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SPAM AND BEYOND: FREEDOM, EFFICIENCY, AND THE REGULATION OF E-MAIL ADVERTISING

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What if traditional direct mail advertisers proposed that recipients-the consumers to whom they mailed their advertisements-pay part of the postage? The proposal would perish in a firestorm of protest. It is surprising then that e-mail users tolerate a similar subsidy in the case of e-mail advertising. The subsidy occurs because senders do not bear the full delivery costs; recipients pay a portion.¹ Consequently, when the sender is an individual, business, or organization sending advertising (an advertiser, for short²), recipients subsidize the advertiser. The subsidy is substantial-approximately twenty billion dollars a year and in-

1. This point is commonplace in the case of unsolicited advertising e-mail. See e.g. Congressman Gary Miller, How To Can Spam: Legislating Unsolicited Commercial E-mail, 2 Vand. J. Ent. L. & Prac. 127, 127 (2000) (noting that "Receiving unsolicited commercial e-mail, also known as 'Spam,' is like receiving junk mail, postage due"). The literature has, however, simply overlooked that the same point applies to solicited advertising e-mail.

2. Although here we use the phrases "e-mail advertiser" and "advertising e-mail," it is more common to refer to "commercial e-mail," where a typical definition is: "any electronic mail message, the principal purpose of which is to promote, directly or indirectly, the sale or other distribution of goods or services to the recipient." California Business and Professions Code, § 17538.45. Such definitions may well be overbroad. For example, what if a college senior sends an unsolicited resume to a hundred potential employers? This is an "electronic mail message, the principal purpose of which is to promote... the sale ... of ... services to the recipient." *Id.* But should a private individual's employment search be subject to the same regulations as an e-mail advertisement from, for example, Amazon.com? There is no need to resolve such questions here. It is sufficient to note that our use of "advertising e-mail" is intended to apply primarily to the paradigm cases of advertising by businesses.

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creasing rapidly.³ Recipients suffer no such subsidies when using traditional communications networks such as newspapers, radio, television, and magazines, where advertisers subsidize non-advertisers. In the case of newspapers, for example, classified advertisements "account for about 40 percent of the revenues of the typical newspaper but only 10 percent of its costs."⁴ If "classifieds were lost, most newspapers would become financially unsustainable."⁵ Is the Internet different in some way that justifies a recipient subsidy of advertisers? It is different in a way that *explains* the subsidy but not in a way that *justifies* it. We can, and should, eliminate the subsidy by an appropriately designed statute because it violates—without adequate justification—the respect for individual freedom that lies at the heart of democratic political organization.⁶

This objection applies to both solicited e-mail (e-mail one consents to receive) and unsolicited e-mail (e-mail sent in the absence of consent). This bears emphasis because courts and commentators have focused almost exclusively on a sub-variety of unsolicited advertising e-mail. These are the e-mails commonly known as spam: "the bogus, lewd and annoying electronic messages that can flood user mailboxes and cripple networks."⁷ Spam has provoked a "wicked backlash that has included massive volumes of consumer complaints, vigilante action, and a spate of

4. Philip Evans & Thomas S. Wurster, Blown to Bits: How the New Economics of Information Transforms Strategy, Harv. Bus. School Press, 42 (2000).

5. *Id.* Magazines would be considerably more expensive without the support of advertising, and audiences do not pay to listen to the radio or watch network TV. They do pay for "pay versions" of TV such as cable and satellite, but, to the extent that providers of "pay versions" collect advertising revenue (or fees from content providers who themselves collect advertising revenue), advertisers subsidize the communication. In the case of telecommunications, telemarketers provide revenue to telecommunications companies.

6. The locus classicus is John Stuart Mill, On Liberty. For an insightful contemporary discussion, see Joseph Raz, The Morality of Freedom (1986).

7. Sam Vaknin, *The Economics of Spam*, eBookWeb. (Aug. 2, 2002) (available at <http://12.108.175.91/ebookweb/stories/storyReader\$1533?print-friendly=truerl>) [hereinafter *Economics of Spam*]. The Direct Marketing Association offers a similar characterization of spam in *The e-Mail Marketing Report: Executive Summary* (available at <http:// www.the-dma.org/cgi/registered/whitepapers/eMail_Market_Exec_Sum_SS.pdf>) ("On any given day, a typical e-mail user's mailbox may be half-filled with spams that advertise pyramid schemes, pornography, get-rich-quick scams, long-distance telephone rates, computer programs, lists of overseas spouses, and offers to participate in more spamming") [hereinafter *The e-Mail Marketing Report*]. For a more extensive catalogue of kinds of unsolicited e-mail, see *Porn Spam on the Rise*, ClickZ.com (July 10, 2002) (available at <http:// www.clickz.com/ emailstrategies/rpt>) (reporting a Brightmail survey on the kinds of spam e-mail).

^{3.} Serge Gauthronet & Etienne Drouard, Unsolicited Commercial Communications and Data Protection, 67 (available at http://europaa.eu.int/comm/internal_marrket/en/dataprot/studies/spamstudyen.pdf).

anti-spam legislation."⁸ An adequate response to spam is part of the solution to the e-mail advertising subsidy. But it is only part. If we are to adequately regulate the flow of e-mail information, we must broaden our focus beyond spam to include *non*-spam e-mail, both unsolicited and solicited e-mail. *All* forms of advertising e-mail impose a subsidy on recipients. The amount of the subsidy is a function of the volume sent, and, while the current amount of non-spam *un*solicited advertising email is relatively small, the volume of *solicited* advertising e-mail is *at least* as great as the volume of spam.⁹

In this context, it is worth noting that e-mails contain a wide variety of different types of information. In addition to advertisements, e-mail

2003]

^{8.} Kenneth Amaditz, Canning "Spam" in Virginia: Model Legislation to Control Junk E-mail, 4 Va. J. L. & Tech. 4, ¶ 1 (1999) (available at http://www.vjolt.net/vol4/issue/ home_art4.html>) (noting that aside "from e-mail obscenity, . . .[e-mail] technology's most notorious monster may well be unsolicited bulk commercial e-mail") [hereinafter Canning].

^{9.} In a 2000 report, the Direct Marketing Association predicts that in 2003 e-mail users will receive 226.7 billion solicited advertising e-mails as opposed to 75.6 unsolicited. The e-mail Marketing Report, supra n. 7. This is the only report that notes that the volume of solicited advertising e-mail is at least as great, if not greater, than the volume of unsolicited advertising e-mail (this Author's solicited advertising e-mail from Kluwer Publishing alone far exceeds the amount of unsolicited e-mail he receives). Solicited advertising e-mail is increasing rapidly. "E-mail marketing has rapidly become a cornerstone of Marketing Automation . . ., one of the primary and fastest-growing segments of Customer Relationship Management From 1999 - 2000, [solicited] e-mail marketing grew by more than 270 percent and has emerged as the killer application for marketing. Aberdeen research indicates that e-mail marketing will continue to grow through 2003, based on its simplicity, cost-effectiveness, and ability to retain long-term customer relationship." Aberdeen Group, e-mail Marketing: Relevancy, Retention, and ROI (available at http://www.aberdeen.com/ ab_company/hottopics/e-mailmarketing/default.htm.>); The Direct Marketing Association's figures are almost certainly underestimates. To get a more realistic estimate, consider that AT & T WorldNet, for example, receives "15 million to 20 million [e-mail] messages each day." The High Price of Spam. Business Week Online, 1. (available at <htp:// www.businessweek.com/technology/content/mar2002/tc2002031_8613.htmrl>) [hereinafter High Price]. Approximately eleven percent to twenty-six percent of these e-mails are unsolicited advertising e-mails. Id. at 1. Assuming that the volume of solicited advertising email is approximately the same, advertising e-mail accounts for twenty-two percent to fiftytwo percent of the e-mail received. This is a volume of 1.1 to 3.7 trillion a year for WorldNet alone. These numbers lend credence to the Jupiter Communications' claim that, by 2004, the average e-mail user will receive 1,600 unsolicited advertising e-mails a year. Keith Regan, Report: E-Mail Marketing to Reach \$7.5 B by 2005, E-Commerce Times (available at <http://www.ecomercetimes.com/perl/story/3265.html>); The total volume of unsolicited advertising e-mail would then come to at least 800 trillion-assuming at least 500 million e-mail users. The assumption is reasonable. Ninety percent of those who access the Internet use e-mail, Harris Poll #18, March 24, 1999 (available at http://www.harris interactive.com/harris_ poll/index.asp?PID=58rl>) [hereinafter Harris Poll], and there are 600 million Internet users, http://www.nua.ie/survey/how_many_oneline/rl (reporting a number of 605.60 million as of September 2002) [hereinafter, nua survey]. Assuming the volume of solicited e-mail is approximately the same, the total volume of advertising e-mail comes to 1,600 trillion.

consists of, among other things, personal messages, communications from employers to employees, "charitable fundraising solicitations, opinion surveys, religious messages, political advertisements, wartime propaganda, virus hoaxes and other urban legends, chain letters, and hate mail."¹⁰ While our focus is exclusively on advertisements, one important question is the extent to which we should generalize the approach we suggest to other forms of e-mail communication.

Section I explains why senders and recipients divide delivery charges and why such cost-division violates freedom; Sections II and III consider the question of whether the violation is justified. Section II focuses on spam. It defines what spam is, explains why sending it unjustifiably violates freedom, and proposes a statute designed to all but eliminate spam. Section III turns to non-spam advertising e-mail, explains why it too unjustifiably violates freedom, and proposes a second statute to redress this situation. Section IV concludes by raising the question of the extent to which these approaches to advertising e-mail should be generalized to non-advertising e-mail.

I. WHY THE SUBSIDY OCCURS AND WHY IT VIOLATES FREEDOM

E-mail users have only two options: cease using e-mail, or subsidize advertisers by paying a portion of the delivery charges. To understand how to regulate advertising e-mail, we need to understand why this is true.

A. WHY THE SUBSIDY OCCURS

We begin with an explanation of what counts as a "delivery charge." Such charges consist of costs that ISPs incur and, typically, pass on to their subscribers. These costs divide into two types: access costs and processing costs. Access costs: ISPs incur access costs when they buy access to the Internet.¹¹ The fee depends on the amount of data-both e-

^{10.} David E. Sorkin, Technical and Legal Approaches to Unsolicited Electronic Mail, 35 U. S. F. L. Rev. 325, 333 (2001) [hereinafter Technical and Legal Approaches].

^{11.} The backbone and regional networks exchange data under two sorts of arrangements: peering agreements and transit agreements. "While peering generally entails traffic exchange between two [network] providers without payment, transit entails payment by one provider to another for carrying traffic." *Characteristics and Competitiveness of the Internet Backbone Market*, United States General Accounting Office Report to the Subcommittee on Antitrust, Business Rights and Competition, Committee of the Judiciary, U. S. Senate, 11 (available at <http://www.goa.gov/new.items.do216.pdf>) [hereinafter *Internet Backbone Market*]; see also Pio Baake & Thorsten Wichmann, On the Economics of Internet Peering (available at <http://www.berlecon.de/tw/peering.pdf>) (discussing of the rationales for peering).

mail and non-e-mail-exchanged: the more traffic, the higher the fee.¹² Since e-mail contributes significantly¹³ to the amount of data traffic, e-mail contributes significantly to network access fees. *Processing costs*: An ISP incurs processing costs in two ways: when it processes e-mail through its computers and into the recipient's inbox; and when it processes e-mail from the sender's inbox through its computers on the way to a regional network.¹⁴ The more e-mail the IPS processes, the

Internet Backbone Market, supra n. 11, at 16. Fortunately, the ISP NetZero illustrates the sorts of fees involved. NetZero leases backbone access from various providers:

[o]ur agreements with wholesale telecommunications providers are generally structured in two ways. We have usage agreements under which we are charged for the aggregate number of hours that our users are connected to a provider's network. We also have capacity agreements under which we are charged for a fixed amount of wholesaler's telecommunications capacity in specific locations whether or not that capacity is fully utilized.

Annual Report Pursuant to Section 13 or 15(d) of the Securities and Exchange Act For the Fiscal Year Ended June 30, 2000, 18 (available at http://primezone.finsys.com/ed- gar_conv_html%5C2000%5C09%5C17%5C0000912057-00-0-13033.html>) [hereinafter NetZero Annual Report]. In fiscal year 1999 - 2000, advertising e-mail cost NetZero some fraction of \$63,515,000 in access fees. \$63,515,000 is the figure NetZero reports as "costs of revenue." Id. at 18. "Cost of revenues consists of telecommunications costs, depreciation of network equipment, occupancy costs and personnel and related expenses." Id. at 20 (emphasis added). Telecommunications costs are the costs of leasing backbone access. These costs comprise the bulk of the "costs of revenue"; indeed, the report identifies increases in Internet access fees as the major reason that its cost of revenues "jumped from zero dollars at NetZero's inception on July 21, 1997 to \$12.4 million for fiscal 1998 - 1999 to \$63.5 million for 1999 - 2000." Id. In 1999 - 2000, NetZero's backbone access fees were some large fraction of \$63.5 million. Of course, not all of these fees result from e-mail. They correlate with the amount of traffic the ISP exchanges with the regional network. E-mail is by far the most frequent activity of people online. Harris Poll, supra n. 9, and it may be that up to forty percent of e-mail sent is advertising e-mail. E-Mail: Killer App-or Just a Killer?, BusinessWeekOnline, (available at <http://www.businessweek.com/print/technology/content/mar2002/tc2002031_3760.htm>) (reporting that about twenty percent of the email the ISP MessageLabs receives is unsolicited advertising; assuming the volume of solicited advertising is about the same, the total comes to forty percent). So advertising email cost NetZero some significant fraction of \$63,515,000.

13. Ninety percent of the 600 million Internet users are also e-mail users, and e-mailing is the most popular online activity. See supra n. 9.

14. Aggregated across all ISPs, these costs are in the billions. It costs an ISP at least \$.00078 to process an e-mail. *America Online, Inc. v. Prime Data World Systems, Inc.,* 97-1652-A 12 (E. Dist. Va., 1998). The court arrives at this figure in assessing the damage the defendant caused when it "sent more than 130,000,000 [unsolicited advertising e-mails] to AOL and its members between November, 1996 and April, 1997." The court notes that "[a]t least one element of damage is easy to quantify: the value of the computer capacity tied up

^{12.} It is difficult to find reliable statistics in this area. As a recent report from the United States General Accounting Office laments,

We found no official data source that could provide information to allow an empirical investigation of the nature of competition in the Internet backbone market.... Neither FCC nor NTIA collect data on the provision of Internet backbone services... neither the Bureau of Labor Statistics nor the U.S. Census Bureau currently collects data directly on Internet backbone providers.

greater the costs it incurs. ISPs recover their access and processing costs primarily through the fees they charge their subscribers. 15

It is important to distinguish between delivery charges and *e-mail* management costs. The latter are the costs recipients incur directly in the form of the time and attention spent and mistakes made in identifying who sent the e-mails, and deciding whether to read, delete, or retain them. Spam and non-spam e-mail differ significantly in their e-mail management costs, a difference that is important later. Our focus at the moment, however, is on delivery charges. Why does e-mail advertising impose such charges on its recipients?

To answer, first consider a communications network-the United States Postal Service ("USPS")-that does not divide delivery costs. The USPS does not do so because it requires senders to pay postage that covers the cost of processing the mail from entry into the system to delivery to the recipient's mailbox.¹⁶ It is able to impose sender-borne postage because it is the single entity controlling entry into and exit from its network. To compare e-mail communication, imagine a hypothetical USPS that does divide delivery costs. The hypothetical USPS only delivers to and picks up from centralized warehouses. Mail users pay private delivery companies to pick up from and deliver to the warehouses, and those delivery companies in turn pay the USPS for access to the warehouses. To send a letter from Los Angeles to Chicago, for example, the sender's delivery company takes the letter to the Los Angeles warehouse; the USPS delivers it to the Chicago warehouse, where the recipient's company picks it up. This system divides delivery costs. Senders bear the cost of getting mail to a warehouse; recipients, the cost of getting it from one. This cost division occurs because a *multiplicity* of private delivery companies control access to the (hypothetical) USPS network.

The division would be only temporary if there were some mechanism the delivery companies could employ to compensate each other. Imagine, for example, that each company logged the amount of mail it received from other companies, and that the companies periodically compensated

15. See infra n. 22.

by . . . [unsolicited advertising e-mail] activity. AOL has submitted evidence establishing . . . that its computer costs are at least \$.00078 per message, without considering personnel or other costs associated with the computer's operation." *Id.* The per e-mail cost is small, but consider AT & T WorldNet which receives approximately three million to ten million solicited and unsolicited advertising e-mails a day. *High Price, supra* n. 9. Using the \$.00078 per message figure, this means the cost per day is between \$2,340 - \$7,800; per year, this is \$854,100 - \$2,847,000. In addition higher and higher volumes of e-mail place increasing demands on hardware. Hardware must be managed and maintained to continue to function properly.

^{16.} The postage does not fully cover the costs. The USPS lost \$1.5 billion in fiscal year 2002. *Postal News Release No. 02-036* (available at http://www.usps.com/news/2002/ press/ pr02_036. htm.>).

each other at a per letter rate. Each company would recover the costs it incurred in getting mail from the warehouses, and the companies could—and in a sufficiently competitive market would—pass some or all of the savings on to their subscribers in the form of lower fees and/or better service. Absent a compensatory mechanism, cost-division is inevitable where multiple fee-charging entities control access to a communications network.

The Internet has precisely this structure. A multiplicity of ISPs surround the Internet controlling access to it, and there is no compensatory mechanism in place.¹⁷ The Internet consists of a "hierarchy of networks with a large backbone network and many second-level and third level feeder networks."¹⁸ The first level, the backbone, consists of high speed fiber optic cables and routers (specialized computers that route traffic over the network).¹⁹ The second level consists of a variety of regional feeder networks that surround the backbone and carry data to and from it. The third level consists of ISPs that obtain their Internet access from the regional networks. A multiplicity of ISPs surround those networks, carrying data to and from them. The multiplicity is no accident. It is a consequence of the fact that the Internet is an *open* network. It is "open" in two senses. First, anyone can connect to the Internet; no governmental permission is needed.²⁰ Second, Internet connections are mediated by a common, non-proprietary language (the Internet Protocol); thus,

18. Pete Moulton, *Telecommunications Survival Guide*, 546 (2001) [hereinafter Survival Guide]. For a concise outline of the historical development of the Internet and a description of its current organization and structure, *see* Jeff Dodd, *Understanding the Internet*, in *How The Internet Works*, Smart Computing, 4 (Summer 2002). The description given in the text is highly schematic in its simple three-layered depiction of the Internet. The networks that form the Internet spread out over a continuum. Large backbone providers like MCI Worldcom, AT & T, and Sprint occupy one end. Small ISPs providing access to relatively few subscribers occupy the other end. In the middle, there may be no clear distinction between a backbone provider and a regional network and between a regional network and an ISP.

19. The backbone is itself a network of networks; Worldcom, AT & T, and Sprint, for example, own and operate different networks that comprise part of the backbone. Survival Guide, *supra* n. 18, at 546-48.

20. In this way, the Internet differs from those networks that one must be licensed to use-public roads, airplane routes, railways, various forms of wireless transmission, and so

^{17.} Compare the United States telecommunications network. The *Telecommunications* Act of 1996 ensures that a multiplicity of companies control access to that network. That act establishes "a framework under which local telephone markets in the United States would be opened to competition." Patrick DeGraba, *Efficient Inter-Carrier Compensation* for Competing Networks When Consumers Share the Value of a Call, 1 (available at <htp:// ftc.gov/be/workingpapers/wp251.pdf>) [hereinafter Compensation for Competing Networks]. The Act also creates a compensation mechanism. It provides for "the development of an inter-carrier compensation regime for inter-network traffic." 47 U. S. C. § 251(a)(1). The Act requires local exchange carriers to "establish reciprocal compensation arrangements for the transport and termination of telecommunications." 47 U. S. C. § 251(b)(1).

when one connects to the Internet, one can count on being able to communicate with the rest of the network.²¹ This design (or lack thereof) spawns a multiplicity of ISPs as businesses compete in the Internet access market.

Cost-division is the inevitable result because ISPs function exactly like the private delivery companies in the hypothetical USPS, and because there is no mechanism by which ISPs compensate each other for email delivery charges. Absent such a mechanism, ISPs recover their email delivery costs from fees they charge their clients.²² This is why

Kevin Werbach, *The Digital Tornado*, 8 (available at <http://www.fcc.gov/Bureaus/OPP/ working_papers/oppwp29.pdf.html>).

21. See M. J. Miller, Forward Thinking, PC Magazine, 8 (May 7, 2002). The Internet and the World Wide Web are open by design. The whole point of the Internet is to let disparate systems . . . connect with one another over IP (the Internet Protocol) . . . [W]hen Tim Berners-Lee created his WorldWide Web program, he designed it so that people could use it without permission because he knew that this was the only way he would get lots of users. And that's why you can easily link from one Web page to another. The Web wasn't the first . . . online community or hypertext system. But it was the most open, and that is why it has survived and thrived.

22. Compare the claim in Canning, supra n. 8, at ¶ 22, that "[s]pamming shifts advertising costs from advertisers to both Internet users and ISPs." This overlooks the fact that ISPs will recover their costs from their subscribers. Canning also notes that no cost-shifting occurs when e-mail users have free Internet access. Id. at \P 23. It is true that, at one time, several ISPs experimented with free Internet access. They relied on advertising revenue to recover their costs. Unfortunately, the experiment failed. NetZero (pre-2001) is a good example of a free, advertising-supported ISP. In 2001, NetZero merged with Juno to form United Online, the third largest ISP in the United States. Patricia Fusco, Top U. S. ISPs by Subscriber: Q1 2002 (available at <http://isp-planet.com/research/rankings/ usa.html>); see also Jim Wagner, United Online's Recipe for Success (available at <http:// isp-planet.com/news/2002/untd.020410.html>) (discussing the formation of United Online). United Online severely limits the free access it provides. NetZero's pre-2001 "business model, unlike traditional Internet service providers, does not have a measurable and predictable revenue stream from user access fees." NetZero Annual Report, supra n. 17, at 28. Instead, it "depends primarily on [its] ability to generate sufficient advertising revenues." Id. at 31. It generates "revenues through media fees referring [its] users to partners' websites, enabling customer registrations for partners and facilitating electronic commerce transactions." Id. at 19. The theory was that "a critical mass of users . . . [would] attract advertising and other sources of revenue." Jennie James, The Wages of Success, 156 Time Magazine Europe (Aug. 21, 2000) (available at http://www.time.com/europe/magazine/ 2000/0821/isp.html>) [hereinafter Wages of Success]. The theory looked sound when free ISPs rose to prominence in 1997 - 1998 when free ISPs rapidly gained millions subscribers. However, to cut costs, free ISPs typically offered reduced options and services relative to fee-charging ISPs and skimped on customer support. It is no surprise then that many sub-

on. Note also that not only does the Internet not require a license, it is also true, as Kevin Werbach emphasizes, that

the technology of the Internet allows new types of services to be layered on top of existing protocols, often without the involvement or even the knowledge of network providers that transmit those services. Numerous users can share physical facilities, and the mix of traffic through any point changes constantly through the actions of a distributed network of thousands of routers.

senders and recipients divide delivery costs with the result that e-mail users subsidize e-mail advertisers. The subsidy is significant. Twenty billion dollars a year is a reasonable estimate,²³ and, whatever the exact

scribers used their free ISP only sparingly; its actual function for many was as a back-up to a fee-charging ISP to which they also subscribed. The result was that the large number of subscribers did not translate into large use, and this made free ISPs unattractive to advertisers. Erik Rolland and Daria Fedotova, You Get What You Pay For: A Case Study of The Free ISP Mode and Spinway, 6 (available at <http://www.google.com/search?q=cache"r0tc HZKwQQ:condor.ucr.edu/class/rolland/ecomm/Cases/Spinway%2520Case.pdf>); as many have noted, the "[p]rofitability [of free ISPs] was tied to advertising revenues which failed to materialize." Howard Feinberg, No Free Dot-com Lunch (available at <http:// www.stats.org/spotlight/ ecommerce.htm>). In 2001, lack of advertising revenue led to the widespread failure of free ISPs. Erich Luening, Fewer Wired Homes as Free ISPs Vanish (available at <http://news.com.com/2100-1023-257211.html>) (noting that "Amid the recent economic and Net-advertising downturns, many companies have dropped their free ISP services, saying the offerings don't bring financial success. Earlier this year [2001]. Kmart's Bluelight.com Internet unit traded its free web access for a fee-based model. Web portal AltaVista also ended is free Net services shortly after company's parent, CMGI, closed its free ISP holding"). Indeed, it was already clear in 2000 that

in the land grab mentality of the Internet, some access providers are using low pricing structures to accumulate as many users as possible as quickly as possible. Such companies do not expect to make money from providing Internet access. Instead, they work on the theory that a critical mass of users will eventually attract advertising and other sources of revenue. The business reality has turned out to be quite different . . . "Many of these [low pricing structure] ISPs are subsidizing the costs of . . . [their] consumers without making up the difference in revenue from advertising and e-commerce."

Wages of Success (quoting Noah Yasskin, director, of European research at Jupiter Communications).

23. Focus first on *unsolicited* advertising e-mail. A recent European Union report estimates recipient-borne delivery costs to be about ten billion dollars a year worldwide. Serge Gauthronet & Etienne Drouard, *Unsolicited Commercial Communications and Data Protection*, 67 (available at <htp://europaa.eu.int/comm/internal_marrket/en/dataprot/studies/ spamstudyen.pdf>)[hereinafter, *Unsolicited Commercial Communications*]. The report offers the following calculation:

Assuming that an average Internet user paying a flat-rate fee of \$12 a month for 10 hours connection time . . . and using standard equipment (without a broadband connection) can download messages at the rate of about 180 K/bits per minute, the cost of downloading just 15 or so messages a day totaling between 500 and 800 K/ bit in size could be as high as \$30 a year. . . . [A]ssuming a worldwide online community of 400 million users, the global cost of downloading advertising messages using current technology may be conservatively estimated at \$10 billion.

Id. However, the point is *not* to provide a precise number. The point is that, whatever the precise number, recipient-borne delivery costs are large. Nonetheless, some comments are in order about the ten billion dollar number. First, the calculation assumes that users pay twelve dollars a month for ten hours of Internet access, or \$1.2 a minute; however, many users pay twenty dollars or more a month for unlimited access. This does not really alter the calculation, however. The average adult Internet user spends fifteen to twenty-four hours a month online. See Michael Pastore, *The Big Picture: Traffic Patterns* (available at <http://cybertatlas.internet.org/big_picture_/traffic_patterns/article>) (discussing an October 1999 survey that reports a figure of 15 hours a month); see also Harris Poll, supra n. 9 (reporting a figure of 6 hours a week). At \$20+ a month, users pay-more or less—\$1 per

amount, it will increase rapidly over the next few years.²⁴

B. THE VIOLATION OF FREEDOM

The objection to this subsidy is that it unjustifiably infringes on individual freedom. A critical aspect of individual freedom is the freedom to pursue plans and projects,²⁵ and, in a market economy, effective use of that freedom often requires spending money. The subsidy unjustifiably violates this freedom by compelling e-mail users to pay for advertising whether or not they wish to allocate their financial resources in that way. There are two claims here-one factual, one normative. The factual claim is that the division of delivery costs compels e-mail users to subsidize both unsolicited and solicited e-mail advertising. The normative claim is that compelling users to subsidize advertisers violates-without adequate justification-users' freedom to allocate their financial resources in ways that promote the pursuit of their ends. The "without adequate justification" is essential. Adequately justified constraints on freedom are acceptable; inadequately justified ones are not.

1. The Factual Claim

The recipient subsidy of e-mail advertisers results from structural features of the Internet. The subsidy may seem unproblematic, however. Taking unsolicited advertising e-mail first, why cannot ISPs protect their subscribers from the subsidy simply by blocking the e-mails from reaching their addressees? In the case of solicited advertising e-mail, why does the subsidy violate freedom? Solicited advertising e-mail is email one consents to receive, and, in giving consent, have recipients not

24. The amount of the subsidy is a function of the amount of advertising e-mail sent, and that amount will increase considerably in the next few years. See supra n. 9.

25. See Richard Warner, Freedom, Enjoyment, and Happiness (1987) (discussing freedom as a self-directed ability to realize plans and projects).

minute of time actually online. Second, the assumption that the average user receives "just 15 or so messages a day" exaggerates the amount of spam users receive, and this would seem to mean that the \$10 billion estimate is an overestimate (since the report obtains that figure by multiplying the \$.022 and \$.035 it costs to download an e-mail message (at 180 K/ bits per minute with a per message size of about 33 K/bit to 53 K/bit) by the number of e-mail messages received). A more reasonable estimate is one to five a day. "Jupiter Media Metrix estimates that each Internet user received 571 spam messages in 2001." *High Price, supra* n. 9 (presumably, the point is that the *average* Internet user received 571 messages, not that "each" user did); *see also E-Mail Continues Dominance of Net Apps* (available at <htp://www.clickz.com/emailstrategies/rept/article/php/8087412>) (reporting a 2001 Gallup Poll that found that a typical e-mail user receives 12 e-mail messages a day at work and 8 a day at home). Third, the report *under*estimates the number of Internet users. The underestimate compensates for the overestimate of the number of unsolicited advertising e-mails the average user receives. The number of Internet users is not 400,000,000 but 600,000,000. *See nua survey, supra* n. 9; *Harris Poll, supra* n. 9.

consented to pay the costs, costs they could easily avoid by withholding consent? Neither objection is correct.

a) Solicited E-mail Advertising

The "consent" recipients give to receive advertising e-mail is often ill-informed, and its voluntariness often questionable.²⁶ But, for the sake of argument, suppose this is not the case. Suppose that those who consent to receive advertising e-mail knowingly and freely consent to bear delivery costs; and that, when they withdraw their consent, advertisers immediately cease to send them e-mails. This would still not eliminate lack of choice. The reason lies in the way most ISPs assess subscriber fees.

Flat pricing is "the most common method currently used for access to the Internet."²⁷ Under a flat pricing scheme, "users pay a flat fee, usually monthly, which allows them to have access to the Internet at a particular service level."²⁸ Under this model, consent by one subscriber to receive advertising e-mail imposes delivery costs on all the other subscribers whether they receive the e-mails or not. Suppose, for example, that Sally and Roger use the same ISP, to which they pay the same flat fee. Sally receives no solicited e-mail advertisements while Roger receives eighty a week. Roger's greater activity imposes greater costs on the ISP,²⁹ but, since they pay the same fee, Sally subsidizes the advertisers sending e-mail to Roger. The only way she can avoid this is to cease

27. Alan E. Wiseman, *Economic Perspectives on the Internet*, 10 (available at http://www.ftc.gov/be/hilites/economicissues.pdf>).

29. See supra n. 12.

^{26.} Most recipients are unaware that e-mail advertising imposes delivery charges on them. See Tom Smith, The Biggest Reason Readers Hate Spam (available at <http:// www.internetweek.com/shared/printableArticle.jhtml?articleD=6400573rl>) (reporting a poll in which respondents were asked to identify the biggest negative impact of spam; no one identified the imposition of delivery charges). In addition, businesses engage in a variety of questionable practices to secure "consent." For example, when one registers one's accounts on the Citibank Web site (http://www.citibank.com) or registers to use the American Airlines Web site (http://www.aa.com), one is given the option of receiving various sorts of e-mail advertising. One selects this option by putting a check in a box next to the text describing the offer. The text is typically short and does not indicate the amount of e-mail one will receive, so it is difficult to make an informed decision (to the extent that such a decision depends on knowing how much e-mail one will receive). In addition, various practices reduce the voluntariness of one's "consent." To begin with, the box is often checked by default. Users frequently overlook this fact and leave it checked even though they do not desire to receive the e-mails. This is a common practice on commercial Web sites. In addition, many sites are designed to recheck the box if the user revisits the page. The consequence is that if the user makes a mistake in registering and returns to correct it, the box is checked even if the user unchecked it earlier. In such cases, the box often remains checked since it is natural to assume that, once one unchecks it, it remains unchecked.

^{28.} Id.

to subscribe to a flat-fee ISP.³⁰

One obvious solution is to a switch from a flat-fee model to a "usagebased" one. On the latter model, if a recipient consents to receive e-mail from an advertiser, only that recipient bears the associated delivery costs. In Europe, for example, it is typical to pay per minute fees for Internet access.³¹ Per minute charges are of course by no means the only possible usage-based pricing model. In the case of e-mail, for example, one might charge by the amount of e-mail one sends and receives (the amount might be measured in a variety of ways-for example, by number of bytes of information sent or received per minute through the ISP). Under such a scheme, Sally would pay less for her Internet access than Roger because she receives no solicited advertising e-mail and hence would incur no related per minute charges. Roger would pay the charges incurred in dealing with his eighty e-mails weekly.

Mandating usage-based pricing is unattractive, however. Usagebased pricing requires keeping track of the amount of time each user spends online. However, over the last several years, the cost of using communication networks has dropped so sharply that there is little point in keeping track of the pennies per minute that it costs to use a network, and ISPs and telecommunications companies have turned to flat pricing to avoid the recording and accounting costs.³² In addition, mandating

32. Unsolicited Commercial Communications, supra n. 23, at 67; see also Eric Krapf, Voice Services Pricing: How Low Can They Go?, 27 Bus.Coms. Rev. 24 (July 2002) (discussing declining costs for long distance telephone services); Robert C. McDonald, Local Call Pricing: A Critical Element of a Successful Internet Policy, presentation to III Telecommu-

^{30.} Canning, supra n. 8 misses this point. It claims that for "users who pay a flat monthly fee ... there is no tangible cost-shifting." Id. at \P 23.

^{31.} See e.g. Robert Zeithammel, German ISP to Introduce Flat Fee (available at http:// news.com.com/2100-1023-237290.html>) (noting that "Contrary to access in the United States, where local phone calls are free. Internet access and local phone calls in Europe are charged by the minute") [hereinafter German ISP]. While it is generally correct that both Internet access and local phone calls are charged by the minute, there are exceptions. See Flat Rate Versus Per Minute Charges for Telephone Service: The Relationship Between Internet Access and Telephone Tarriffs, 3-4 (available at http://www.gipiproject.org/prac-ternet-access-and-telephone-tarriffs, 3-4 (available at). For a discussion of both usage-based and flat fees for Internet access and an analysis the interaction of both with different models of paying for telephone services, see Juan del Campillo, ISP Interconnection and Flat-Rated Internet Pricing, Journal of Economic Literature (available at http://econwpa.wustl.edu: 8080/eps/ io/papers/ 0207/0207002.pdf>) [hereinafter ISP Interconnection and Flat-Rated Internet Pricing]. Note that per minute pricing need not be usage-based. Per minute pricing could spread costs in just the way flat pricing does. Cost spreading would occur under two conditions. First, users varied in the extent to which the time they spent online imposed costs the ISP; second, the ISP charged all users the same per minute fee. Low cost users would then support high cost users, who would not pay the full cost of their activities. Usagebased fees may thus spread costs just as flat fees do. This Article uses "usage-based pricing" to mean a pricing mechanism that tracks usage and does not spread costs. The discussion in the text assumes that per minute pricing is usage-based pricing.

usage-based pricing takes the decision of what pricing model to use out of the hands of ISPs. Other things being equal, letting market participants, including ISPs, decide when, what, how, and with whom they buy and sell is more efficient.³³ There is still considerable controversy over Internet pricing models and their consequences, especially their interaction with the traditional telephone system. Finally, subscribers generally prefer flat pricing.³⁴

We assume that most ISPs will continue to use flat pricing, and that as a consequence, e-mail recipients cannot avoid e-mail delivery charges even in the case of solicited advertising e-mail.

b) Unsolicited E-mail Advertising

Huge amounts of unsolicited advertising e-mail deluge ISPs.³⁵ The torrent imposes significant costs on them,³⁶ and, if they cannot block the flood, they must recover these costs through subscriber fees,³⁷ with the result that e-mail users subsidize unsolicited e-mail advertisers. But is it really true that ISPs are unable to block the e-mails? After all, two technologies-spam filters and IP address blocking-provide ways to pre-

33. Arthur Okun summarizes the efficiency claim:

Arthur Okun, Equality and Efficiency: The Big Tradeoff, 50 (1975) [hereinafter Okun, Equality and Efficiency]. There are many exceptions to this scenario. See Charles E. Lindblom, The Market System: What It Is, How It Works, and What To Make of It, 147-165 (2001) (emphasizing that in practice efficiency is a function of both the market and appropriate legal regulation) [hereinafter The Market System].

34. See German ISP, supra n. 31 (noting that several studies argue that lack of flat rate pricing has prevented the spread of the Internet in Europe).

35. See supra n. 9.

36. See supra nn. 12 and 23.

37. See supra n. 20.

2003]

nications Forum, June 27, 2000 (available at <http://www.citel.org/PCC1/iiiforum/ presentations/P1-987P_I.pdf>); Flat Rate verus Per Minute Charges for Telephone Services: The relationship between Internet Access and Telephone Tarrifs (available at <http:// www.gipiproject.org/practices/perminutepricing.pdf>); German ISP, supra n. 29 (noting that several studies argue that lack of flat rate pricing has prevented the spread of the Internet in Europe).

The case for efficiency of capitalism rests on the theory of the "invisible hand," which Adam Smith first set forth two centuries ago. Through the market, greed is harnessed to serve social purposes in an impersonal and seemingly automatic way. A competitive market transmits signals to producers that reflect the values of consumers. If the manufacture and distribution of a new product is profitable, the benefits it produces to buyers necessarily exceed the costs of production. And these costs in turn measure the value of the other outputs that are sacrificed by using labor and capital to make the new product. Thus, profitability channels resources into more productive uses and channels them away from less productive ones. The producer has the incentive to make what consumers want and to make it in the least costly way. Nobody is asked to evaluate what is good for the system or for the society; if he merely pursues his own economic self-interest, he will automatically serve the social welfare.

vent the delivery of advertising e-mail. Unfortunately, neither technology provides a way to avoid subsidizing advertisers.

A spam filter is hardware and software that analyzes incoming email and blocks the delivery of e-mail that does not meet the filter's criteria of acceptability.³⁸ The filter performs these tasks *after* the e-mail arrives at the ISP;³⁹ consequently, the ISP still incurs delivery costs-both network access and internal processing costs – so the ISP still has to recover these costs through subscriber fees.⁴⁰ The same problem plagues IP address blocking. An IP address is a string of numbers that uniquely identifies a computer linked to the Internet; computers use the addresses to communicate with each other.⁴¹ When e-mail is delivered, an ISP can determine the IP address from which it was sent and can then block the delivery of e-mails from that address. The block occurs through the use of a firewall⁴² *after* the e-mail arrives at the ISP, so, just as with spam filters, the ISP incurs delivery costs.⁴³

2. The Normative Claim

E-mail users cannot avoid subsidizing e-mail advertisers. The subsidy violates recipients' freedom. The normative claim is that it does so without adequate justification. What shows that the violation is unjustified? Market economies exhibit many constraints on freedom-some justified, some not. Indeed, merely "to survive in the market one must make a particular kind of contribution-a marketable one. No other alternative is open; no choice. Most adults, then, in a market system work

41. Frank J. Derfler & Les Freed, How Networks Work, 117-18 (2003).

42. A firewall consists of hardware and software that can (among its other functions) block data from specified IP addresses from further access to the ISP. *Id.* at 164 - 65. For a more technical discussion of firewalls and their limitations, *see* Matthew Strebe & Charles Perkins, *Understanding Firewalls*, Security Complete, 373 (2002).

43. In addition, the ISP bears the cost of maintaining and configuring the firewall (the list of undesirable IP addresses must be constantly updated as spammers change the IP addresses to avoid IP address blocking).

^{38.} See In With The Good, Out with the Bad, How the Internet Works, Smart Computing, 181 (Summer 2002) (available at http://www.smartcomputing.com/editorial/article.asp).

^{39.} Id. at 183 (stating that the filter may be installed on the desktop or the server).

^{40.} Indeed, spam filters increase costs advertising e-mail imposes on ISPs as the ISPs incur the costs of providing and operating the filter. In addition, a considerable amount of unsolicited advertising e-mail will evade the filter, and some legitimate mail will be blocked. See Stefanie Olsen, AT & T Spam Filter Loses Real E-Mails, 1 (available at http://zdnet.com.com/2102-1105-982118.html). Note that "AOL Time Warner says it spends up to fifteen dollars of its user's monthly fees' fighting spam. AT & T spends \$35,000 a month, and WorldCom has thirty people dedicated to fighting spam." Sharon Gaudin & Suzanne Gaspar, The Spam Police (available at http://www.nwfusion.com/research/2001/0910feat.html) [hereinafter The Spam Police].

or perish."⁴⁴ More generally, it is not unusual to have little or no choice about what commercial relationships one enters (about the choice of a cable company or health insurance plan, for example). In at least some cases, the resulting benefits justify the constraints on choice.⁴⁵

Balancing the value of freedom against the benefits derived from its violation is often a difficult task, and proposed trade-offs typically provoke considerable controversy. Determining whether the e-mail advertising subsidy is adequately justified presents no such difficulties, It would if the subsidy yielded some significant social gain. We would have to balance the gain against the violation of freedom. However, there is (almost) no gain to balance. The subsidy results in an economically inefficient system of advertising e-mail that imposes a significant social *loss* in the form over-mailing. The inefficiency of subsidized advertising email justifies-indeed, given the interference with freedom, *requires*-eliminating subsidy.

II. WHAT SPAM IS AND WHY IT IS INEFFICIENT

We begin by seeing why spam is inefficient. The first step is to define spam. The definition highlights the features that make spam inefficient, and, in doing so, the definition guards against overbroad regulation. The threat of overbroad regulation arises out of the violence of the backlash against spam. There is no consensus about exactly what spam is. "From the start, the term 'spam' developed into a catchall term for unwanted e-mail of all kinds."⁴⁶ Ill-defined, "catchall" terms make for overbroad regulation. If we are to regulate spam appropriately, we need a definition that identifies just what it is about spam that requires legal regulation.

^{44.} The Market System, supra n. 31, at 187. Lindblom notes that the "classical economists applauded *The Market System* because it coerced the masses to work through the 'silent, unremitting pressure' of hunger." *Id.*

^{45.} The point is a common one in the philosophical literature. See e.g. John Finnis, Natural Law and Natural Rights, 219-220 (1980). Courts routinely balance freedom against benefits in a variety of contexts. See e.g. Goldberg v. Kelly, 397 U.S. 254, 266 (1970) (balancing due process rights, and hence the freedom to effectively pursue one's claims, against the costs of reviewing administrative rulings); Mathews v. Eldridge, 425 U.S. 319, 348 (1976) (balancing due process rights against the costs of reviewing administrative rulings); Destination Ventures, Ltd. v. FCC, 46 F.3d 54, 56 (9th Cir., 1995) (balancing a business's free speech right to send unsolicited fax advertising against the costs such advertising imposes on recipients).

^{46.} Spam: Unsolicited Commercial E-Mail By Any Other Name, The J. of Internet Law, 2 (available at <http://www.gcwf.com/articles/journal/jil_sept99_1.hmtrl>) [hereinafter By Any Other Name].

A. Defining Spam

Two definitional approaches dominate the literature. One defines spam in terms of the content of the e-mail message; the other, in terms of the volume of e-mail sent. Content-based approaches typically characterize spam as unsolicited e-mail consisting of deceptive, disreputable, or unsavory content.⁴⁷ There is, however, no consensus on the required type of content. As just noted, "spam" is "a catchall term for unwanted email of all kinds."⁴⁸ The "excessive volume" approach avoids controversies over content by insisting that content is irrelevant to whether an email counts as spam.⁴⁹ The "excessive volume" approach counts as spam as any unsolicited e-mail sent in excessive amounts.⁵⁰ Again, there is lack of consensus. Some insist, and others deny, that sending the same unsolicited message to more than one recipient qualifies as excessive.⁵¹ The definition we offer is a version of the "excessive volume" approach. The definition identifies those aspects of spam that guarantee its inefficiency.

We start with an example, the Nigerian Money Offer, and then generalize to the definition. The Nigerian Money Offer e-mail purports to come

from someone in an African country who claims to have amassed a fortune and wants to transfer it to your bank account for safekeeping. "The person offers you millions to hold the money in your bank account temporarily, but it is a pack of lies.... There is no fortune and the purpose of the scam is to take the money out of your account, not put money in it.'⁵²

50. Id. at 2. "Others, including the creators of the respected Net Abuse FAQ site, believe that . . . it is excess multiple postings of the same message that makes a message spam." Id.

51. The Mail Abuse Prevention System, for example, defines spam as any unsolicited e-mail sent to multiple recipients. Mail Abuse Prevention System (MAPS) is a nonprofit California corporation devoted to the elimination of unsolicited advertising e-mail. The Spam Police, supra n. 40 (discussing the MAPS and similar services, of which MAPS is the largest). The Direct Marketing Association Online Marketing Guidelines and Do the Right Thing Commentary (permitting the sending of multiple unsolicited advertising e-mails) (available at <http://www.the-dma.org/guidelines/onlineguidelines.shtmlrl>); MAPS, DMA to Internet: Shut Up and Eat Your Spam, (objecting to the Direct Marketing Association's position) (available at <http://mail-abuse.org/anti-dma.htmlrl.>).

52. In 2000, the Nigerian money offers was the fastest growing Internet fraud. The number of such e-mails increased 900 percent from 2000 to 2001. See http://www.nclnet.org./emailscamspro2.html. The scam is illegal, of course. The focus here,

^{47.} See supra n. 7.

^{48.} Faye Jones, By Any Other Name, supra n. 46, at 2.

^{49.} The Net Abuse FAQ (available at http://www.cybernothing.org/faqs/net-abuse-faq.htmlrl) "Spam' doesn't mean 'ads.' It doesn't mean 'abuse.' It doesn't mean '[e-mail] whose content I object to.'" *Id.* The Net Abuse FAQ is a respected source of information about the norms governing Internet behavior.

The goal is to reach those recipients who are sufficiently gullible to give the sender access to their money. The sender's problem is that very few are sufficiently gullible. One solution is to "target" the e-mails. Targeting is the process of matching messages to recipients in a way that maximizes the likelihood that the message will produce the response the sender desires. Legitimate businesses typically target their advertising.⁵³ The sender of the Nigerian Money offer cannot do so, however. There is no way of identifying in advance of sending the e-mails the few that are so gullible that they will fall for the scam. So the sender sends millions upon millions of *untargeted* e-mails to fish for the sufficiently foolish.⁵⁴ The sender can afford to do so because the cost is very low.

Costs are low for three reasons. First, it costs little to obtain millions of untargeted e-mail addresses, around 0.000032 per address.⁵⁵ Second, the per-message delivery charge is also quite low: 0.000125 or less, and the cost declines with increases in e-mail volume.⁵⁶ Third, the

The heightened importance of "understanding the customer" to the modern business enterprise ... is evidenced by the market's fascination with CRM [customer retention management] as a tool to 'enhance the value of customer relationships'... Respondents overwhelmingly mentioned importance of ... providing information "where, when, and how" customers want to receive it.

54. This plan is typical of the sorts of e-mails on which content-based definitions of spam focus, the e-mails consisting of "sex, scams, get rich quick schemes, financial services and products, and health articles of dubious provenance." *Economics of Spam, supra* n. 7. As in the case of the Nigerian Money Offer, the senders are typically send millions of e-mails to fish for the relatively few who will respond positively.

55. For \$79.95, for example, The Bulk E-Mail Superstore offers a "Platinum" service that allows one to "send 13,000 [e-mails] per hour" with access to the Superstore's collection of 25 million e-mail addresses." See http://www.homeuniverse.com/emailplatinum2. htmrl>. The service also includes an "E-Mail Address Extractor . . . [that] will automatically extract fresh e-mail addresses from all Newsgroups, Online Providers and any text file, even Web Pages!!! Any webpage that you can save as a text file E-Mail Platinum will automatically extract the e-mail addresses right out of that webpage!!!" Id. (exclamation points in the original). As the Direct Marketing Association notes, Spammers buy (or otherwise obtain) lists "containing 10 million, 25 million, even 50 million e-mail addresses." The DMA's State of the Interactive E-Commerce Marketing Industry Report: 2000 Emerging Trends and Business Practices (available at http://www.the-dma.org/library/publications/interactiveecommerce.shtml.>).

56. See Sam Vaknin, *The Economics of Spam*, eBookWeb. (Aug. 2, 2002) (available at <http://12.108.175.91/ebookweb/stories/storyReader\$1533?print-friendly=truerl.>) In general, spammers handle their ISP fees in two ways: illegally, or legally. Taking the illegal

2003]

however, is on another objectionable aspect of the e-mails: the abuse of e-mail communication through over-mailing.

^{53.} Don Peppers & Martha Rogers, *The One To One Future: Building Relationship One Customer at a Time*, 138 (1996) [hereinafter *The One To One Future*]. Advertisers target because it makes advertising more effective. When "two marketers are competing for the same customer's business, all other things being equal, the marketer with the greatest scope of information about that particular customer (and hence the more targeted advertising)... will be the more efficient competitor." *Id.* The marketing and advertising literature takes it for granted that advertisers target their advertising. As a recent survey notes,

sender saves money in one other important way. The sender ignores "opt-out requests," requests from recipients to be removed from the email list. The sender does so because it costs more, in time and effort, to remove the name than to leave it on. The only cost to the sender of ignoring opt-out requests is the cost of mailing to that address if the list is used again, and this cost is a tiny fraction of a penny. There is no other downside; the sender does not care if e-mails annoy or anger any given recipient; the sender cares only about the gullible. This means the sender need not invest in the time and personnel needed to prune the email lists in response to opt-out requests.

We define the *paradigm case* of spam as completely untargeted email from a sender who completely ignores recipients' opt-out requests. The point of the "paradigm case" qualification is that the definition characterizes one end of a continuum. The other end consists of e-mails sent by advertisers who target their e-mails as precisely as possible and who comply with all opt-out requests. Spam consists of e-mail sufficiently like the paradigm case, e-mail at *or near* the "completely untargeted, no

approach first, spammers are notorious for masquerading as non-advertisers to obtain an e-mail account from an ISP at the low monthly rate they offer ordinary, individual users. The contract governing the use of such an account prohibits using it to send massive amounts of advertising e-mail. The advertiser uses the account in precisely this way until the ISP exercises its right under the contract to terminate the account for misuse. The spammer may then simply repeat the process by opening another account with another ISP, or with the same ISP under a different name. The fees are low, and the per message cost is very low. Hence, the low per message cost means that the contribution of ISP fees to the average cost of sending an e-mail is quite low. The per message cost decreases with volume. As Dave Rand, one of the Internet's pioneers, observes, it "costs spammers little to send out huge volumes of spam (and many are apparently stealing credit card numbers or using other techniques to further reduce the cost)." Sharon Gaudin, Q & A: Dave Rand on spam, NetworkWorldFusion (Sept. 10, 2001) (available at <http://www.nwfusion.com/research/2001/0910featside4.html.>). Spammers who take the legal approach pay signifcant fees. ISPs charge significant fees to advertisers sending large volumes of e-mail. NetAtlantic, for example, charges \$7,500 for an e-mail account that permits 60 million e-mails a month; \$12,000 for 120 million; and, \$22,000 for 300 million. See Extreme Hosting with Dedicated Lyris E-Mail Servers, § price list (available at). Note, however, that the per message cost is very low: \$.000125; \$.0001; and \$.000073, respectively; note also that the per message also declines with increases in volume. Id. Some ISPs welcome spammers as clients. For example, one "selfdescribed spammer," Ronnie Scelson,

who signed a contract with PSInet, (says) that backbone providers are more than happy to do business with spammers. 'Tve signed up with the biggest 50 carriers two or three times,' says Scelson . . . [who] claims to send 84 million commercial email messages a day over his three 45-megabit-per-second DS3 circuits. 'If you were getting \$40,000 a month for each circuit,' Scelson asks, 'would you want to shut me down.'

Sam Vaknin, *The Economics of Spam*, eBookWeb. (Aug. 2, 2002) (available at <http://12.10 8.175.91/ebookweb/stories/storyReader\$1533?print-friendly=truerl.>). Scelson's \$120,000 a month for his three high-speed lines translates into a *per message* cost of approximately \$.0000032 (if he sends 84 million e-mails every day of a 31 day month). *Id*. compliance with opt-out requests" end. This definition is a version of the "excessive volume" approach-despite the fact that the definition does not mention an amount. No mention is necessary. The fact that spammers ignore opt-out requests makes even small amounts of spam "excessive" in the sense that even the small amount constitutes inefficient overmailing. Before we turn to the inefficiency claim, however, three further comments on the definition are in order.

First, we should emphasize the contrast between spam—untargeted, non-opt-out e-mail—and unsolicited e-mail that is highly targeted and sent by advertisers who respond to opt-out requests. Currently the volume of such e-mail is quite low, as advertisers fear that they will be stigmatized as spammers. This may very well be unfortunate, as reflection on the role unsolicited advertising plays in traditional print advertising strongly suggests. In traditional print media, unsolicited advertising plays a critical economic role: it brings *new* customers to a business.⁵⁷ Email is tailor-made to play this role. It is considerably less costly than traditional media,⁵⁸ and it can be much more precisely targeted.⁵⁹ Unso-

58. Unsolicited Commercial Communications, supra n. 21. "[T]he average unit price for an e-mail marketing campaign... is about 10 cents compared to a cost of between 56 cents and \$1 for a direct mail campaign. Id. The Direct Marketing Association offers similar figures:

Direct Mail: \$0.75 - \$2.00 Opt in e-mail: \$0.20 Spam <\$0.01

The e-Mail Marketing Report, supra n. 9. E-mail advertising campaigns are less costly because they eliminate mailing and printing costs, costs that are a significant part of a traditional direct marketing budget. In the catalogue apparel sales industry, for example, the

median apparel direct marketing retailer . . . devotes twenty-two percent of its net sales to the production, printing, and mailing of catalogs. Much of this catalog cost [the printing and mailing costs] can be eliminated for customers who prefer to receive their information entirely online.

Michael A. Turner, The Impact of Data Restrictions On Consumer Distance Shopping, 43 (available at <http://privacyalliance.org/resources/turner.pdf,>) [hereinafter Impact of Data Restrictions].

^{57.} Consider the role of unsolicited advertising in traditional (non-e-mail) media. Sale of apparel through catalogues provides an excellent example. A Direct Marketing Association study shows that the median apparel catalog retailer mails nineteen million copies of its flagship catalog each year and it "sends out roughly 10 million copies of ... [that] catalogue to prospective customers." Impact of Data Restrictions, supra n. 129. Prospective customers are those who have not previously purchased from the company, and will not (typically) have consented to receive the catalogue. Catalogue retailers typically mail prospects from a "list that identifies people who have purchased from another catalogue company or have subscribed to a particular magazine." Id. at 24. Hence, mailings to prospects are unsolicited. Catalogue retailers mail unsolicited catalogues because it is critical to their business: "the median apparel catalog retailer receives 67.0 percent of its net sales from its house list [its list of past customers] and the remainder from new customers." Id. at 28.

licited e-mail advertising that is highly targeted and sent by advertisers that comply with opt-out requests has the potential to greatly benefit both advertisers and recipients. Advertisers would benefit from more effective advertisements, and recipients would benefit by receiving a greater degree of relevant information. We will return to these points when we consider how to regulate spam.

Second, we should note that spam, as defined here, is not confined to e-mails like the Nigerian Money Offer, e-mails with deceptive, disreputable, or dubious content. Legitimate businesses sometimes send spam. Benchmark Supply (now doing business as Vortex Supply) is an example.⁶⁰ Benchmark Supply uses e-mail to sell printer toner nationwide at cut-rate prices. The endeavor faces a problem. Benchmark is far from a nationally recognized business with a reputation for quality and service, and relatively few will buy from a seller they do not know and have little reason to trust. There is no way, in advance of sending the e-mails, to identify those willing to buy from an unknown business. The solution is the same as in the case of the Nigerian Money Offer: send millions upon

'Hands down, [e-mail] is one of the most cost-effective ways for me to market and get people to purchase products' . . . 'Every time we send out an e-mail, we can track and see the direct result. Its direct marketing, but to the next level.'

Claudia Kuehl, Spam's Good Twin, (available at http://www.the-dma.org/cgi/registered/whitepapers/spamsgoodtwin.html.). Kuehl concludes:

Mailing costs are tiny, the results of test campaigns are virtually instantaneous, response rates are fifteen times higher than for other media, continuous contact can be maintained with prospects without over-stretching advertising or consumer relations budgets . . . and printing costs are nil.

Id.

60. "The company name BENCHMARK PRINT SUPPLY of ATLANTA GA 30338 USA first started to appear in multiple duplicate spams . . . from [sic] 9th September 1998." http://easyweb.easynet.co.uk/~gcaseltgon/spam/benchmark.htmlrl. In 2001, Benchmark continued its spamming activities under the name "Vortex Supply." *Id.* The name change almost certainly is the result of the decision rendered in *Bibilotech v. Sam Khuri d/b/a Benchmark Supply*, 98-CV-1344-WBH (N. Dist. of Ga., 2000). In the settlement agreement, Benchmark agrees to pay a \$1000 per e-mail to any party to whom it sends unsolicited e-mail of which any of the following is true: there is no true "from" address; there is no opt-out option; or the recipient has already opted-out. *See* http://www.bibliotech.net. Spammer.htmlrl.>.

^{59.} E-mail advertising can be more effective than traditional direct mail marketing because it allows better tracking of customer responses advertisements. "When you combine database marketing techniques with e-mail campaigns, you gain powerful insight into each customer's preferences and behaviors." Ray Kaupp, *Tracking eMarketing Results: The Difference Between Knowing and Guessing*, Messaging Magazine (May/June 2000). So, it "is easy to understand why advertisers embrace e-mail advertising with such enthusiasm, why they think that the Internet is the perfect medium for direct marketing, and e-mail is the delivery mechanism that makes it work. E-mail done right is personal, immediate, compelling, and actionable-the ideal tool to drive response for online marketers." *Id.* The Direct Marketing Association makes the same point, quoting Stephanie Healy, interactive sales manager for OmahaSteaks.com:

millions of untargeted e-mails to fish for the few positive replies. In pursuing this strategy, Benchmark Supply keeps its follow-up costs to the minimum necessary to complete sales; in particular, it does not comply with opt-out requests.⁶¹ The negative reactions of non-purchasing recipients matter little; the goal is to find the relatively few who will buy, not to smooth the ruffled feathers of those who will not.

Third, spam imposes significant costs on its recipients. The costs divide into recipient-borne delivery charges, and e-mail management costs.⁶² The delivery charges amount to approximately ten billion dollars a year,⁶³ and the e-mail management costs run into the tens of billions.⁶⁴ These costs greatly exceed any benefit spam confers on its recipients. Some recipients benefit when, for example, they buy cut-rate priced toner. *Most*, however, do not benefit at all. This is an ineliminable feature of spam. Spam is largely untargeted; that is, little or no attempt is made to ensure that the content of the message is relevant to the recipient; hence, most recipients receive useless information. The benefits spam generates run primarily to the spammers.

B. SPAM'S INEFFICIENCY

What is the standard of efficiency that spam fails to meet? It is efficient to send e-mail (e-mail of any sort) up to the point at which the benefits exceed costs, where the benefits and the costs in question are the benefits and costs to *both* advertisers and recipients. A lesser volume of e-mail means at least one advertiser or recipient foregoes a net benefit; a greater volume means that at least one advertiser or recipient incurs a net cost. Spammers mail more than this amount. The reason they do so lies in the way they assess their costs and benefits. The spammers' benefit is the revenue the e-mails generate. To garner significant revenue, spammers must send a huge volume of e-mail. Spammers face two problems: increasing costs, and declining benefits. Their response to these problems guarantees that they send an inefficiently large amount

^{61.} Failure to comply with requests to not receive e-mails was a typical complaint about Benchmark Supply. See http://www.complaints.com/complaintofthedayaugust2 2000.1.htmrl> (stating: "This outfit is bombarding me with e-mail, yet they intentionally do not provide an e-mail address to unsubscribe or stop it").

^{62.} See text supra n. 15.

^{63.} See supra n. 23.

^{64.} Here is one way to quantify the cost: suppose that each e-mail user spends one minute a day deleting spam; set the number of users worldwide at 500,000,000 million and, count a user's time as worth ten dollars an hour. Then, the yearly cost of managing spam is roughly thirty billion dollars. Compare http://www.fusl.ac.be/Files/General/CEREC/ economie/wauthy/DOCs_EP/spam.htmrl> (noting that "[i]t is not much of a pain to delete messages, but certainly the cumulative time, day after day, and across millions of computer users, certainly adds up. (Say, 2 minutes a day times 93 million users times \$10 an hour times 260 week-days / year = \$8.06 Billion / year or about 0.1% of the GDP)").

of e-mail. Legitimate e-mail advertisers face exactly the same problem (the discussion that follows applies to them as well as to spammers), but their response guarantees that they volume of e-mail they send tends toward the efficient amount.

Increasing costs: The problem is that the cost of sending a given volume of e-mail (the cost of sending another 10,000, for example) eventually increases as the total volume sent increases (as, for example, the total volume increases from 10,000,000 to 20,000,000). The costs that increase are "follow-up costs," costs incurred when recipients contact them to request more information, comply with the spammers' requests, or make a purchase. Follow-up costs eventually increase because the volume of responses to the e-mails increases as the volume of e-mail sent increases. At some point, the responses will impose the spammer the task of processing an amount of data that exceeds its fixed and limited information processing resources. At that point, costs will increase in the form of delays, mistakes, system crashes, and overworked personnel. This eventual increase in follow-up costs, like the eventual increase in campaign preparation costs, ensures that, at some point, the cost of sending a given volume of e-mail increases as the total volume sent increases.65

Decreasing benefits: The spammer's primary benefit is revenue. The spammer does not realize this benefit from every e-mail, of course, but just from some fraction. This fraction eventually declines as the volume of e-mail increases. Information processing limitations are the reason. Imagine that the spammer's e-mails have generated all the responses that he or she can efficiently and effectively handle given the limits of its information processing resources. What happens if the e-mails continue to generate additional responses? The overburdened information processing technology results in delays, errors, and mistakes, and overworked personnel become less effective. As the spammer deals less effectively with the responses, the fraction of e-mails from which it benefits drops.⁶⁶

^{65.} The spammer could of course avoid this task by simply ignoring some of the responses, but this defeats the purpose of sending the e-mails in the first place. The purpose was to profit from the responses.

^{66.} This may seem obviously wrong. If the e-mails are generating so much demand, why not simply increase the information processing capacity to avoid the drop in the average benefit and thereby profit from the increase? The advertiser may do so, of course. But a reasonable business does not respond in this way to every fluctuation in demand. A reasonable business acquires only the capacity needed for its reasonably expected short run and long run needs. Processing information involves costs in the form of time, trained staff, and appropriate technology, and over-investment wastes money on capacity the business will never use. It is reasonable to increase information processing resources in response to an increase in demand only when the demand is sufficiently stable and long-term that the investment in increased capacity will pay off. The typical question an advertiser

Spammers deal with this situation by sending e-mail up to the point at which *their* decreasing benefits equal *their* increasing costs.⁶⁷ If the spammers send less, they forego a net benefit; if more, they incur a net cost. Spammers ignore the costs that they impose on their recipients; they do so when they ignore opt-out requests. This guarantees that spam is inefficient. It is efficient to send spam up to the point at which the benefits to the spammer and the recipients exceed the costs to the spammer and the recipients. Very few recipients benefit from spam, so the benefits to the spammer and the recipients is only slightly greater than the benefits to the spammer alone. On the other hand, recipients bear massive costs, so the cost to the spammer and the recipients is far greater than the cost to the spammer alone. Consequently, when a spammer sends e-mail up to the point at which *its* benefits equal *its* costs, he or she sends more (considerably more) than the efficient amount.

The point of demonstrating that spam is inefficient is to show that sending spam unjustifiably violates recipients' freedom. Violations of freedom are justified only when the benefits thereby achieved are sufficiently great. The benefits the e-mail subsidy generates are not great; rather, the costs exceed the benefits. The solution is to eliminate spam through legal regulation. Eliminating spam ends the violation of freedom and, by eliminating the inefficiency, makes everyone (except the spammers and perhaps a few recipients) better off. This restricts the freedom of would-be spammers, but surely it is better to trade a widespread, costly, and inefficient violation of freedom for a narrower restriction that eliminates the inefficiency and makes almost everyone better off. There is no acceptable alternative to banning spam. Spam is untargeted, no-opt-out advertising, and, such advertising is inherently inefficient. There is no way to allow spam while eliminating the inefficiency. In particular, it is not sufficient simply to shift the full *delivery costs* onto spammers. The shift would only slightly increase the cost of sending spam as the per-message delivery cost is quite low, a fraction of a penny. The volume of spam would drop only slightly, and recipients would still bear huge e-mail management costs.

We now turn to the question of how to regulate spam. In considering this question, it is important to note that spam divides into two categories: e-mails sent in furtherance of an illegal activity (like the Nigerian Money Offer); and, those sent in pursuit of a legal end (like the Benchmark Supply e-mails). There is no need here to justify laws that penalize

faces is how much e-mail should be sent given the available information processing resources. The text focuses on this question, the "fixed and limited resources" question. Even the advertiser that increases resources must ultimately answer this question. It has to decide how much to e-mail given the increased resources.

^{67.} They do so, that is, to the extent resources allow.

sending e-mails in pursuit of an illegal end. If there is good reason to prevent the perpetration of these illegal activities by traditional means, there is no less reason when the means is e-mail.⁶⁸ The only justificatory question concerns spam sent in furtherance of a legal activity. The violation of freedom justifies a statute designed virtually to eliminate spam.⁶⁹

C. REGULATING SPAM

The key provision of the proposed statute is the requirement that advertising e-mail contain an opt-out provision. The rationale is that spam will virtually disappear if two conditions are fulfilled. *First*: e-mail advertisers (and hence spammers in particular) are required to provide a reasonable opt-out option and to comply in a timely fashion with opt-out requests. An opt-out option is *un*reasonable if the time and trouble involved in opting-out is greater than the cost of continuing to receive the e-mails. *Second*: enforcement of the statute is perfect. All violations are detected and penalized, and the penalties are sufficiently high to make compliance with the statute less costly than non-compliance. Perfect enforcement is of course impossible; indeed, spam poses serious enforcement difficulties.⁷⁰ However, initially assuming perfect enforcement makes it easy to see how an enforceable opt-out requirement virtually eliminates spam. The reason is that spam imposes significant costs on recipients without (in the vast majority of cases) any corresponding bene-

^{68.} The Federal Trade Commission (FTC) prosecutes unsolicited advertising e-mail that perpetrates fraud and other sorts of crimes. Prepared Statement of the Federal Trade Commission on "Unsolicited Commercial Email" before the Senate Subcommittee on Communications of the Committee on Commerce, Science, and Transportation (April 26, 2001) (available at http://www.ftc.gov/opa/2002/02/eileenspam1.htm) [hereinafter Prepared Statement]. The FTC currently prosecutes fraud perpetrated through e-mail under a variety of pre-Internet statutes, including the Mail Fraud Statute (15 U.S.C. Section 45) and the Lottery Statutes (18 U.S.C Sections 1301 - 02). The FTC supplements these prosecutorial activities with a program to educate consumers to the dangers to fraudulent unsolicited advertising e-mail. Id.

^{69.} It is widely and correctly held that spam demands a statutory response. See Canning, supra n. 8, at \P 20. The statutes-adopted or proposed incorporate some combination of the following five types of provisions. See Canning, supra n. 8, at \P 24. Canning offers the following five-fold classification of statutes. (1) Opt -in: Opt-in provisions prohibit e-mails ending advertising e-mail unless the recipient has previously consented to receiving the e-mails. Id. at $\P\P$ 76-77. (2) Opt-out: Opt-out provisions require that senders provide a reasonable way for recipients to request the sender to cease sending e-mails, a request with which the sender must comply. Id. at $\P\P$ 86-89. (3) Labeling: Labeling provisions require unsolicited advertising e-mail to identify itself as such in the message's header. Id. at $\P\P$ 78-80. (4) Anti-fraud: Anti-fraud provisions penalize disguising the true origin of the e-mail. Id. at $\P\P$ 81-82. (5) Trespass: Modeled on trespass to chattels, these statutes allow an ISP to sue those who damage it by sending it unsolicited e-mail. Id. at $\P\P$ 83-85.

^{70.} See Canning, supra n. 8, at ¶¶ 52-73.

SPAM AND BEYOND

fit. Since exercising the opt-out option is less costly than continuing to receive the e-mails, recipients will opt-out, in so far as they are economically rational. Given perfect enforcement and significant penalties, spammers will comply with the opt-requests, and spam will virtually disappear.

Four further observations are in order below:

1. A Clear and Conspicuous Opt-out Option

Some comment is in order in regard to the assumption that exercising the opt-out option is less costly than continuing to receive the emails. This is a minimum requirement. Use of the opt-out option should require as little time and effort as possible. It should be clear and conspicuous.⁷¹ A labeling requirement would most likely be helpful. Labeling e-mails as advertisements reduces the time and effort involved in identifying the e-mail as an advertisement and alerts the recipient to look for the opt-out option.⁷² The costs to the advertiser are minimal. They consist of putting "ADV" or some similar label in the e-mail header.⁷³ In addition, to ensure the effectiveness of opting-out, some provision would be necessary to prevent advertisers from simply changing the name of their business and claiming the right to e-mail their former opt-outs under the new name.

2. Who Has to Provide an Opt-out Option?

Which advertisers should have to provide an opt-out option? Given that the purpose of the statute is to eliminate spam, the answer may seem obvious: spammers. The difficulty is that being a spammer is a matter of degree; a spammer is an e-mail advertiser engaging in *little or no* targeting and *little or no* compliance with opt-out requests. How little targeting and how little compliance makes one a spammer? It would be difficult to frame an answer that is sufficiently precise to give advertisers adequate notice of who must provide an opt-out option.

2003]

^{71.} See Prepared Statement, supra n. 66, at 11 (commenting on the proposed CAN SPAM Act, S. 630: "S. 630 would also require each UCE [unsolicited commercial e-mail] message to contain a clear and conspicuous notification of an opportunity for the recipient to decline to receive further UCE from the sender").

^{72.} Id. at 11 (stating that "[Proposed statutory provision] S. 630 would require that every UCE message contain an identifier indicating that the message is an advertisement or solicitation. This provision would benefit consumers by enabling them to immediately recognize UCE messages as advertisements").

^{73.} Id.

Notice that a message is an advertisement or solicitation would impose few, if any, additional costs on senders of UCE; they would merely have to add a few words (or even a few letters) to each message sent. Unlike print or broadcast communications, additional words in e-mail messages do not add to their cost.

166 JOURNAL OF COMPUTER & INFORMATION LAW [Vol. XXII

The solution is to require all e-mail advertisers to provide an opt-out option. This avoids the difficulty while not requiring legitimate businesses to do anything that they do not already do (or at least have compelling reasons to do). Legitimate businesses (with the exception of spammers like Benchmark Supply) do comply with opt-out requests. They do so because, once a recipient opts-out, the benefit of sending the e-mails is most likely non-existent, while the cost of continuing to send emails is significant. The benefit is most likely non-existent because it is unlikely that the recipient will buy in response to e-mail advertisements sent after the withdrawal of consent. The recipient will most probably not even read the e-mails as he or she no longer desires the information they offer. Hence, the advertiser gains no benefit-no sales revenuefrom sending the e-mails. On the other hand, the cost of continuing to send the e-mails is most likely significant. This may seem incorrect. The costs of mailing any given e-mail are minute. How can these costs matter so much? They do not, but they are not the only costs involved. The significant cost is the negative impact on the good will and trust the advertiser strives to cultivate and maintain among its customers and potential customers. Cultivating good will and trust is an essential ingredient of business success. People do not generally deal with those they do not trust.⁷⁴ Legitimate businesses try to foster trust in order to appeal to the vast majority of buyers over the long run.⁷⁵ An advertiser undermines this effort if it sends e-mail in the face of a request not to do so, and making a practice of doing so could seriously impair an adver-

Id.

^{74.} Buying typically requires trust. In offering an item for sale, the seller represents (at least implicitly) that the item has a certain value. A buyer will not (irrelevant exceptions aside) buy the item unless he or she believes the seller's promise of value. Buyers may of course seek independent verification of the seller's claims; however, buyers often simply trust the buyer. Suppose one needs a DVD player. One does not have the time or inclination to pore through reports that compare the available products, so one simply buys a Sony DVD player because Sony's reputation for quality leads one to trust that it will perform adequately. See Francis Fukuyama, Trust: The Social Virtues & The Creation Of Prosperity, 151-152 (Free Press Paperbacks 1995). Indeed, as Francis Fukuyama emphasizes,

it is very difficult to conceive of modern economic life in the absence of a minimum level of informal trust. In the words of the economist and Nobel laureate Kenneth Arrow, "Now trust has a very important pragmatic value Trust is an important lubricant of a social system. It is extremely efficient; it saves a lot of trouble to have a fair degree of reliance on other people's word Trust and similar values, loyalty or truth-telling . . . have real practical, economic value."

^{75. &}quot;Today's consumer is far more informed and demanding, usually aware of the best prices and most competitive product specs. So they expect consistent policies, procedures, programs-and *relationships*-with the enterprise that manufactures the product or stands behind the service." Fieldbook, *supra* n. 62, at 226; *see also supra* n. 57.

tiser's reputation.⁷⁶ Consequently, to send e-mail after an opt-out request is to incur a significant cost with no corresponding benefit. The economically rational advertiser will, therefore, comply when a recipient withdraws consent.

3. Implementing the Opt-out Requirement

To implement the opt-out requirement, the statute would mandate the creation and maintenance of a list of those who have opted-out of receiving unsolicited e-mail advertising. The simplest way to conceive of the list is as a registry of e-mail addresses. Recipients would place their addresses on the list either by clicking on the opt-out provision in an advertising e-mail or by contacting the list directly. Advertisers would be required to consult the list before sending e-mail and would be barred from sending e-mail to anyone on the list.

The problem with this approach is that it not only eradicates spam, it also eliminates targeted, opt-out-compliant unsolicited advertising email. Under the present proposal, *all* advertisers, spammers and nonspammers alike, must consult the list and refrain from e-mailing anyone on it. As noted earlier, there are serious arguments in favor of allowing targeted, opt-out-compliant unsolicited advertising e-mail.⁷⁷ One way to do so is to require only spammers to consult the opt-out list. The difficulty is the one noted earlier when discussing which advertisers should be required to provide an opt-out option: namely, being a spammer is a matter of degree, and, hence it would be difficult to specify with sufficient precision exactly who must consult the list.

The solution is to add information to the list. Include advertisers' names (more precisely, some appropriate identification of the advertiser). In this case, recipients opt out advertiser-by-advertiser. When a recipient clicks on an opt-out option in an advertiser's e-mail, the recipient's e-mail address is associated with that advertiser. Advertisers may not e-mail anyone who has opted-out from receiving e-mail from them. This allows an advertiser to send unsolicited e-mail to anyone who has not opted-out with regard to that advertiser.

This approach is not without its cost, which is a certain amount of spam. Suppose that a spammer has a list of several million e-mail addresses and that no addressee on the list has specifically opted out from receiving e-mail from that spammer. The spammer can e-mail everyone

^{76.} With respect to a product or service, businesses strive to maintain a "distinctive identity that differentiates a relevant, enduring, and credible promise of value associated with a product, service, or organization." Scott Ward, Larry Light, & Jonathan Goldstine, What High-Tech Managers Need to Know about Brands, Harv. Bus. Rev. 85, 88 (July-Aug., 1999). Failing to honor opt-out requests undermines the credibility of the promise of value since the advertiser manifests a disregard for the welfare of its customers.

^{77.} Id.

on the list without violating the statute. This may not be particularly worrisome, however, since the spammer will quickly lose the ability to spam without violating that statute. The mailing will initiate a flood of opt-out requests since virtually all recipients will opt out. Complying with the opt-out requests increases the cost of sending spam and limits its effectiveness, which depends on mailing huge volumes. To mail massive amounts and also comply with opt-out requests, the spammer will have to repeatedly acquire new lists and prune opt-outs from them. Eventually, the spammer will not be able to mail enough cheaply enough to make the spam campaign worthwhile.

Allowing short-lived bursts of unsolicited advertising e-mail does have one potential benefit that may, to some extent, offset the cost of allowing a small amount of spam. Consider this example. Suppose you own a very popular model BMW. You are unhappy with the cup holder that comes with the car. You invent a simple, cheap plastic improvement, which any owner can install. The improvement also works on some other BMW models, and on some other non-BMW manufactured cars as well. You suspect that many people are unhappy with their standard cup holders, and that they would eagerly purchase your improvement. You would like to e-mail those sufficiently dissatisfied with their cup holders because they would be likely to buy your improvement. Your problem, however, is that you do not know who they are. The solution is to send millions of untargeted e-mails to seek out the dissatisfied. It may be desirable to allow short bursts of untargeted, unsolicited advertising e-mail to disseminate information about commercial innovations.

In general, the amount of untargeted unsolicited e-mail will be minimal. Most legitimate businesses try to target their advertising as precisely as possible. Advertisers target because it makes advertising more effective. When "two marketers are competing for the same customer's business, all other things being equal, the marketer with the greatest scope of information about that particular customer [and hence the more targeted advertising]... will be the more efficient competitor."⁷⁸ Indeed, the marketing and advertising literature takes it for granted that advertisers target their advertising.⁷⁹

^{78.} Don Peppers & Martha Rogers, The One To One Future: Building Relationships One Customer at a Time, 139 (Doubleday 1996).

^{79.} As a recent survey notes,

The heightened importance of "understanding the customer" to the modern business enterprise . . . is evidenced by the market's fascination with CRM [customer retention management] as a tool to 'enhance the value of customer relationships'. . . Respondents overwhelmingly mentioned importance of . . . providing information "where, when, and how" customers want to receive it.

Patrick Marketing Group, Key Business and Marketing Trends Survey Analysis (available at http://www.pmgdirect.com/reports_list/PMGreport.pdf).

While there is no need here to insist on one or another implementation of the opt-out requirement, we will assume the version in which recipients opt out advertiser by advertiser. The essential point is that, on either version of the statute, the opt-out requirement would virtually eliminate spam given perfect enforcement and sufficiently severe penalties. The point is easily restated in a way that eliminates the assumption of perfect enforcement: an opt-out requirement backed by sufficiently severe penalties would eliminate spam to the extent the requirement is enforced. What extent is that?

4. Enforcement

We will put this issue mostly to one side. Our concern is with the content of the statute one should try to enforce, not the question of how to enforce it.⁸⁰ Of course, the two questions are hardly entirely independent as some statutory content will be motivated by enforcement concerns. The statute should, for example, almost certainly contain anti-fraud provisions (provisions that penalize disguising the true origin of an e-mail) to aid enforcement.⁸¹ In addition, one may want to provide for a private right of enforcement in the statute. If the penalties were sufficiently high, individuals and organizations would sue spammers thereby reducing the government's enforcement burden.⁸²

Id.

2003]

^{80.} See Prepared Statement, supra n. 66, at 8. To control spam sent to perpetrate fraud, the FTC calls for

An enforcement scheme . . . modeled on . . . the Commissions 900-Number Rule and the Telemarketing Sales Rule in the statutes that mandated promulgation of those Rules. The enforcement provisions would allow the Commission to treat violations of [the proposed true spam statute] as violations of a rule under Section 18 (15 U.S.C. \S 57a) of the FTC Act regarding unfair or deceptive acts or practices. Moreover, the Commission's efforts would be supplemented with those of the State Attorney General, and possibly other federal agencies with jurisdiction in areas where the FTC has none. This type of dual federal-state enforcement has proved extremely successful in the past, particularly in challenging deceptive and abusive telemarketing practices, and the Commission would expect it to work equally well in this context.

^{81.} Spammers tend to "hide the messages' origin.... Spammers ... don't want angry recipients to find them.... Spammers use two tricks to cloak their location: forging the return address and the message's headers, which indicate the path the mail takes across the Internet." Special Report: The Net's Next Era, Inside the Spammers' Arsenal, Business Week Online (March 1, 2002) (available at http://www.businessweek.com/technology/content/mar2002/tc2002031_7541.htm).

^{82.} MAPS (the Mail Abuse Prevention System) might very well pursue such lawsuits. MAPS is the largest and most prominent of many organizations dedicated to eliminating spam. See Spam Police, supra n. 40. MAPS maintains a list of IP addresses known as the Realtime Blackhole List (RBL). Most ISPs make use of the RBL. "MAPS estimates that the RBL protects between one-third and one-half of all e-mail boxes in the world." Margaret Johnston, Next Wave of Attacks Against Spammers Underway (available at <http:// www.cnn.com/TECH/computing/9910/11/kill.spam.dead.idg/index.html>). An IP address is

D. FIRST AMENDMENT CONSIDERATIONS

One issue remains. Does the proposed statute violate the First Amendment? Advertising e-mail is commercial speech, and, as such, receives First Amendment protection as long as it is non-deceptive and concerns a lawful activity.⁸³ Commercial speech may, however, be restricted in light of a substantial government interest provided the restriction is narrowly tailored to advance that interest.⁸⁴ In the case of advertising e-mail, the relevant government interest is cost-shifting. Comparison with unsolicited advertising sent to fax machines is instructive.

The Telephone Consumer Protection Act of 1991 bans unsolicited faxes that contain advertisements.⁸⁵ The ban was challenged on First Amendment grounds in Destination Ventures v. Federal Communications Commission.⁸⁶ In rejecting the challenge, the court noted that unsolicited fax advertisements shift significant advertising costs onto consumers (the advertisements use up paper and tie up fax machines).⁸⁷ The statute shifted advertising costs off consumers, and the court held that the government's interest in protecting consumers was sufficient to justify the ban.⁸⁸

included in the list if e-mail sent from that address violates MAPS "Basic Mailing List Management Principles for Preventing Abuse." Sending unsolicited advertising e-mail in large volume violates the principles. When a MAPS-participating ISP receives an e-mail, it checks the RBL to see if it contains the IP address from which the e-mail was sent. If it does, the ISP blocks the delivery of *all* e-mail from that address. The RBL has not been particularly effective in controlling spam. Spammers "have consistently succeeded in adapting their techniques to circumvent advances in anti-spam technology. Technical approaches are unlikely ever to eradicate spam, partly because of the time and resources that spammers devote to their activities (and the economies of scale from which they benefit) and partly because of the openness of the Internet and e-mail protocols." *Technical and Legal Approaches, supra* n. 10, at 356. *See also* Mark D. Robbins, *Electronic Trespass: An Old Theory in a New Context*, 15 Comp. L. (July 1988) 1, 4. MAPS might very well find a congenial and more effective role as an organizer and supporter of private party anti-spam lawsuits. *Canning, supra* n. 8, at ¶¶ 67-69 suggests a private right of enforcement but overlooks a role for organizations like MAPS.

83. Central Hudson Gas & Electric Corp. v. Public Services Commn. of New York, 447 U. S. 557, 563-65 (1980).

84. Id. There is no "least restrictive means" test. See generally Bd. of Trustees St. U. of New York v. Fox, 492 U.S. 469 (1989).

85. 47 U. S. C. § 227(b)(1)(C) (2003).

86. 46 F.3d 54, 56 (9th Cir. 1995).

87. Id. at 57.

88. Id. It is instructive to compare two other cases: Rowan v. U.S. Post Office Dept., 397 U. S. 728, 737-738 (1970), and Bolger v. Youngs Drug Products Corp., 463 U. S. 60, 75 (1983). In Rowan, the Court denied a First Amendment challenge to a regulation that allowed junk mail recipients to regulate the amount of junk mail they received. In Bolger, the court struck down a federal statute that banned advertisements for contraceptives, advertisements some found to be offensive and intrusive. The rationale in Rowan was costSPAM AND BEYOND

The same interest justifies the proposed statute. Spam imposes significant costs on recipients. The statute allows recipients to avoid these costs by opting out. The statue is narrowly tailored to achieve this goal. Indeed, unlike the *Telephone Consumer Protection Act's* prohibition of unsolicited fax advertising, the proposed statute does not actually ban unsolicited e-mail advertising. It simply imposes an opt-out requirement. The actual opt-out decision rests in the hands of individual recipients, and the amount of unsolicited e-mail advertising is a function of the collective effect of individual opt-out decisions. Of course, the expectation is that, in the case of spam, almost all recipients will opt out in order to avoid the costs spam imposes. However, recipient, not state, action ensures this result.⁸⁹ It is difficult to conceive any weaker requirement that would reliably allow recipients to avoid the costs unsolicited e-mail advertising imposes on them.

E. THE ULTIMATE EFFECT OF THE PROPOSED STATUTE

Assuming adequate enforcement, the ultimate effect of the proposed statute is to virtually eliminate untargeted, non-opt-out-compliant unsolicited e-mail. The proposed statute allows only brief bursts of such email, bursts that are quickly quelled by a corresponding burst of opt-out requests.

Apart from such bursts, the unsolicited advertising e-mail that remains consists of highly targeted, opt-out-compliant e-mails. Call such e-mails *responsive* e-mails, and let us understand this term to include,

89. See supra n. 86 (criticizing the Direct Marketing Association's First Amendment objections to a national "don't call" list applicable to telemarketers. In both cases, the government does *not* decide how much advertising consumers receive; consumers do).

shifting and recipients that choose whether or not to receive the advertisements. In Bolger, the rationale for the ban was the protection of privacy, not cost-shifting, and it was the federal government that imposed the ban. These differences explain the different decisions. Similar issues have arisen recently in the context of telemarketing, and the claims made in that context might well be made about e-mail opt-out lists. President Bush signed H. R. 395 into law on March 11, 2003. The Act authorizes the FTC to implement and enforce a national "Don't Call" list. Telemarketers would be prohibited from calling anyone on the list. The Direct Marketing Association contends that the list is unconstitutional. The Association contends that "if the only objective of such a list-and the only reason for its creation-is to reduce the number of calls made to the American public, the government interest is itself unconstitutional. The government simply has no right to decide, directly or indirectly, how many telephone calls should be made in any given year or other period." Comments of the Direct Marketing Association, supra n. 51, at 37. There are two problems. First, the claim is simply inconsistent with both Rowan and Destination Ventures. At least where cost-shifting is the rationale, the government can, at least in some cases, constitutionally ban a form of advertising. Second, in the case of a "don't call" list, it is simply false that "the government decide[s] . . . how many telephone calls should be made in any given year or other period." Id. Consumers decide that through the collective effective of their individual decisions about whether to join the list.

not just targeted, opt-out-compliant *unsolicited* advertising e-mail, but also *solicited* advertising e-mail. It makes sense to group the two sorts of e-mail together as both are forms of targeted, opt-out-compliant e-mail advertising. Solicited e-mail advertising is highly targeted; advertising e-mails sent in response to a recipient's request to receive it is about as targeted as advertising can get.

How should such e-mail be regulated? Regulation is called for since responsive advertising e-mail is, like spam, inefficient. The source of the inefficiency is somewhat different, however. Spam is inefficient because recipients bear significant delivery charges *and* e-mail management costs. In the case of responsive e-mail advertising, recipients can avoid the e-mail management costs by opting out. Recipients *cannot*, however, avoid delivery charges by opting out. Flat pricing ensures this. This guarantees that the e-mails are inefficiently over-mailed. The inefficiency shows that there is no justification for the violation of freedom that occurs when responsive e-mail advertising imposes delivery charges on recipients and hence shows that legal regulation is appropriate to redress this situation.

III. BEYOND SPAM: RESPONSIVE E-MAIL ADVERTISING

The standard of efficiency is the same as with spam: it is efficient to send e-mail up to the point at which the benefits equal the costs, where the relevant benefits and costs are the benefits and costs to *both* advertisers and recipients. The combination of the division of delivery costs and flat pricing guarantees that advertisers send more than the efficient amount. Cost division ensures that recipients bear a portion of the delivery charges associated with advertising e-mail. Flat pricing spreads these delivery charges over all of an ISP's subscribers thereby ensuring that recipients do not bear the true delivery charges corresponding to the amount of e-mail they receive. To see why this leads to inefficiency, first remove flat pricing from the equation; responsive e-mail advertising would then closely approximate the efficient volume. Seeing why provides the background against which we can see why introducing flat pricing leads to inefficiency.

Consider a particular e-mail advertiser—Borders Books, for example—sending both solicited and unsolicited e-mail. To the extent it rationally pursues its self-interest, Borders will—exactly like a spammer send e-mails up to the point at which *its* benefits equal *its* costs. This amount will not be efficient. The reason is that some recipients receive too much Borders e-mail; and, some too little. A recipient receives too much if the recipient's cost exceeds his or her benefit; too little if the reverse is true. It is inevitable that some receive too much and some too little. Borders, like any advertiser, sets its e-mail policies based on information collected at some earlier time. Even if the information were perfectly accurate and complete when collected, it would not be so by the time the advertisements were sent out. Recipients' needs change (from, for example, a need for information about golf clubs and chess sets in March to a need for information about scuba gear and chess clocks in April). Given the constantly changing pattern of informational needs, it is virtually impossible for Borders to ensure that each recipient receives e-mail up to, and only up to, the point at which benefits equal costs. Consequently, the amount of e-mail will not be efficient; it will not approximate closely to the point at which the benefits to Borders and its recipients equal the costs to Borders and the recipients.

However, unlike a spammer, Borders will continually adjust the amount it mails until that amount closely approximates the efficient amount. To see why, suppose Sally, for example, receives too much email. She would increase her net benefit by reducing the amount of email received, so, insofar as she is economically rational, she will withdraw consent to receiving advertising beyond the point at which her benefit equals her cost.⁹⁰ Borders will comply with this request,⁹¹ and, in doing so, it adjusts the volume of e-mail toward the efficient level. This adjustment decreases the volume of e-mail the advertiser sends, but, of course, if Borders is offering items that generate consumer interest and demand, it will also receive requests for advertising from recipients whose benefits exceeds their costs, and it will respond by increasing the amount it mails.⁹²

91. See supra Section II(C)(3).

92. The advertiser will do so unless it is already sending e-mail up to the point at which its benefit equals its cost. In the latter case, the advertiser may also eventually its information processing resources and, given the increased capacity, will send more e-mail.

^{90.} We assume Sally knows approximately at what point her costs equal her benefits and we assume that the cost of communication is so small that Sally need not worry that the communication cost exceeds any benefit communication generates. We also assume that costs increase and benefits decline as the volume of e-mail received increases. A recipient's benefit consists in receiving information relevant to potential purchases. A recipient gains this benefit only from some fraction of the e-mails. This fraction declines as e-mail volume increases, and the benefit declines as a result. Information processing limitations are the reason. No one's ability to acquire and use information is unlimited, and confusion. mistakes, and delays result if one tries to assimilate and analyze an amount of information that exceeds one's integrative and analytical abilities. E-mail recipients are no exception. Attempting to handle an e-mail deluge that exceeds one's capacity to assimilate and analyze the information results in confusion, mistakes, and delays. One is less efficient and effective, and the fraction of the e-mails from which one actually benefits eventually decreases. E-mail management costs ensure that the cost of receiving e-mail eventually increases. These costs grow when a recipient with fixed and limited information processing resources attempts to deal with a volume of information that exceeds the recipients' information processing capacity. It takes more and more time to sort through the e-mails to determine which to read, which to ignore, and which to delete. Mistakes and their correction impose costs as does the need to repair system crashes should they occur.

The result is that the volume constantly adjusts toward the point at which: (1) each recipient's benefit equals that recipient's cost; and, (2) each advertiser's benefit equals its cost. This point is efficient: at this point, the benefits to Borders and its recipients equal the costs to Borders and the recipients. The volume of e-mail tends toward this point because recipients' opt-out requests serve as a feedback mechanism that allows advertisers constantly to adjust the volume of e-mail in favor of efficiency. Flat pricing disturbs this feedback mechanism by ensuring that some recipients agree to receive e-mails beyond the point at which their cost equals their benefit. To see why, recall the costs divide into two types: delivery charges, and e-mail management costs. The *true* cost consists of both. Flat pricing, however, ensures that recipients ignore delivery charges in deciding how much e-mail to receive. The flat fee does not change with changes in e-mail volume, so the fee is simply irrelevant to the decision about how much e-mail to receive. The only relevant cost is the e-mail management cost. Taking only this cost into account means a recipient agrees to receive e-mail beyond the point at which the benefit exceeds the *true* cost.

This distorts the opt-out feedback mechanism. In the absence of flat pricing, feedback from recipients' opt-out requests ensures that advertisers adjust the volume of e-mail they send in light of the *true* costs it imposes on recipients. Flat pricing ensures that advertisers adjust their volume only in light of the lesser e-mail management costs. The result is that the volume of e-mail tends toward the inefficient point at which: (1) each recipient's benefit is *less* than that recipient's *true* cost; and, (2) each advertiser's benefit equals its cost. The solution is not to ban flat pricing.⁹³ We should instead find some way to shift the delivery charges from recipients onto advertisers. Then, advertisers would take these costs into account directly (not via a feedback mechanism) in their decisions about how much e-mail to send. The result would be that the volume of responsive advertising e-mail would tend toward efficiency.

It is easy to envision a statutory cost-shifting mechanism. Suppose an advertiser_sends e-mail through its ISP (the sending ISP) to a recipient, who receives it through his or her ISP (the receiving ISP). The email is labeled "ADV" in its header. If this is the first time the receiving ISP has received e-mail labeled ADV from that particular advertiser via that sending ISP, it creates a log entry with two fields, an "identity" field, and a "total sent" field. The "identity" field contains the advertiser's e-mail address and the identity of the sending ISP; the "total sent" field contains the number one. If the ISP has already received e-mail

It will do so provided it sees the increased demand as sufficiently stable and long-term to justify the additional investment in information processing.

^{93.} See supra nn. 31-33.

from that advertiser via that ISP, it increases the value of the "total sent" field by one. Periodically, the receiving ISP transmits all such "advertiser logs" to a central clearinghouse. The clearinghouse assesses a per e-mail fee charged to the sending ISP.

The fee the clearinghouse assesses is owed in part to the clearinghouse and in part to the receiving ISP. The clearinghouse portion of the fee is sufficient (in the aggregate) to cover its operating costs; the receiving ISP portion compensates ISPs for the charges incurred in receiving advertisers' e-mails. Assuming the ISP market is sufficiently competitive, ISPs-most at least-will use the advertising revenue to lower their price and/or increase the quality of their service. They will do so because ISPs offering better price/quality packages attract more subscribers than those offering poorer packages. The result is that advertisers subsidize users, not visa versa.

It would not be difficult to mandate such a clearinghouse mechanism. The statute would call for the creation of the clearinghouse, establish a mechanism for determining the per-e-mail fee the clearinghouse assesses, and require sending ISPs to pay the fees assessed. In addition, it would require all advertising e-mail to be labeled "ADV" (or something similar) in the header, and it would require ISPs to keep the logs described above (or something similar).

The proposed statute raises a number of issues that can be conveniently addressed as a series of objections and replies.

Objection: One of the main advantages of e-mail advertising is that it is significantly less costly than traditional direct marketing while being at least as effective, if not more so. The clearinghouse raises the cost of e-mail advertising. Advertisers ultimately bear the cost of operating the clearinghouse since sending ISPs will almost certainly recover clearinghouse charges by increasing fees for advertiser e-mail accounts.⁹⁴ It would certainly be objectionable if statutorily imposed fees significantly raised the cost of e-mail advertising.

Reply: It costs between \$.10 - \$.20 to send an advertising e-mail as compared with \$.0.75 - \$2.00 for traditional direct mail marketing.⁹⁵ The proposed clearinghouse would not greatly increase the cost. The clearinghouse fee has two components: the receiving ISP's delivery costs;

The e-Mail Marketing Report, supra n. 9.

^{94.} See supra n. 23.

^{95.} Unsolicited Commercial Communications, supra n. 23. "[T]he average unit price for an e-mail marketing campaign... is about 10 cents compared to a cost of between 56 cents and \$1 for a direct mail campaign. *Id.* The Direct Marketing Association offers similar figures:

Direct Mail:
 \$0.75 - \$2.00

 Opt in e-mail:
 \$0.20

 Spam
 <\$0.01</td>

and, a small fraction of the clearinghouse's operating costs. Per message delivery costs are quite low, a fraction of a cent.⁹⁶ Adding this fraction does not greatly increase the cost of e-mail advertising relative to traditional direct marketing. Clearinghouse operating costs also turn out to be quite small on a per message basis. Suppose-conservatively-that the clearinghouse processes 100 trillion e-mails a year.⁹⁷ At \$.01 - \$.10 per e-mail, this is one trillion dollars to ten trillion dollars a year.⁹⁸ It is difficult to imagine that this should not be sufficient to cover the operating costs of a simple, highly automated billing system (the clearinghouse is simply a billing service accepting a standard input from the receiving ISPs and generating a standard output sent to sending ISPs). Adding \$.01 - \$.10 to the per e-mail cost still leaves the cost of e-mail advertising significantly below the cost of traditional direct mail advertising.

Objection: The delivery charges a receiving ISP actually incurs are a function of the market for Internet access. The fees vary with the size and needs of the ISP.⁹⁹ A statutorily imposed fee is therefore likely to under-compensate some ISPs and over-compensate others.

Reply: There is no reason why the fee setting mechanism should not be sensitive to relevant differences in ISPs. To the extent feasible, the fee could vary with variations in ISPs. Of course, this does not fully avoid under- and over-compensation. No fee-setting mechanism will ever perfectly mirror market operations, but an imperfect mechanism is better than none at all. Some mechanism is needed to correct the market, which has led to a situation in which Internet users, without their consent, inefficiently subsidize advertisers.

Objection: The proposed statute conflicts with the First Amendment.

Reply: The same cost-shifting rationale that justifies the "spam" statute justifies the "clearinghouse" statute. Indeed, in this case, the statute simply shifts costs with *no* expectation that the result will be to eliminate advertising. In fact, all the proposed statute does is charge advertisers "postage"-that is, a charge to cover the costs involved in delivering their e-mails. No one denies that it is constitutional for the USPS to do so in the case of paper mail advertisers. The fact that the

99. See supra n. 22.

^{96.} See supra nn. 55, 56.

^{97.} At least 1000 trillion advertising e-mails are sent yearly. See supra n 9.

^{98.} Someone-the government, advertisers, or a private organization-must bear the one-time cost of setting up the system. In 1992, the FTC estimated the cost of setting up a national "don't call" list for telemarketers to be \$12,000,000. Comments of the Direct Marketing Association before the Federal Communications Commission in the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991, 10 (available at <htp://the-dma.org/government/fccncproposal.pdf>) [hereinafter Comments of the Direct Marketing Association]. The Direct Marketing Association claims the cost is higher. Id.

medium is electronic could not conceivably make imposing postage unconstitutional.

IV. BEYOND ADVERTISING E-MAIL

Eliminating spam and shifting delivery charges reverses the e-mail subsidy and thereby brings the Internet in line with other communications networks on which advertisers subsidize non-advertisers. The email subsidy issue, however, extends well beyond the confines of e-mail advertising. As we noted at the outset, e-mails exhibit an astonishing variety, including "charitable fundraising solicitations, opinion surveys, religious messages, political advertisements, wartime propaganda, virus hoaxes and other urban legends, chain letters, and hate e-mail."¹⁰⁰ Recipients bear delivery charges and e-mail management costs in these cases as well.

Should we deploy some combination of an opt-out requirement and a cost-shifting mechanism in response? To answer, we need to balance the value of the speech against the inefficiency of the communication. In contrast to the cases discussed here, it may well be that we should countenance the inefficiency in the name of freedom of expression.

^{100.} Technical and Legal Approaches, supra n. 10, at 333. Cara Garretson observes, [i]f a campaigner sends out a bulk e-mail with the subject line, "Vote John Doe for Congress!," is that message considered spam? If spam is defined as any unsolicited communication, then perhaps. But if there is no potential commercial gain to the sender, then is it really the same as the multitude of get-rich-quick and sexual enhancement offers that the average Internet user receives every day? Such was the topic at a spirited panel debate at the Politics Online 2002 conference.

Cara Garretson, *Does Politics Plus E-Mail Equal Spam* (May 21, 2002) (available at http://www.pcworld.com/news/article/0,aid,100604,00.asp).