the *Buffalo Law Review*).

47. One bulk e-mailer has offered to send messages to 500,000 people for \$500. See R. Lee Sullivan, *You've Got Spam*, FORBES, Jan. 22, 1996, at 37. A distributor of bulk e-mail software claims that its program can send about 1000 messages per hour using an ordinary dial-up Internet account. See Mailloop Software, *Mailloop Overview*, Dec. 8,

Another objection to unsolicited fax advertising is that it ties up the recipient's fax machine, making it impossible to send or receive other messages while the advertisement is being received.⁴⁸ While each fax may take less than one minute, a machine that receives a large number of fax advertisements each day may be tied up much of the time. Unsolicited e-mail generally does not cause a similar problem, since multiple messages may be received simultaneously. However, the recipient's telephone line may be tied up for the time it takes to download each message unless he or she can delete unread messages without downloading them first.⁴⁹

Unsolicited faxes do pose a small additional inconvenience to recipients, in that the recipient must decide which faxes merit further attention and which can be discarded unread. This inconvenience is similar to that involved in direct mail advertising: a brief glance at each item is usually sufficient. Phone calls from telemarketers are generally considered more intrusive than faxes or direct mail, because they are interactive and because they must be dealt with immediately.⁵⁰

Bulk e-mail also can be inconvenient for recipients, especially if the sender uses a vague or misleading subject line to conceal the nature of the message, forcing the recipient to examine the text of the message in order to determine its relevance. The recipient's e-mail software can reduce but not eliminate the time and effort required to sort incoming e-mail messages.⁵¹ On some computer systems, however, each incoming e-mail message causes the user's computer to emit an audible or visual signal, and may even require the user to press one or more keys to acknowledge the message. E-mail advertising can therefore be somewhat more intrusive than faxes or direct mail, but it is almost certainly less so than calls from telemarketers.⁵²

1996, <<http://www.mailloop.com/overview.html>> (on file with author and the *Buffalo Law Review*).

48. See H.R. REP. 102-317, at 25 (1991). Many fax machines will automatically redial a number periodically upon receiving a busy signal, but may give up after a specified number of attempts. In any event, a fax machine that is tied up receiving a transmission is unavailable for use in transmitting or receiving another document at the time, potentially causing great inconvenience to the user of the machine.

49. See *supra* note 45.

50. "Unlike other communications media, the telephone commands our instant attention. Junk mail can be thrown away. Television commercials can be turned off. The telephone demands to be answered." 137 CONG. REC. S18,317 (daily ed. Nov. 26, 1991) (statement of Sen. Pressler).

51. See *supra* note 45.

52. Some computer users probably consider anonymous bulk e-mail (messages sent without a return address or other identification of the sender, or even with a false re-

Because it is so easy and inexpensive to send bulk e-mail, advertisers are beginning to bombard recipients with such messages. The number of faxes that can be sent by a fax advertiser is limited by the number of telephone lines leased by the advertiser or its fax broadcast service, but no such limitation applies to e-mail. Unsolicited e-mail advertising is likely to be a burden to computer users because of the sheer number of such messages that they receive, rather than simply because of the cost or inconvenience involved in receiving and deleting a single message.

II. STATUTORY CONSTRUCTION

A. *Statutory Language*

The TCPA's definition of "telephone facsimile machine" (TFM) is stated in terms of the function that such machines perform rather than the method that they use.⁵³ As discussed above, a conventional fax machine transmits or receives a copy of a printed document over a telephone line using standard fax protocols. An e-mail message can also be a copy of a printed document transmitted or received over a telephone line, using various e-mail and data communication protocols. This confusion is

turn address) to be more intrusive than telephone calls, since there is no way for the recipient to register his or her displeasure about receiving the message. *Cf. The Automated Telephone Consumer Protection Act of 1991, S. 1462; The Telephone Advertising Consumer Protection Act, S. 1401; and Equal Billing for Long Distance Charges, Hearing Before the Subcomm. on Communications of the Senate Comm. on Commerce, Science, and Transportation, S. 857, 102d Cong. 9 (1991)* (statement of Steve Hamm, Adm'r, S.C. Dep't of Consumer Affairs) (noting that recipients of automated telemarketing calls "wish they had the ability to slam the telephone down on a live human being").

Another burden of unsolicited e-mail that is sometimes mentioned is the risk of contracting a computer virus. *See, e.g., Coates, supra* note 36. A virus cannot be transmitted as a normal e-mail message, although an e-mail message may have an attached file containing executable program code that includes a virus. The recipient thus would have to decode and run the attached file to contract the virus, although some e-mail programs can do this automatically. *See Les Jones, Good Times Virus Hoax Frequently Asked Questions, Dec. 21, 1996, <<http://www.public.usit.net/lesjones/goodtimes.html>>* (on file with author and the *Buffalo Law Review*). The risk of computer viruses may be much smaller than most people believe. *See Rob Rosenberger, Computer Virus Myths, Oct. 4, 1997, <<http://www.kumite.com/myths/>>* (on file with author and the *Buffalo Law Review*) (referring to sensationalistic media coverage and exaggerated claims by producers of antiviral software); COMPUTER INCIDENT ADVISORY CAPABILITY, U.S. DEP'T OF ENERGY, BULLETIN NO. H-05, INTERNET HOAXES: PKZ300, IRINA, GOOD TIMES, DEEYENDA, GHOST, Nov. 20, 1996, <<http://ciac.llnl.gov/ciac/bulletins/h-05.shtml>> (noting that CIAC spends "much more time de-bunking hoaxes than handling real virus incidents.") (on file with author and the *Buffalo Law Review*).

53. *See supra* note 9 and accompanying text.

the basis for most of the arguments that the "junk fax" ban also covers e-mail.

A literal interpretation of the statutory definition of TFM would include most personal computers in use today. A computer with a modem, a printer, and appropriate software (normally sold bundled with the computer) qualifies as a TFM under § 227(a)(2)(B).⁵⁴ Adding a scanner would qualify the computer under subsection (A), though a scanner is not necessary because the two subsections are stated in the alternative.⁵⁵ Furthermore, many computers include a fax modem, which enables a computer to communicate with fax machines using standard fax protocols as well as with other computers using data communication protocols.⁵⁶ The distinction between computers and conventional fax machines has blurred considerably, and most personal computers seem to fit squarely within the statutory definition of a TFM. The permissive language in the definition is further evidence that Congress intended a broad construction: a conventional fax machine automatically transcribes documents onto paper, while a computer merely "has the capacity" to do so.⁵⁷

Perhaps the strongest argument against such a broad application of the TCPA is based upon common sense: The ordinary, commonly understood meaning of "telephone facsimile machine" includes neither computers nor electronic mail. Congress almost certainly did not even consider the statute's applicability to e-mail;⁵⁸ the breadth of the statutory definition thus seems inadvertent. Nonetheless, absent additional evidence of ambiguity, the fact that the statutory definition differs from common usage

54. One possible distinction is that a conventional fax machine is a single piece of equipment that meets the statutory definition, while a computer system includes two or more separate components which satisfy the definition only collectively. However, the statute defines a TFM using a collective noun ("equipment"), see 47 U.S.C. § 227(a)(2) (1994), and elsewhere it uses the singular noun "device" to refer to both a computer and a TFM, see § 227(b)(1)(C) (1994).

55. Earlier versions of the TCPA and related legislation defined the term TFM conjunctively (as equipment capable of both sending and receiving faxes), see, e.g., H.R. 2184, 101st Cong. (1989), reprinted in *Telemarketing Practices: Hearing on H.R. 628, H.R. 2131, and H.R. 2184 Before the Subcomm. on Telecommunications and Finance of the House Comm. on Energy and Commerce*, 101st Cong. 12-15 (1989); H.R. 2921, 101st Cong., 136 CONG. REC. H5818 (daily ed. July 30, 1990); or merely as equipment capable of sending faxes, see, e.g., S. 1462, 102d Cong., 137 CONG. REC. S9874 (daily ed. July 11, 1991).

56. See *supra* note 25.

57. See 47 U.S.C. § 227(a)(2).

58. See *infra* text accompanying notes 71-88.

probably does not justify rejecting a literal interpretation.⁵⁹

As a penal statute,⁶⁰ the TCPA should be construed strictly. Language elsewhere in the TCPA lends indirect support to a narrow construction. Section 227(b)(1)(C) states that it is illegal "to use any telephone facsimile machine, computer, or other device to send an unsolicited advertisement to a telephone facsimile machine."⁶¹ If a computer qualifies as a TFM, then the term "computer" in this provision would be surplusage.⁶² While it would be possible to send unsolicited faxes using a computer equipped with a fax modem but neither a printer nor a scanner (which would thus not qualify as a TFM), such a computer would certainly be included under "other device." This subsection thus ought to be read as an indication that the drafters did not intend the term TFM to include computers.

Another provision of the TCPA presents further evidence that Congress never intended that the statute be applied to e-mail. Section 227(d) requires that each TFM transmission be marked on at least the first page with the time and date of transmission, the name of the sender, and the sender's telephone number.⁶³ Unlike faxed documents, e-mail messages generally do not have "pages," and it makes less sense to include the sender's telephone number on an e-mail message than on a fax.⁶⁴ Furthermore, when the TCPA was enacted, most fax machines already incorporated a facility for automatically imprinting the identifying information specified by § 227(d)(2).⁶⁵ In-

59. See 1A NORMAN J. SINGER, *STATUTES AND STATUTORY CONSTRUCTION* § 20.08 (5th ed. 1993). *But see* 2A NORMAN J. SINGER, *STATUTES AND STATUTORY CONSTRUCTION*, § 47.38 (5th ed. 1992) (noting that a court may supply words omitted due to inadvertence).

60. Willful violations of the TCPA are subject to punishment by fine or imprisonment under 47 U.S.C. § 501 (1994).

61. 47 U.S.C. § 227(b)(1)(C) (1994).

62. See *Colautti v. Franklin*, 439 U.S. 379, 392 (1979) (referring to "the elementary canon of construction that a statute should be interpreted so as not to render one part inoperative.").

63. See 47 U.S.C. § 227(d)(1),(2) (1994). The FCC has interpreted § 227(d)(2) to require merely that fax machines be capable of marking the identifying information automatically once the user has supplied the information to the machine. See *Rules & Regulations Implementing the Telephone Consumer Protection Act of 1991*, 10 F.C.C.R. 12,391, ¶ 21 (1995).

64. It is unclear whether the telephone number disclosure requirement was intended merely to identify the sender or to provide the recipient with a convenient means of responding. (The telephone number provided may be either a voice or a fax number. See 47 U.S.C. § 227(d)(1)(B), (d)(2)). In either case, a more appropriate analog for e-mail messages would probably be to require inclusion of a valid return e-mail address rather than a telephone number, though the language of the statute provides no basis for such a requirement.

65. See S. REP. NO. 102-178, at 9 (1991), *reprinted in* 1991 U.S.C.C.A.N. 1968, 1976.

ternet e-mail messages, however, generally do not include the sender's telephone number, and commonly-used e-mail software does not include a telephone number as a standard data element.⁶⁶ Applying the identifying information requirements set forth in § 227(d) billions of e-mail messages sent each year. On the other hand, if outgoing e-mail is not subject to those requirements, then incoming e-mail ought not be subject to the prohibition on unsolicited advertisements in § 227(b)(1)(C) either.

Other language in and surrounding the TCPA is also relevant to its construction. The TCPA was specifically directed at abuses of the telephone system.⁶⁷ The preamble states that it is intended "to prohibit certain practices involving the use of telephone equipment," and the word *telephone* appears in its short title. Its context consists of other statutes that also pertain to the telephone system.⁶⁸

While a telephone line is inherent to a fax transmission, it is not required for the transmission of e-mail.⁶⁹ The sender of a fax knows the recipient's telephone number and purposely addresses the transmission directly to the recipient's telephone line. The sender of an e-mail message, on the other hand, addresses the message to an e-mail address, and typically does not know whether telephone lines will be used at any point during the transmission of the message (other than at the sender's own

Actually, manufacturers of "low-end" fax machines requested that enforcement of this requirement be delayed, claiming that such machines did not automatically imprint the date and time on each document. See Rules & Regulations Implementing the Telephone Consumer Protection Act of 1991, 7 F.C.C.R. 8660 (1992). The FCC denied the manufacturers' request, effectively mandating that all fax machines include an internal clock. See *id.*; Rules & Regulations Implementing the Telephone Consumer Protection Act of 1991, 10 F.C.C.R. 12,391, ¶ 25 (1995).

There was some controversy over whether § 227(d)(2) should apply to computer-based fax modems. The FCC ultimately concluded that a computer-based fax modem qualifies as a TFM under the statute, and therefore must mark identifying information on each document that it transmits. See 47 C.F.R. § 68.318(c)(3) (1996); Rules & Regulations Implementing the Telephone Consumer Protection Act of 1991, 10 F.C.C.R. 12,391, ¶ 27-31 (1995); see also *infra* notes 91-92 and accompanying text.

66. Most e-mail programs do, however, permit the user to enter arbitrary text in one or more fields identifying the sender of a message. A telephone number or other information could easily be included here, and (depending upon the software) could be included in each subsequent outgoing message by default, just as a fax machine marks each outgoing fax with the sender's name and telephone number.

67. See Eckenwiler, *supra* note 11.

68. The preceding section, 47 U.S.C. § 226 (1994), concerns telephone operator services; the following section, 47 U.S.C. § 228 (1994), concerns 900 numbers and other pay-per-call services.

69. See *supra* note 26 and accompanying text.

end of the connection).⁷⁰ Unlike conventional fax transmissions, therefore, e-mail is only incidentally related to the telephone system, which casts some doubt upon the TCPA's applicability to e-mail.

B. *Legislative History*

If the language of the TCPA yields contradictory conclusions about its applicability to e-mail, then its legislative history is even less helpful. Although e-mail was widely known by 1991⁷¹ and unsolicited e-mail was already becoming a nuisance,⁷² e-mail is not even mentioned in any of the congressional reports or testimony related to the TCPA. Nor is there any explanation of the statutory definition of "telephone facsimile machine."⁷³ The legislative history does indicate the reasons behind the ban on unsolicited fax advertising, however, and for the most part those reasons are equally applicable to unsolicited e-mail.

Congress began considering legislation to restrict unsolicited fax advertising in 1989.⁷⁴ The Facsimile Advertising Regulation Act introduced that year would have required telephone companies to maintain lists of customers who objected to receiving un-

70. In many instances it may be relatively foreseeable that the recipient of an e-mail message will receive the message using a telephone connection. For example, an e-mail address terminating in "@aol.com" represents an America Online (AOL) subscriber. An AOL subscriber who has Internet access via a direct network connection (perhaps at work or on a university campus) can access the system via the Internet, but most AOL subscribers use modems to access the system, either directly or through a dial-up Internet account. Therefore, one who sends e-mail to an AOL subscriber can foresee that it will almost certainly be received over a telephone line.

While e-mail normally is not transmitted directly from the sender's computer to the recipient's own telephone line, the statute does not require a direct transmission; it merely requires that the advertisement be sent to a telephone facsimile machine. See 47 U.S.C. § 227(b)(1)(C). The sender's knowledge of the recipient's means of receiving e-mail is probably relevant only in determining whether the violation is willful, which affects the amount of damages. See 47 U.S.C. § 227(b)(3). However, devices that blur the distinctions between these technologies (such as e-mail-to-fax gateways) may render such distinctions less meaningful.

71. See *Hum in Electronic Mail Seen*, CHRISTIAN SCI. MONITOR, Jan. 19, 1982, at 11 (930 million e-mail messages were sent in 1980).

72. See William M. Bulkeley, *Sifting the Junk Out of E-Mail*, WALL ST. J., Feb. 28, 1991, at B1 ("Electronic junk mail is becoming a nuisance for many personal-computer users . . .").

73. All of the definitions of TFM that appear in various versions of the statute are stated in terms of the function of the device (sending or receiving printed documents over telephone lines) rather than the method it uses. See *supra* note 55.

74. See H.R. 2184, 101st Cong. (1989), reprinted in *Telemarketing Practices: Hearing on H.R. 628, H.R. 2131, and H.R. 2184 Before the Subcomm. on Telecommunications and Finance of the House Comm. on Energy and Commerce*, 101st Cong. 12-15 (1989).

solicited fax advertisements, and rendered it unlawful to send unsolicited advertisements to those on such lists.⁷⁵ Several bills concerning telemarketing and fax advertising were introduced over the next two years. The Telephone Advertising Consumer Rights Act would have instructed the Federal Communications Commission to prescribe rules to restrict unsolicited fax advertising.⁷⁶ The version ultimately passed by the Senate would have prohibited unsolicited fax advertising completely.⁷⁷ A similar Senate bill, the Automated Telephone Consumer Protection Act, also contained an outright ban on unsolicited fax advertising.⁷⁸ The ban remained intact in the House version of that bill, by then renamed the Telephone Consumer Protection Act of 1991 (TCPA),⁷⁹ and the Senate concurred in the House amendments.⁸⁰

The TCPA was enacted in response to a variety of complaints about telemarketing practices. The Congressional findings set forth in the act describe telemarketing calls generally as a nuisance and an invasion of privacy.⁸¹ The findings do not mention problems attributed to unsolicited faxes, such as cost shifting and tying up telephone lines.⁸² Those two complaints do appear, however, throughout the other documents that comprise the legislative history of the TCPA and related bills.

75. *See id.*

76. *See* H.R. 1304, 102d Cong., H.R. REP. NO. 102-317, at 2-5 (1991); S. 1410, 102d Cong., 137 CONG. REC. S8992 (daily ed. June 27, 1991) (companion bills). The bill included the following mandate:

(e) CONSIDERATION OF FACSIMILE MACHINE RESTRICTIONS. - Within 120 days after the date of enactment of this section, the Commission shall initiate a rulemaking proceeding to prescribe rules to restrict the use of any telephone facsimile machine or computer or other electronic device to send any unsolicited advertisement to the telephone facsimile machine of any person. In establishing such restrictions, the Commission shall consider -

(1) the extent to which unsolicited advertisements are transmitted through telephone facsimile machines;

(2) the extent to which recipients of such advertisements incur costs for such receipt; and

(3) the most cost effective methods of preventing advertising abuses with telephone facsimile machines.

H.R. 1304, 102d Cong., H.R. REP. NO. 102-317, at 5.

77. *See* S. 1410, 102d Cong., 137 CONG. REC. S16,200 (daily ed. Nov. 7, 1991).

78. *See* S. 1462, 102d Cong., 137 CONG. REC. S9874 (daily ed. July 11, 1991).

79. *See* 137 CONG. REC. H11,307 (daily ed. Nov. 26, 1991).

80. *See* 137 CONG. REC. S18,782 (daily ed. Nov. 27, 1991).

81. *See* Telephone Consumer Protection Act of 1991 (TCPA), Pub. L. No. 102-243, § 2, 105 Stat. 2394, 2394-95 (1991).

82. *See id.* While seizure of telephone lines is characterized as a threat to public safety, the findings appear to be referring to the use of automated dialing systems rather than fax transmissions. *See id.* § 2(5).

Representative Edward J. Markey, upon introducing the Facsimile Advertising Regulation Act, described the problem as follows:

Unsolicited advertising is beginning to clog FAX lines, restricting the owners' ability to use their machines for the purposes they originally bought them for and generating operating costs the users can't control. Unlike junk mail, which can be discarded, or solicitation phone calls, which can be refused or hung up, junk FAX ties up the recipient's line until it has been received and printed. The recipient's machine is unavailable for business and he or she incurs the high cost for supplies before knowing whether the message is either wanted or needed.⁸³

Congress clearly was concerned about the cost-shifting effects of unsolicited fax advertising. Representative Markey quoted a *Washington Post* story that compared unsolicited faxes to "junk mail with the postage due."⁸⁴ Legislators repeatedly complained about the cost of receiving and printing unsolicited faxes, but they were probably more concerned with the fact that costs were being shifted from advertisers to recipients than with the magnitude of those costs.⁸⁵

83. 135 CONG. REC. E1462 (daily ed. May 2, 1989) (statement of Rep. Markey).

Similar statements were made in support of the Telephone Advertising Consumer Rights Act and the Automated Telephone Consumer Protection Act when they were introduced two years later: "Unsolicited facsimile advertising ties up fax machines and uses the called party's fax paper. This costs the recipient both time and money." 137 CONG. REC. S8992 (daily ed. June 27, 1991) (statement of Sen. Pressler).

These unsolicited advertisements prevent the owners from using their own fax machines for business purposes. Even worse, these transmissions force the recipient to pay for the cost of the paper used to receive them. These junk fax advertisements can be a severe impediment to carrying out legitimate business practices and ought to be abolished.

137 CONG. REC. S9874 (daily ed. July 11, 1991) (statement of Sen. Hollings).

84. Jerry Knight, *The Junk Fax Attack: Why Maryland May Outlaw Unsolicited Advertisements*, WASH. POST, May 23, 1989, at C3, quoted in 136 CONG. REC. H5820 (daily ed. July 30, 1990) (statement of Rep. Markey).

Markey also referred to the cost-shifting effect as the House considered the final version of the TCPA:

When those junk faxes start coming over your machine, you do not think like a Republican or a Democrat, you just think how are you going to be able to get your hands around the neck of the person making you pay with your paper for whatever message they are trying to send you.

137 CONG. REC. H11314 (daily ed. Nov. 26, 1991) (statement of Rep. Markey).

85. Even in 1989, when all but the most expensive fax machines required thermal paper, a one-page fax probably cost the average recipient less than 10 cents to print. See, e.g., *A Bold Plan to End "Junk Fax,"* S.F. CHRON., Jan. 20, 1989; Peter Burrows, *Bill Would Put Some Fax on Hold*, NEWSDAY, June 29, 1989, at 43; cf. *Destination Ventures, Ltd., v. FCC*, 46 F.3d 54, 56 (9th Cir. 1995) (contrasting plaintiff's estimate of 2½ cents per page with FCC's claim of 3 to 40 cents); Carroll Lachnit, *Electronic "Junk Mail":*

Electronic mail has a similar cost-shifting effect. Although each message normally involves a somewhat lower cost to the recipient than is true of faxes, the cost-shifting effect—i.e., the cost borne by recipients relative to that borne by advertisers—is even higher, because unsolicited advertisements can be sent via e-mail at very low cost to the sender, and advertisers have little or no incentive to reduce the volume of e-mail advertisements.⁸⁶

The other major area of concern was the inconvenience involved in receiving unsolicited fax advertisements. Such advertisements could tie up a fax machine when its owner had a “legitimate” use for it.⁸⁷ Unlike the cost-shifting complaints, the inconvenience arguments were based primarily on anecdotal evidence, such as accounts of “fax attacks” and similar incidents.⁸⁸

C. Administrative Interpretation

The Federal Communications Commission is charged with implementing the regulatory aspects of the TCPA.⁸⁹ The FCC’s telemarketing rule paraphrases much of the TCPA; its definition of TFM is identical to the statutory definition.⁹⁰ The FCC has not stated whether a view on the applicability of the TCPA to electronic mail. However, it has ruled that computer-based fax

Judge Orders Fax Sender to Pay Businessman 22 Cents for Sending Unsolicited Ad, ORANGE COUNTY REG., July 3, 1991, at B8 (describing small claims judgment of 22 cents for an unsolicited fax, apparently one page long). As one commentator noted, the time required to take a one-minute marketing call is worth much more than the cost of printing a one-page fax. See Patrick Cox, *Curbing “Junk Fax”: The Market Will Deal with Fax Attacks*, USA TODAY, Feb. 8, 1989, at 8A.

86. See *supra* note 47 and accompanying text; cf. *Telemarketing Practices: Hearing on H.R. 628, H.R. 2131, and H.R. 2184 Before the Subcomm. on Telecommunications and Finance of the House Comm. on Energy and Commerce*, 101st Cong. 21 (1989) (statement of Rep. Shays) (“Junk mail may be annoying, but the sender at least pays the cost of the stamp and the paper it’s printed on.”).

87. See 136 CONG. REC. H5820 (daily ed. July 30, 1990) (statement of Rep. Ritter); H.R. No. REP. 102-317, at 25 (1991).

88. The governors of both Connecticut and Maryland were inundated with faxes critical of unsolicited fax legislation pending in those states, prompting both governors to sign the legislation. See 136 CONG. REC. H5820 (daily ed. July 30, 1990) (statement of Rep. Ritter). Cleveland Browns’ fans launched a “fax attack” on the Houston Oilers’ office before a football game. See *id.* A less dramatic but more relevant incident was described in a 1989 *Wall Street Journal* article:

After a big incoming order was rendered illegible by a 10-page junk fax that jammed its machine, American Small Business Computers Inc. in Pryor, Okla., tried to create a computer program that would turn around and blacken an entire roll of any junk advertiser’s fax paper. But the program didn’t work.

Michele Manges, *Junk Mail in the Age of Fax*, WALL ST. J., May 3, 1989.

89. See 47 U.S.C. § 227(b)(2) (1994).

90. See 47 C.F.R. § 64.1200(f)(2) (1996).

modems do qualify as TFM's.⁹¹ Because the FCC viewed the statute as "ambiguous" on this question,⁹² however, it probably would not interpret the statute as including computers capable of receiving and printing e-mail message, since this would require an even broader construction of the definition.⁹³

The language of the TCPA is ambiguous and even contradictory as to its applicability to electronic mail, and neither the legislative history nor administrative interpretations provide a clear answer. Therefore, the policy implications of construing the TCPA to cover e-mail, along with the availability and likely effectiveness of alternative approaches, should be the primary bases for deciding how the statute ought to be interpreted.

III. POLICY IMPLICATIONS

Interpreting the TCPA to cover unsolicited commercial e-mail would promote several laudable policy objectives. First, like the ban on unsolicited fax advertising, it would prevent marketers from shifting the costs of advertising to consumers. Furthermore, the private right of action created by the TCPA renders the statute self-enforcing; the problem of unsolicited e-mail might be resolved without extensive regulatory intervention.

Many people are understandably skeptical of governmental efforts to regulate the Internet and online services. The Clipper chip proposal,⁹⁴ the Communications Decency Act,⁹⁵ *Stratton*

91. See *id.* § 68.318(c)(3); Rules & Regulations Implementing the Telephone Consumer Protection Act of 1991, 10 F.C.C.R. 12,391, ¶¶ 27-31 (1995).

92. "The question of whether the definition of telephone facsimile machine includes fax boards is a matter of statutory interpretation that falls squarely within the scope of this proceeding. The statute is ambiguous with respect to this question and the legislative history provides no guidance."

Rules & Regulations Implementing the Telephone Consumer Protection Act of 1991, 10 F.C.C.R. 12,391, ¶ 30.

93. Since the TCPA was enacted, Congress has enacted another statute which imposes similar restrictions on telemarketers, though it does not repeat the ban on unsolicited fax advertising. The Telemarketing and Consumer Fraud and Abuse Prevention Act, 15 U.S.C. §§ 6101-08 (1994), is administered by the Federal Trade Commission rather than the FCC. The FTC's Telemarketing Sales Rule, 16 C.F.R. § 310 (1996), implements that statute. The FTC originally proposed to include e-mail and other online marketing efforts in the scope of the rule, but relented following protests by online industry groups. See *Comments of the Interactive Services Association on the Proposed FTC Telemarketing Rules*, Mar. 31, 1995, <<http://www.isa.net/pubpol/ftctele.html>> (on file with author and the *Buffalo Law Review*); Memorandum from Bill Moroney and Sarah Reardon to the Government Affairs Committee, Electronic Messaging Association, concerning the Proposed FTC Telemarketing Sales Rule, May 4, 1995, <http://www.ema.org/html/at_work/ftctelem.htm> (on file with author and the *Buffalo Law Review*).

94. The Clipper chip proposal was an ill-fated attempt by the U.S. government to

Oakmont, Inc. v. Prodigy Services Co.,⁹⁶ and similar events have produced considerable suspicion regarding government's ability to comprehend the culture and dynamics of computer networks. Indeed, even though the Internet itself traces its origins to a federally funded computer network, it has a long history of informal self-governance without governmental interference.⁹⁷ For these reasons, even many opponents of unsolicited e-mail tend to resist application of the TCPA or other laws to e-mail.⁹⁸

Another argument against federal regulation of e-mail relates to the government's ability to exercise control over electronic communications. Because the Internet and many online services are international networks, both practical and constitutional constraints may leave a single jurisdiction with little power to affect conduct that occurs or originates beyond its borders.⁹⁹ Bulk e-mailers might well locate abroad to escape the applicability of the TCPA.¹⁰⁰

provide people with a relatively secure means of encrypting communications, but with a back door that could be used by authorized government agencies. See generally A. Michael Froomkin, *The Metaphor Is the Key: Cryptography, the Clipper Chip, and the Constitution*, 143 U. PENN. L. REV. 709 (1995).

95. The Communications Decency Act (CDA) was part of the Telecommunications Act of 1996, Pub. L. No. 104-104, § 502, 110 Stat. 56, 133-43. Most of the CDA was struck down as unconstitutional in *ACLU v. Reno*, 929 F. Supp. 824 (E.D. Pa. 1996), *aff'd*, 117 S. Ct. 2329 (1997), and *Shea v. Reno*, 930 F. Supp. 916 (S.D.N.Y. 1996), *aff'd*, 117 S. Ct. 2501 (1997).

96. *Stratton Oakmont, Inc. v. Prodigy Services Co.*, No. 31063/94, 1995 N.Y. Misc. LEXIS 229, 1995 WL 323710 (N.Y. Sup. Ct. May 24, 1995), <<http://www.jmls.edu/cyber/cases/stratton.txt>> (holding that by exercising editorial control, online service acted as publisher rather than distributor for purposes of defamation action). The holding in *Stratton Oakmont* has been widely criticized and was nullified by a provision in the Communications Decency Act not challenged in the *ACLU* and *Shea* actions. See 47 U.S.C.A. § 230(c) (West Supp. 1997).

97. See generally Gigante, *supra* note 28; David E. Sorkin, *Revocation of an Internet Domain Name for Violations of "Netiquette": Contractual and Constitutional Implications*, 15 J. MARSHALL J. COMPUTER & INFO. L. 587 (1997); Kim S. Nash, *The Enforcers*, COMPUTERWORLD, Apr. 15, 1996, at 103.

98. See, e.g., Scott Hazen Mueller, *Serving Spam*, Post No. 2, Dec. 17, 1996, <<http://www.hotwired.com/braintennis/96/51/index1a.html>> (on file with author and the *Buffalo Law Review*).

99. See Kate Maddox, *Online Marketers Look Past the Web*, ADVERT. AGE, June 3, 1996, at 38, 40 (noting enforcement difficulties presented by e-mail from Liechtenstein); cf. Burk, *supra* note 28, at 1134 (arguing that state regulation of Internet activities is constrained by the Due Process Clause of the Fourteenth Amendment and the dormant Commerce Clause).

100. Flight abroad is a more likely possibility for e-mail advertisers than for those advertising by fax, since sending faxes from abroad requires the sender to pay international long distance telephone charges, while international e-mail is generally no more expensive than domestic e-mail.

Many e-mail advertisers promote goods and services that can be delivered via the

Perhaps the strongest objection to a complete prohibition on unsolicited e-mail advertising, however, is the effect that such a rule would have on legitimate commercial expression. While a ban would probably withstand constitutional scrutiny,¹⁰¹ it might well suppress advertising messages lacking an economically feasible alternative outlet, thereby stifling competition and innovation.¹⁰² Opponents of an outright ban also argue that a market solution is preferable: consumers wishing to be protected from unsolicited e-mail could choose a service provider such as America Online, which prohibits such messages and attempts filter them out, while those who want to receive e-mail advertisements (or who prefer to rely upon their own filtering devices) could choose other providers.¹⁰³

The debate over unsolicited commercial e-mail may be somewhat slanted by perceptions regarding its content and social value. E-mail advertising has not achieved the legitimacy of traditional direct mail advertising. Sending unsolicited e-mail

Internet, such as mailing lists, web design services, and sexually-oriented materials. Such businesses may exist primarily as a presence on the Internet, with little or no physical base. See, e.g., *State v. Granite Gate Resorts, Inc.*, No. C6-95-7227, 1996 WL 767431 (Minn. Ramsey County Dist. Ct. Dec. 11, 1996) <<http://www.jmls.edu/cyber/cases/ggorder.html>> (on file with author and the *Buffalo Law Review*), *aff'd*, 568 N.W.2d 715 (Minn. Ct. App. 1997) (asserting jurisdiction over a Nevada resident's Internet gambling service located in Belize); Scott Hazen Mueller, *Serving Spam*, Post No. 2, Dec. 17, 1996, <<http://www.hotwired.com/braintennis/96/51/index1a.html>> (on file with author and the *Buffalo Law Review*) (noting that phone sex services and pager scams have moved offshore, and bulk e-mailers now are doing so). The TCPA applies to the party whose goods or services are being advertised, however, so U.S.-based firms would not be able to circumvent the law simply by engaging foreign bulk e-mail services. See Rules & Regulations Implementing the Telephone Consumer Protection Act of 1991, 10 F.C.C.R. 12,391, ¶ 35 (1995).

101. The TCPA's ban on unsolicited fax advertising was upheld by the Ninth Circuit in *Destination Ventures, Ltd., v. FCC*, 46 F.3d 54 (9th Cir. 1995). The court in *Destination Ventures* held that even the plaintiff's estimate of 2½ cents per page of fax paper produced a significant shift in advertising costs to consumers, justifying the ban on unsolicited fax advertising. *Id.* at 56-57. The court noted, however, that it would consider the circumstances at the time the statute was enacted, despite the fact that technological advancements might subsequently reduce the burdensome effects of fax advertising. *Id.* at 57.

102. While large, established businesses may be able to attract consumers to their web sites by name recognition and advertising in traditional media, small businesses are more likely to turn to less expensive marketing methods such as unsolicited e-mail advertising. See Maddox, *supra* note 99, at 38; Janet Kornblum, *Spam King Challenged*, Dec. 5, 1996, <<http://www.news.com/News/Item/0,4,5967,00.html>> (on file with author and the *Buffalo Law Review*).

103. Cf. David Post, *The Case of Virtual Junk Mail*, AM. LAW., Nov. 1996, at 97 (arguing that people should be able to "choose from a diverse set of communities, each with its own rules . . .").

and the related practice of posting articles to excessive numbers of Usenet newsgroups are referred to disparagingly as "spamming,"¹⁰⁴ and the most egregious offenders may find their names and other personal information posted for public ridicule and harassment.¹⁰⁵ E-mail advertising is frequently used to promote fraudulent get-rich-quick schemes and other questionable ventures.¹⁰⁶ Unsolicited e-mail advertisements often misrepresent the sender's identity or the source of the recipient's name and e-mail address.¹⁰⁷

Unsolicited e-mail advertising as it presently exists is highly inefficient, mainly because advertisers bear such a small share of the costs that are involved. E-mail advertisers have no incentive to eliminate duplicate or obsolete addresses from their lists. They also have little incentive to target their marketing efforts.¹⁰⁸ Nonetheless, it may be premature to ban all unsolicited e-mail advertising, if for no other reason than because the Internet is still in a period of rapid development, and a ban might prevent the emergence of superior methods of addressing the problem. Many other approaches have been suggested or are already in use, some of which may be able to achieve the same or better results without the undesirable side effects of a government-imposed ban.

IV. ALTERNATIVE SOLUTIONS

While the TCPA as it presently stands may not cover electronic mail, there are many other approaches to the unsolicited e-mail problem. First, however, if an outright ban on unsolicited commercial e-mail is deemed appropriate, the statutory con-

104. See, e.g., Judith H. Bernstein, *Attack of the Killer Spam*, NETGUIDE, Nov. 11, 1995, at 91; Gleick, *supra* note 34.

105. See, e.g., Garfinkel, *supra* note 34; Axel Boldt, *Blacklist of Internet Advertisers*, Jan. 18, 1997, <<http://math-www.uni-paderborn.de/~axel/BL/blacklist.html>> (on file with author and the *Buffalo Law Review*).

106. See Fred Elbel, *How to Get Rid of Junk Mail, Spam, and Telemarketers*, Jan. 20, 1997, <<http://www.csn.net/~felbel/jnkmail.html>> (on file with author and the *Buffalo Law Review*); see also Frank Sowa, *Cyberworld Monitor*, BOARDWATCH, Dec. 1996 (describing investigations and monitoring of e-mail advertisers by FBI, FTC, IRS, SEC, and several states).

107. See Gleick, *supra* note 34.

108. See Tracey M. Dooms, *Junk Mail Moves On Line: Effective Advertising or Just a Nuisance?*, INDEPLS. BUS. J., Nov. 18, 1996, at 21. Some e-mail advertisers do prequalify recipients or target specific audiences. See, e.g., Judith H. Bernstein, *Marketing—Bulk Is Big Business*, NETGUIDE, Dec. 1, 1996, at 30; Rosalind Resnick, *Correcting Politically Incorrect Online Marketing*, DM NEWS, Dec. 2, 1996, at 40 (arguing that this approach seems to be the exception rather than the rule).

struction problem could be solved simply by amending the TCPA to state explicitly that unsolicited advertisements transmitted via electronic mail are prohibited. Alternatively, a separate federal statute could be enacted to prohibit unsolicited commercial e-mail.¹⁰⁹ Legislation that would attempt this on a state level has already been introduced in at least one state,¹¹⁰ and similar efforts are likely to follow elsewhere.¹¹¹

One set of responses to the unsolicited e-mail problem is recipient-based: self-help initiatives undertaken by the recipients of unsolicited messages. While reliance upon such efforts leaves the burden upon recipients, it does avoid the risks of overregulation and may maximize individual choice and the ability to adapt to technological advances.

Another set of responses is regulatory in nature, with standards to be established by either government or the participants themselves (network service providers, advertisers, or both). Self-regulation may well be the best option, but it may be difficult to secure unanimous agreement on what rules should apply to e-mail advertising.¹¹²

A. *Self-Help Efforts*

Many Internet users have attempted to stem the tide of unsolicited commercial e-mail messages by keeping their own e-mail addresses private. E-mail advertisers obtain addresses from a number of places; two of the primary sources seem to be the online directories available on services such as America On-

109. Existing statutes other than the TCPA also could be interpreted to prohibit unsolicited e-mail messages. America Online and CompuServe, for example, have argued that unsolicited e-mail messages directed at their subscribers violate the Computer Fraud and Abuse Act, 18 U.S.C. § 1030 (1994). See *Cyber Promotions, Inc. v. America Online, Inc.*, 948 F. Supp. 436 (E.D. Pa. 1996); *CompuServe, Inc. v. Cyber Promotions, Inc.*, No. C2-96-1070 (S.D. Ohio Oct. 23, 1996) <<http://www.jmls.edu/cyber/cases/cs-cp1.html>> (on file with author and the *Buffalo Law Review*); Wendy R. Leibowitz, *Geography Isn't Destiny: High Tech Is Reshaping Legal Basics*, NAT'L L.J., Sept. 23, 1996, at A1.

110. See S. 13, 69th Leg., Reg. Sess. (Nev. 1997). State regulation of unsolicited e-mail is likely to fail for the same reasons that states were frustrated in their attempts to regulate unsolicited faxes before the enactment of the TCPA. See Parker, *supra* note 39, at 479-81. However, efforts undertaken at the state level could serve as a useful model for federal legislation.

111. Representative Edward Markey reportedly has considered introducing federal legislation that would ban unsolicited commercial e-mail. See Garfinkel, *supra* note 34.

112. Unsolicited e-mail is analogous to the problem of the commons, in which one individual's consumption of shared resources imposes costs upon all others. Even a small number of nonparticipants thus could render a market solution ineffectual. See Akst, *supra* note 11.

line, and messages posted to Internet discussion fora, including mailing lists and Usenet newsgroups. By declining to be included in online service directories and omitting or disguising one's e-mail address in publicly posted messages, it may be possible to prevent an address from finding its way onto many advertisers' lists.¹¹³ Many Internet users maintain two or more different addresses in order to reserve one for personal or non-commercial messages,¹¹⁴ some companies use random character strings for addresses instead of surnames in order to prevent outsiders from guessing employees' e-mail addresses.¹¹⁵

Concealing one's e-mail address, however, is not a satisfactory solution for many Internet users, just as not everyone (even in California) wants to have an unlisted telephone number. Publishing one's fax number is not considered an invitation to advertisers who wish to send unsolicited faxes;¹¹⁶ similarly, publishing an e-mail address should not create a presumption that its owner is willing to bear the cost of unsolicited advertising messages.

Recipients of unwanted commercial e-mail messages often complain to the sender, asking to be removed from the sender's mailing list.¹¹⁷ Many e-mail advertisers include instructions for such removal in the text of advertising messages that they send.¹¹⁸ Similar "opt-out" systems are used by telemarketers (as required by the TCPA¹¹⁹) and direct mail marketers.¹²⁰ Unfortu-

113. E-mail advertisers use various programs to "harvest" e-mail addresses from Usenet databases and other sources. Many Internet users have responded by posting messages anonymously or under a fictitious address. See Henry, *supra* note 11, at 44.

114. See James Coates, *Cyberlynched! A Victim of Mob Justice on the Internet Frontier Lives to Tell the Tale*, CHI. TRIB., Jan. 16, 1997, § 5, at 1.

115. See Ed Foster, *Junk E-mailers Use Fake Identification to Slip Through AOL's Spam Ban*, INFOWORLD, Jan. 6, 1997, at 42.

116. See Rules & Regulations Implementing the Telephone Consumer Protection Act of 1991, 10 F.C.C.R. 12,391, ¶ 37 (1995).

117. A similar response is to complain to the sender's "postmaster," system administrator, or Internet service provider. This approach is likely to be successful only if the sender has violated applicable acceptable use policies. See Al Bredenberg, *Caveat Spammer: Marketers are Trying to Legitimize Internet Junk Mail, or Spam Through New Methods*, INTERNET WORLD, July 1996, at 68.

118. See Michelle V. Rafter, *Stop Spam*, Dec. 19, 1996, <<http://www.cnet.com/Content/Features/Howto/Spam/ss01.html>> (on file with author and the *Buffalo Law Review*).

119. 47 C.F.R. § 64.1200(e)(2)(vi) (1996) (requiring that telemarketers maintain "do-not-call" lists).

120. In addition to the company-specific "do-not-call" lists required pursuant to the TCPA, industry-wide direct mail and telemarketing exclusion lists are sponsored by the Direct Marketing Association. See *The Automated Telephone Consumer Protection Act of 1991*, S. 1462, 102d Cong. (1991); *The Telephone Advertising Consumer Protection Act*, S. 1401, 102nd Cong. (1991); *Equal Billing for Long Distance Charges*, Hearing on S.857

nately, these removal requests seem to be ignored as often as they are honored,¹²¹ and in some cases such a request may even lead to more rather than fewer unsolicited messages.¹²² And because many e-mail advertisers do not include a valid return address in their messages, it is not always possible to make a removal request.¹²³ Furthermore, the need to respond to each unsolicited advertisement with a separate removal request will become increasingly burdensome as the volume of unsolicited e-mail advertising increases.

A third recipient-based approach is to filter incoming e-mail, attempting to delete unwanted messages efficiently in order to minimize wasted time and resources.¹²⁴ However, filters are far from perfect, and many unsolicited commercial messages are likely to slip through.¹²⁵ It is difficult to filter out advertisements automatically without risking deletion of other correspondence,¹²⁶ and even the more efficient filters still do not completely prevent network resources from being consumed by unwanted messages.¹²⁷ While filtering technologies undoubtedly will improve over time, it is likely that the volume of advertising messages will increase and e-mail advertisers will become more adept at evading filters. Mandatory labelling of commercial e-mail messages, discussed below, would make effective filtering possible.¹²⁸

Before the Subcomm. on Communications of the Senate Comm. on Commerce, Science, and Transportation, 102d Cong. 35 (1991) (statement of Richard A. Barton, Sr. V.P., Gov't Affairs, Direct Marketing Ass'n).

121. See, e.g., Bernstein, *supra* note 108; Gleick, *supra* note 34; Jana Sanchez-Klein, *supra* note 21. But see Dooms, *supra* note 108 (noting that messages sent subsequent to a removal request could be considered illegal harassment under the Communications Decency Act, 47 U.S.C. § 223(a)).

122. See Foster, *supra* note 115 ("[T]he more often one replies to a junk e-mail message (even if it's a 'remove' request), the more likely one is to be targeted for additional messages from the same domain.").

123. See Gleick, *supra* note 34.

124. See *supra* text accompanying note 45.

125. "Filters have one major downfall: you can't block addresses you don't know about, and spammers change addresses more often than Dennis Rodman changes his hair color." Rajter, *supra* note 118.

126. See CLIFFORD STOLL, *SILICON SNAKE OIL* 97 (1995). When America Online began filtering out messages from known bulk e-mailers, it (perhaps inadvertently) blocked out entire Internet service providers believed to harbor spammers, preventing any of those providers' subscribers from sending messages to AOL subscribers. See Kim Girard & Mitch Wagner, *You Can't Send Mail There from Here: Anti-Spam Efforts Hinder E-Mail Delivery*, *COMPUTERWORLD*, Dec. 16, 1996, at 3.

127. See *supra* text accompanying note 45.

128. See *infra* text accompanying notes 141-42.

Finally, an increasing number of Internet users are resorting to retaliation against e-mail advertisers: directing hostile "flames" at the advertiser; flooding the advertiser with e-mail messages, telephone calls, or faxes; and posting information about the advertiser on World Wide Web pages or Internet discussion forums.¹²⁹ Many e-mail advertisers are now very cautious about the contact information they provide as a result of such tactics.¹³⁰ While these tactics may work on occasion, they can be illegal, and they tend to be ineffective at shifting costs back to the advertiser or otherwise deterring unsolicited e-mail marketing.¹³¹ E-mail bombs, for example, place the greatest burdens on the sender's and the advertiser's Internet providers, neither of which may even be aware of the advertiser's activities.¹³² Blacklists and similar attempts to castigate or boycott bulk e-mailers seem to have had little effect.¹³³ Furthermore, some e-mail advertisers have counter-attacked by including names of previous objectors in future advertising messages, subjecting them to retaliation by other incensed Internet users.¹³⁴

B. *Regulatory Approaches*

The ineffectiveness of self-help efforts has led many Internet users to call upon government, network service providers, and advertisers to address the problem of unsolicited commercial e-mail. Several industry groups have already ventured into

129. See, e.g., Bredenberg, *supra* note 117; Garfinkel, *supra* note 34; Nash, *supra* note 97; Wallace Wang, *Winning the War on Spam*, BOARDWATCH, Dec. 1996, <<http://www/boardwatch.com>> (on file with author and the *Buffalo Law Review*); Boldt, *supra* note 105.

130. See Garfinkel, *supra* note 34 (noting that e-mail advertiser Jeff Slaton advises clients to advertise using only a temporary voice-mail telephone number); see also Foster, *supra* note 115 (describing "hit-and-run tactics" used by e-mail advertisers).

131. "Consumer reaction [to unsolicited commercial e-mail] is pretty much the same as it is to traditional direct mail At first the hate mail seems a little nasty . . . but then, go into the mail room of any large mailer or telemarketer and see what you find." Hicks, *supra* note 44.

132. See Rafter, *supra* note 118.

133. See David Hoye, *Battling Junk E-Mail: Blacklists the Key Weapon in Cyberspace War*, ARIZ. REPUBLIC/PHOENIX GAZETTE, Apr. 29, 1996, at E1.

While blacklists and similar attempts to educate Internet users and bulk e-mailers may have limited success at diminishing the effectiveness of unsolicited e-mail advertising, the cost of such advertising is so low that it is likely to continue in spite of such efforts. Even an infinitesimal response rate may be sufficient for a direct e-mail advertising campaign to break even, unless recipients can successfully shift some of the costs back to the advertiser.

134. See, e.g., Todd Wallack, *Nothing Stops a Spammer*, NETWORK WORLD, Jan. 13, 1997, at 1, 12.

the area, including the Direct Marketing Association and the Interactive Services Association, which in 1996 jointly published a set of principles for unsolicited marketing e-mail.¹³⁵ Many Internet service providers have adopted acceptable use policies prohibiting unsolicited e-mail messages and refuse to cooperate with providers that permit such practices.¹³⁶ Because of the decentralized nature of the Internet and the low cost of entering the bulk e-mail market, however, self-regulatory efforts largely have failed to solve the unsolicited e-mail problem, and calls for government action are gaining increasing momentum.

One relatively uncontroversial requirement would force commercial e-mail messages to identify the sender and include a valid return e-mail address.¹³⁷ Such identification is generally required by existing e-mail protocols, but bulk e-mailers often circumvent this requirement, probably to avoid the retaliatory tactics discussed earlier.¹³⁸ Sender identification would enable recipients to filter out subsequent messages from bulk e-mailers, provide them with a means of requesting removal from mailing lists, and possibly make it reduce the incidence of fraudulent schemes advertised by e-mail. The TCPA requires sender identification for fax transmissions,¹³⁹ and a similar requirement ought to apply to commercial e-mail messages.¹⁴⁰

135. See Direct Marketing Association & Interactive Services Association, *Principles for Unsolicited Marketing E-Mail*, June 4, 1996, <<http://www.isa.net/pubpol/dma/spamming.html>> (on file with author and the *Buffalo Law Review*).

Two newer organizations that also are examining e-mail advertising issues are the Direct Electronic Mail Marketing Association, see Bredenber, *supra* note 129, at 72; and the Electronic Direct Marketing Association, see Bernstein, *supra* note 108.

136. See, e.g., Scott Hazen Mueller & Aliza R. Panitz, *Sample Acceptable Use Policies*, Nov. 21, 1996, <<http://www.vix.com/spam/aup.html>> (on file with author and the *Buffalo Law Review*); Scott Hazen Mueller, *Serving Spam*, Post No. 2, Dec. 17, 1996, <<http://www.hotwired.com/braintennis/96/51/index1a.html>> (on file with author and the *Buffalo Law Review*).

137. The Interactive Services Association's Guidelines on Online Solicitation, June 4, 1996, <<http://www.isa.net/pubpol/dma/onlinesolicit.html>> (on file with author and the *Buffalo Law Review*), for example, recommend disclosure of the names, e-mail addresses, and postal addresses of both the entity making the solicitation and the entity on whose behalf it is made. The Electronic Direct Marketing Association has indicated that its guidelines will require members to include at least a valid return e-mail address in each message. Electronic Direct Marketing Association, EDMA: Mission Statement, Nov. 18, 1996, <<http://www.edma.org/mission.html>> (on file with author and the *Buffalo Law Review*).

138. See *supra* note 129 and accompanying text.

139. See 47 U.S.C. § 227(d)(1) (1994).

140. While pseudonymous, anonymous, and perhaps even untraceable e-mail messages may be justifiable in some circumstances, there is little or no reason to permit such practices in the case of unsolicited commercial e-mail.

A related rule would mandate that commercial or bulk e-mail messages bear a prominent label, most likely a predefined code at the beginning of the subject line or elsewhere in the message header.¹⁴¹ Labelling messages would enable recipients to filter them out effectively, perhaps even selectively, and would reduce the likelihood that recipients would be misled by advertisements disguised as personal messages. Mandatory labelling is less intrusive than an outright ban: it places fewer restraints upon commercial speech, and it reduces or eliminates the need for Internet service providers and commercial online services to do their own blocking and filtering. However, like the sender identification requirement, it still fails to address the larger issue of bandwidth consumption, since the volume of unsolicited messages transmitted over the Internet is likely to increase even more dramatically with effective labelling and filtering systems.¹⁴²

Direct marketers have long favored opt-out systems over opt-in systems,¹⁴³ mainly because few consumers take the time to opt either way. Permitting those who do not wish to receive advertisements to opt out is a reasonable solution in the case of direct mail advertising, since the burden imposed upon the recipient is relatively small, and the volume of advertising material is constrained by the costs borne by the advertiser. Telemarketers are also permitted to use an opt-out system, provided they comply with federal regulations pertaining to the maintenance of "do-not-call" lists.¹⁴⁴ Because fax transmissions shift quantifiable costs to the recipient, however, the TCPA pro-

141. See, e.g., Akst, *supra* note 11 (suggesting that e-mail advertisements should have to be labelled as "junk," "bulk," or "advertising"); Resnick, *supra* note 108 (noting that Ralph Nader's Consumer Project on Technology and other groups advocate federally mandated labels on e-mail advertisements); Interactive Services Association, *Guidelines on Online Solicitation*, June 4, 1996, <<http://www.isa.net/pubpol/dma/onlinesolicit.html>> (on file with author and the *Buffalo Law Review*) (suggesting that unsolicited commercial messages include three asterisks at the start of the subject field); ReplyNet, Inc., *Unsolicited Junk E-Mail . . . It's Bad for Business*, Nov. 6, 1996, <<http://www.reply.net/junkmail.html>> (on file with author and the *Buffalo Law Review*) (supporting legislation to require that unsolicited e-mail messages bear a code in the message header indicating the type of advertisement and the nature of the products being offered).

142. See Scott Hazen Mueller, *Serving Spam*, Post No. 4, Dec. 19, 1996, <<http://www.hotwired.com/braintennis/96/51/index3a.html>> (on file with author and the *Buffalo Law Review*) ("I don't care how the stuff is tagged, 10 million messages a day each by only a thousand different spammers is going to crash systems all over the Internet.").

143. See, e.g., Jonah Gitlitz, *Opt-In Is Absolutely Unworkable*, DM News, July 15, 1996, at 52; Ken Liebeskind et al., *DMers Sound Off at DMS's List Day*, DM News, Sept. 4, 1995, at 2.

144. See 16 C.F.R. § 310.4(b)(1)(ii) (1996); 47 C.F.R. § 64.1200(e)(2)(vi) (1996).

hibits unsolicited fax advertising, effectively mandating an opt-in system.¹⁴⁵ An analogous argument can be made in support of an opt-in system for e-mail advertising.

E-mail advertisers urge Internet users to accept an opt-out system, promising to keep track of those individuals who request to be removed from mailing lists.¹⁴⁶ Industry groups have also raised the possibility of a universal exclusion list, which would eliminate the need for individuals to submit separate removal requests to each bulk e-mailer.¹⁴⁷ While the proliferation of e-mail advertisers will likely make company-specific exclusion lists relatively worthless, a universal list would probably afford adequate protection to consumers, provided that all (or nearly all) bulk e-mailers participated in the system.¹⁴⁸

While most of the direct marketing industry is hostile to opt-in systems, some advertisers have used such systems to their advantage. One bulk e-mailer, for example, urges advertisers to build "politically correct" mailing lists comprised of people who have voluntarily signed up to receive e-mail on specific topics.¹⁴⁹ Another possibility would be to permit advertisers to send a single, brief e-mail message inquiring as to the recipient's willingness to receive advertising material, either in general or by subject matter categories. If advertisers were to share their lists of persons who objected to or declined such inquiries (in effect, maintaining an industry-wide opt-out list), the objectors would not be subjected to repeated inquiries.

An approach likely to be attractive to many Internet users would permit recipients of e-mail advertisements to collect fees from advertisers in exchange for reading their messages. Some Internet users have attempted to institute such a system unilaterally, informing bulk e-mailers that they assess a specified fee

145. See 47 U.S.C. § 227(a)(4), (b)(1)(C) (1994).

146. See *supra* note 118 and accompanying text.

147. See Bernstein, *supra* note 108 (Electronic Direct Marketing Association); Bredenberg, *supra* note 129, at 72 (Direct Marketing Association); Larry Jaffee, *27-M E-Mail Address File Shopped; List Sparks Formation of Internet Regulatory Trade Association*, DM News, Jan. 15, 1996, at 4 (Direct Electronic Mail Marketing Association); see also Akst, *supra* note 11 (suggesting establishment of a central opt-out registry).

148. Internet users may at first be reluctant to participate in exclusion lists, for fear that such lists may be used as mailing lists by disreputable advertisers. See Aliza R. Panitz & Scott Hazen Mueller, *Frequently Asked Questions about Spam*, Dec. 26, 1996, <<http://www.vix.com/spam/faq.html>> (on file with author and the *Buffalo Law Review*) (noting that some people who have listed their addresses on existing exclusion lists have found themselves "flooded with spam . . . If we compiled a list and gave it to the spammers to delete, chances are they would just *add* all of the addresses to their target lists.").

149. See Bernstein, *supra* note 108, NETGUIDE, Dec. 1, 1996, at 30.

for receiving or "proofreading" each unsolicited commercial message directed to their accounts.¹⁵⁰ Ultimately, most such fees function punitively; even with a very high response rate, few bulk e-mailers would really be willing to pay a fee of up to \$500 to each potential customer, and the enforceability of such unilaterally imposed contracts is questionable.¹⁵¹

A payment system that probably makes more sense in the long term is one in which advertisers automatically pay recipients a much lower fee for each message, either predetermined or negotiated at the time that the message is transmitted.¹⁵² Future developments in electronic commerce will enable such transactions to be performed efficiently at the level of 10 cents or less, which still is significantly lower than the cost of sending a direct mail piece or making a telemarketing call. Such micropayment schemes are currently in development, but are not yet available to most Internet users.¹⁵³

CONCLUSION

Unsolicited electronic mail messages, most of which are commercial in nature, represent a growing problem for users of online services and the Internet. The Telephone Consumer Protection Act's overbroad definition of a "telephone facsimile machine" makes it possible to construe the Act's prohibition on unsolicited fax advertising as also applicable to unsolicited e-mail messages. Faxes and e-mail share many of the same characteristics, and in particular both shift costs onto the recipient of a communication. This cost-shifting effect was the primary basis

150. See, e.g., Henry, *supra* note 11, at 44; *About Junkbusters Spamoff*, Nov. 12, 1996, <<http://www.junkbusters.com/ht/en/spam.html>> (on file with author and the *Buffalo Law Review*). Similar tactics have been used against telemarketers with varying success by members of Private Citizen Inc., which publishes a directory of consumers who charge for receiving telemarketing calls. See Edward M. Eveld, *Getting Hung Up on Telemarketing*, KANSAS CITY STAR, Oct. 11, 1996, at A1.

151. Even if the advertiser has constructive knowledge of the individual's offer to receive unsolicited messages in exchange for a specified fee, a court would probably hold that the advertiser's act of sending unsolicited messages was not sufficient to constitute acceptance of the offer. Furthermore, the court might require that the fee reasonably reflect the actual costs borne by the individual in receiving the message, which probably will be extremely small. On the other hand, such cases are likely to be brought by in small claims courts, and recipients of unsolicited messages may be able to obtain default judgments based upon a unilateral contract theory.

152. See James Love, *Serving Spam*, Post No. 3, Dec. 18, 1996, <<http://www.hotwired.com/braintennis/96/51/index2a.html>> (on file with author and the *Buffalo Law Review*). Some experts simply propose assessing a per-message surcharge on all Internet users, akin to postage charges. See, e.g., Girard & Wagner, *supra* note 126.

153. See Bredenberg, *supra* note 129, at 73.

for the prohibition on unsolicited fax advertising, and could be used to justify applying the same law to e-mail. However, Congress almost certainly did not anticipate such a construction, and the Federal Communications Commission, which administers the statute, has not expressed no opinion on the matter. It therefore seems unlikely that the TCPA in its present form would be construed to prohibit unsolicited e-mail advertising.

Nonetheless, efforts to regulate unsolicited e-mail can be expected to gain momentum as the problem grows. Within a year or two several states may have attempted to ban e-mail advertising or require that it be clearly labeled. While Internet service providers and individual Internet users will continue to exert pressure on e-mail advertisers, technological advances and the decentralized nature of the Internet should enable advertisers to circumvent most such efforts. Mandatory labelling in particular seems to be a desirable solution from the perspective of computer users, but labelling also does not adequately address the technical problems posed by unsolicited messages and still would be subject to circumvention by determined advertisers.

The best solution may be one that combines industry initiatives such as voluntary labelling and universal exclusion lists with technical approaches such as filtering and mail blocking. Individual Internet users could choose from service providers that supply various levels of protection from unsolicited messages, and ideally providers could design e-mail services individually tailored to each customer's preferences. The role to be played by micropayment systems is less clear, though the availability of such systems likely will promote more efficient use of resources and could provide a partial solution to the cost-shifting problem.