Order Code RL31953

CRS Report for Congress

"Junk E-Mail": An Overview of Issues Concerning Commercial Electronic Mail and "Spam"

Updated April 14, 2004

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Prepared for Members and Committees of Congress



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Summary

Unsolicited commercial e-mail (UCE), also called "spam" or "junk e-mail," aggravates many computer users. Not only can spam be a nuisance, but its cost may be passed on to consumers through higher charges from Internet service providers who must upgrade their systems to handle the traffic. Also, some spam involves fraud, or includes adult-oriented material that offends recipients or that parents want to protect their children from seeing. Proponents of UCE insist it is a legitimate marketing technique that is protected by the First Amendment, and some consumers want to receive such solicitations.

On December 16, President Bush signed into law S. 877, the Controlling the Assault of Non-Solicited Pornography and Marketing (CAN-SPAM) Act. The law, P.L. 108-187, went into effect on January 1, 2004.

The CAN-SPAM Act does not ban unsolicited commercial e-mail. Rather, it allows marketers to send commercial e-mail as long as it conforms with the law, such as including a legitimate opportunity for consumers to "opt-out" of receiving future commercial e-mails from that sender. It preempts state laws that specifically address spam, but not state laws that are not specific to e-mail, such as trespass, contract, or tort law, or other state laws to the extent they relate to fraud or computer crime. It does not require a centralized "do not e-mail" registry to be created by the Federal Trade Commission (FTC), similar to the National Do Not Call registry for telemarketing. The law requires only that the FTC develop a plan and timetable for establishing a "do not e-mail" registry, and to inform Congress of any concerns it has with regard to establishing it. FTC Chairman Timothy Muris has specifically warned that he does not believe a "do not e-mail" registry would be enforceable or noticeably reduce spam. Mr. Muris and others caution that consumers should not expect any legislation to be a "silver bullet" for solving the spam problem; a combination of consumer education, technological advancements, and legislation is required.

The extent to which P.L. 108-187 reduces "spam" may be debated if for no other reason than there are various definitions of that term. Proponents of the legislation argue that consumers are most irritated by fraudulent e-mail, and that the law should reduce the volume of such e-mail because of the civil and criminal penalties included therein. Opponents counter that consumers object to unsolicited commercial e-mail, and since the law legitimizes commercial e-mail (as long as it conforms with the law's provisions), consumers actually may receive more, not fewer, unsolicited commercial e-mail messages. Thus, whether or not "spam" is reduced depends in part on whether it is defined as only fraudulent commercial e-mail, or all unsolicited commercial e-mail.

Spam on wireless devices such as cell phones is a growing concern, and is also addressed in P.L. 108-187. See CRS Report RL31636, *Wireless Privacy: Availability of Location Information for Telemarketing* for more on that topic. This report will be updated as events warrant.

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"Junk E-Mail": An Overview of Issues Concerning Commercial Electronic Mail and "Spam"

Overview

One aspect of increased use of the Internet for electronic mail (e-mail) has been the advent of unsolicited advertising, also called "unsolicited commercial e-mail" (UCE), "unsolicited bulk e-mail," "junk e-mail, "or "spam."[1] Complaints focus on the fact that some spam contains, or has links to, pornography, that much of it is fraudulent, and the volume of spam is steadily increasing. In April 2003, the Federal Trade Commission (FTC) reported that of a random survey of 1,000 pieces of spam, 18% concerned "adult" offers (pornography, dating services, etc.) and 66% contained indications of falsity in "from" lines, "subject" lines, or message text.[2] According to Brightmail [http://www.brightmail.com], a company that sells anti-spam software, the volume of spam as a percentage of all Internet e-mail rose from 8% in January 2001 to 63% in March 2004.

Opponents of junk e-mail argue that not only is it annoying and an invasion of privacy (see CRS Report RL31408 for more on Internet privacy), but that its cost is borne by recipients and Internet Service Providers (ISPs), not the marketers. Consumers reportedly are charged higher fees by ISPs that must invest resources to upgrade equipment to manage the high volume of e-mail, deal with customer complaints, and mount legal challenges to junk e-mailers. Businesses may incur costs due to lost productivity, or investing in upgraded equipment or anti-spam software. The Ferris Research Group [http://www.ferris.com], which offers consulting services on managing spam, estimated that spam cost U.S. organizations over $10 billion in 2003.

Proponents of UCE argue that it is a valid method of advertising, and is protected by the First Amendment. The Direct Marketing Association (DMA) released figures in May 2003 showing that commercial e-mail generates more than

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[1] The origin of the term spam for unsolicited commercial e-mail was recounted in *Computerworld*, April 5, 1999, p. 70: "It all started in early Internet chat rooms and interactive fantasy games where someone repeating the same sentence or comment was said to be making a 'spam.' The term referred to a Monty Python's Flying Circus scene in which actors keep saying 'Spam, Spam, Spam and Spam' when reading options from a menu."

[2] Federal Trade Commission. False Claims in Spam: A Report by the FTC's Division of Marketing Practices. April 30, 2003. P. 10. Available at the FTC's spam Web site: [http://www.ftc.gov/bcp/conline/edcams/spam/index.html]

$7.1 billion in annual sales and $1.5 billion in potential savings to American consumers.[3] In a joint open letter to Congress published in *Roll Call* on November 13, 2003, three marketing groups — DMA, the American Association of Advertising Agencies, and the Association of National Advertisers — asserted that "12% of the $138 billion Internet commerce marketplace is driven by legitimate commercial e-mail. This translates into a minimum of $17.5 billion spent in response to commercial e-mails in 2003 for bedrock goods and services such as travel, hotels, entertainment, books, and clothing."[4] A March 2004 study by the Pew Internet & American Life Project found that 5% of e-mail users said they had ordered a product or service based on an unsolicited e-mail, which "translates into more than six million people."[5]

DMA argued for several years that instead of banning UCE, individuals should be given the opportunity to "opt-out" by notifying the sender that they want to be removed from the mailing list. (The concepts of opt-out and opt-in are discussed below.) Hoping to demonstrate that self regulation could work, in January 2000, the DMA launched the E-mail Preference Service where consumers who wish to opt-out can register themselves at a DMA Web site [http://www.dmaconsumers .org/emps.html]. DMA members sending UCE must check their lists of recipients and delete those who have opted out. Critics argued that most spam does not come from DMA members, so the plan was insufficient, and on October 20, 2002, the DMA agreed. Concerned that the volume of unwanted and fraudulent spam is undermining the use of e-mail as a marketing tool, the DMA announced that it would pursue legislation to battle the rising volume of spam.

Controlling spam is complicated by the fact that some of it originates outside the United States and thus is not subject to U.S. laws or regulations. Spam is a global problem, and a 2001 study by the European Commission concluded that Internet subscribers globally pay 10 billion Euros a year in connection costs to download spam [http://europa.eu.int/comm/internal_market/privacy/studies/spam_en.htm]. Some European officials complain that the United States is the source of most spam, and the U.S. decision to adopt an opt-out approach in the CAN-SPAM Act (discussed below) was not helpful.[6] A British anti-spam company, Sophos, asserted in March 2004 that the United States is responsible for more than 56% of the spam sent worldwide.[7] Tracing the origin of any particular piece of spam can be difficult because some spammers route their messages through other computers (discussed below under **Securing Internet Connections**).

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[3] Quoted in: Digits. Wall Street Journal, May 22, 2003, p. B3.

[4] Available at: [http://www.the-dma.org/cgi/dispnewsstand?article=1638].

[5] Pew Internet & American Life Project. Pew Internet Project Data Memo. March 2004. Available at: [http://www.pewinternet.org/reports/pdfs/PIP_Data_Memo_on_Spam.pdf].

[6] For example, see: Mitchener, Brandon. Europe Blames Weaker U.S. Law for Spam Surge. Wall Street Journal, February 3, 2004, p. B1 (via Factiva).

[7] Lemke, Tim. U.S. "Worst offender" in Spam Production. Washington Times, March 8, 2004, p. C13 (via Factiva).

What Is Spam?

One challenge in debating the issue of spam is defining it.[8] To some, it is any commercial e-mail to which the recipient did not "opt-in" by giving prior *affirmative consent* to receiving it. To others, it is commercial e-mail to which *affirmative* or *implied consent* was not given, where implied consent can be defined in various ways (such as whether there is a pre-existing business relationship). Still others view spam as "unwanted" commercial e-mail. Whether or not a particular e-mail is unwanted, of course, varies per recipient. Since senders of UCE do find buyers for some of their products, it can be argued that at least some UCE is reaching interested consumers, and therefore is wanted, and thus is not spam. Consequently, some argue that marketers should be able to send commercial e-mail messages as long as they allow each recipient an opportunity to indicate that future such e-mails are not desired (called "opt-out"). Another group considers spam to be only fraudulent commercial e-mail, and believe that commercial e-mail messages from "legitimate" senders should be permitted. The DMA, for example, considers spam to be only fraudulent UCE.

The differences in defining spam add to the complexity of devising legislative or regulatory remedies for it. Some of the bills introduced in the 108th Congress took the approach of defining commercial e-mail, and permitting such e-mail to be sent to recipients as long as it conformed with certain requirements. Other bills defined *unsolicited* commercial e-mail and prohibited it from being sent unless it met certain requirements. The final law, the CAN-SPAM Act (see below), took the former approach, defining and allowing marketers to send such e-mail as long as they abide by the terms of the law, such as ensuring that the e-mail does not have fraudulent header information or deceptive subject headings, and includes an opt-out opportunity and other features that proponents argue will allow recipients to take control of their in-boxes. Proponents of the law argue that consumers will benefit because they should see a reduction in fraudulent e-mails. Opponents of the law counter that it legitimizes sending commercial e-mail, and to the extent that consumers do not want to receive such e-mails, the amount of unwanted e-mail actually may increase. If the legislation reduces the amount of fraudulent e-mail, but not the amount of unwanted e-mail, the extent to which it reduces "spam" would depend on what definition of that word is used.

Avoiding and Reporting Spam

Tips on avoiding spam are available on the FTC Web site [http://www.ftc.gov/bcp/menu-internet.htm] and from Consumers Union [http://www.consumersunion.org/pub/core_product_safety/000210.html#more]. Consumers may file a complaint about spam with the FTC by visiting the FTC Web site [http://www.ftc.gov] and choosing "File a Complaint" at the bottom of the page. The offending spam also may be forwarded to the FTC (UCE@ftc.gov) to assist the

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[8] "Spam" generally refers to e-mail, rather than other forms of electronic communication. The term "spim," for example, is used for unsolicited advertising in Instant Messaging. Unsolicited advertising on wireless devices such as cell phones is called "wireless spam."

FTC in monitoring UCE trends and developments. Some ISPs also have mechanisms for their subscribers to report spam.

Restraining Spam: Federal Law—The CAN-SPAM Act

The 108th Congress passed the CAN-SPAM Act, S. 877, which merged provisions from several House and Senate bills.[9] Signed into law by President Bush on December 16, 2003 (P.L. 108-187), it went into effect on January 1, 2004.

The Senate originally passed S. 877 on October 22, 2003, by a vote of 97-0. As passed at that time, the bill[10] combined elements from several of the Senate bills. The House passed (392-5) an amended version of S. 877 on November 21, 2003, melding provisions from the Senate-passed bill and several House bills. The Senate concurred in the House amendment, with an amendment, on November 25, through unanimous consent. The Senate amendment included several revisions, requiring the House to vote again on the bill. The House agreed with the Senate amendment by unanimous consent on December 8, 2003.

Summary of the Major Provisions of the CAN-SPAM Act

The major provisions of P.L. 108-187 include the following.

- Commercial e-mail may be sent to recipients as long as the message conforms with the following requirements:
  — transmission information in the header is not false or misleading;
  — subject headings are not deceptive;
  — a functioning return e-mail address or comparable mechanism is included to enable recipients to indicate they do not wish to receive future commercial e-mail messages from that sender at the e-mail address where the message was received (**the "opt-out" requirement**);
  — the e-mail is not sent to a recipient by the sender, or anyone acting on behalf of the sender, more than 10 days after the recipient has opted-out, unless the recipient later gives affirmative consent to receive the e-mail (i.e., opts back in); and
  — the e-mail must be clearly and conspicuously identified as an

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[9] Nine bills were introduced in the 108th Congress prior to passage of the CAN-SPAM Act: H.R. 1933 (Lofgren), H.R. 2214 (Burr-Tauzin-Sensenbrenner), H.R. 2515 (Wilson-Green), S. 877 (Burns-Wyden), S. 1052 (Nelson-FL), and S. 1327 (Corzine) were "opt-out" bills. S. 563 (Dayton) was a "do not e-mail" bill. S. 1231 (Schumer) combined elements of both approaches. S. 1293 (Hatch) created criminal penalties for fraudulent e-mail.

[10] The original Senate-passed bill contained a Title not related to spam (Title II — Realtime Writers Act), which is not discussed in this report. It was not included in the amended version of S. 877 passed by the Senate November 25.

advertisement or solicitation (although the legislation does not state how or where that identification must be made).

- Some of those requirements (including the prohibition on deceptive subject headings, and the opt-out requirement) do not apply if the message is a "transactional or relationship message," which include various types of notifications, such as periodic notifications of account balance or other information regarding a subscription, membership, account, loan or comparable ongoing commercial relationship involving the ongoing purchase or use by the recipient of products or services offered by the sender; providing information directly related to an employment relationship or related benefit plan in which the recipient is currently involved, participating, or enrolled; or delivering goods or services, including product updates or upgrades, that the recipient is entitled to receive under the terms of a transaction that the recipient has previously agreed to enter into with the sender.

- Sexually oriented commercial e-mail must include, in the subject heading, a "warning label" to be prescribed by the FTC (in consultation with the Attorney General), indicating its nature. The warning label does not have to be in the subject line, however, if the message that is initially viewable by the recipient does not contain the sexually oriented material, but only a link to it. In that case, the warning label, and the identifier, opt-out, and physical address required under section 5 (a)(5) of the Act; must be contained in the initially viewable e-mail message as well. Sexually oriented material is defined as any material that depicts sexually explicit conduct, unless the depiction constitutes a small and insignificant part of the whole, the remainder of which is not primarily devoted to sexual matters. These provisions do not apply, however, if the recipient has given prior affirmative consent to receiving such e-mails.

- Businesses may not knowingly promote themselves with e-mail that has false or misleading transmission information.

- State laws specifically related to spam are preempted, but not other state laws that are not specific to electronic mail, such as trespass, contract, or tort law, or other state laws to the extent they relate to fraud or computer crime.

- Violators may be sued by FTC, state attorneys general, and ISPs (but not by individuals).

- Violators of many of the provisions of the act are subject to statutory damages of up to $250 per e-mail, to a maximum of up to $2 million, which may be tripled by the court (to $6 million) for "aggravated violations."

- Violators may be fined, or sentenced to up to 3 or 5 years in prison (depending on the offense), or both, for accessing someone else's computer without authorization and using it to send multiple commercial e-mail messages; sending multiple commercial e-mail messages with the intent to deceive or mislead recipients or ISPs as to the origin of such messages; materially falsifying header information in multiple commercial e-mail messages; registering for 5 or more e-mail accounts or online user accounts, or 2 or more domain names, using information that materially falsifies the identity of the actual registrant, and sending multiple commercial e-mail messages from any combination of such accounts or domain names; or falsely representing oneself to be the registrant or legitimate successor in interest to the registrant of 5 of more Internet Protocol addresses, and sending multiple commercial e-mail messages from such addresses. "Multiple" means more than 100 e-mail messages during a 24-hour period, more than 1,000 during a 30-day period, or more than 10,000 during a 1-year period. Sentencing enhancements are provided for certain acts.

- The Federal Communications Commission, in consultation with the FTC, must prescribe rules to protect users of wireless devices from unwanted commercial messages. (See CRS Report RL31636 for more on this topic.)

Conversely, the Act does not —

- Create a "do not e-mail registry" where consumers can place their e-mail addresses in a centralized database to indicate they do not want commercial e-mail. The law requires only that the FTC develop a plan and timetable for establishing such a registry and to inform Congress of any concerns it has with regard to establishing it.

- Require that consumers "opt-in" before receiving commercial e-mail.

- Require commercial e-mail to include an identifier such as "ADV" in the subject line to indicate it is an advertisement. The law does require the FTC to report to Congress within 18 months of enactment on a plan for requiring commercial e-mail to be identifiable from its subject line through use of "ADV" or a comparable identifier, or compliance with Internet Engineering Task Force standards, or an explanation of any concerns FTC has about such a plan.

- Include a "bounty hunter" provision to financially reward persons who identify a violator and supply information leading to the collection of a civil penalty, although the FTC must submit a report to Congress within 9 months of enactment setting forth a system for doing so.

Opt-In, Opt-Out, and a "Do Not E-Mail" Registry

Much of the debate on how to stop spam focuses on whether consumers should be given the opportunity to "opt-in" (where prior consent is required) or "opt-out" (where consent is assumed unless the consumer notifies the sender that such e-mails are not desired) of receiving UCE or all commercial e-mail. The CAN-SPAM Act is an "opt out" law, requiring senders of all commercial e-mail to provide a legitimate[11] opt-out opportunity to recipients.

One method of implementing opt-out is to create a "do not e-mail" registry where consumers could place their names on a centralized list to opt-out of all commercial e-mail instead of being required to respond to individual e-mails. The concept is similar to the National Do Not Call registry where consumers can indicate they do not want to receive telemarketing calls. The CAN-SPAM Act does not take the step of actually requiring the FTC to create a do not e-mail registry.[12] It does, however, require the FTC to submit a plan and timetable for establishing a registry, authorize the FTC to create it, and instruct the FTC to explain to Congress any concerns about establishing it.

FTC Position on a Do Not E-Mail Registry. Although there appears to be widespread public support for a "do not e-mail" list,[13] some worry that the database containing the e-mail addresses of all those who do not want spam would be vulnerable to hackers, potentially exacerbating rather than solving the problem. Others, including FTC Chairman Timothy Muris, caution that a Do Not E-Mail list may not be enforceable. In an August 19, 2003, speech to the Aspen Institute, he commented that the concept is interesting, "but it is unclear how we can make it work" because it would not be enforceable.[14] "If it were established, my advice to consumers would be: Don't waste the time and effort to sign up."

Following initial Senate passage of S. 877 in October 2003, an unnamed FTC official was quoted by the *Washington Post* as saying that the FTC's position on the

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[11] Some spam already contains instructions, usually to send a message to an e-mail address, for how a recipient can opt-out. However, in many cases this is a ruse by the sender to trick a recipient into confirming that the e-mail has reached a valid e-mail address. The sender then sends more spam to that address and/or includes the e-mail address on lists of e-mail addresses that are sold to bulk e-mailers. It is virtually impossible for a recipient to discern whether the proffered opt-out instructions are genuine or duplicitous.

[12] The FTC issued a warning to consumers in February 2004 that a Web site (unsub.us) promoting a National Do Not E-mail Registry is a sham and might be collecting e-mail addresses to sell to spammers. See: [http://www.ftc.gov/opa/2004/02/spamcam.htm].

[13] A survey by the ePrivacy Group found that 74% of consumers want such a list. Lisa Bowman, Study: Do-Not-Spam Plan Winning Support, c|net news.com, July 23, 2003, 12:28 PM PT.

[14] Available at: [http://www.ftc.gov/speeches/muris/030819aspen.htm].

registry is unchanged, and if the Commission remains unconvinced that it would work, "Congress would have to change the law" to require the FTC to create it.[15]

On November 21, after the House passed S. 877, Mr. Muris released a statement complimenting Congress on taking a positive step in the fight against spam, but cautioning again that legislation alone will not solve the problem.[16] In March 2004, citing the difficulties of tracking down spammers who use aliases or conceal their identities by routing the e-mails through other computers, he told the Consumer Federation of America that "I've seen nothing to change my mind" about the enforceability of such a registry.[17]

"Opt-In" in the United States and Europe. During debate on the CAN-SPAM Act, several anti-spam groups argued that the legislation should go further, and prohibit commercial e-mail from being sent to recipients unless they opt-in, similar to a policy adopted by the European Union (see below). Eight U.S. groups, including Junkbusters, the Coalition Against Unsolicited Commercial Email (CAUCE), and the Consumer Federation of America, wrote a letter to several Members of Congress expressing their view that the opt-out approach (as in P.L. 108-187) would "undercut those businesses who respect consumer preferences and give legal protection to those who do not."[18] Some of the state laws (see below) adopted the opt-in approach, including California's anti-spam law.

The European Union adopted an "opt-in" requirement for e-mail, which became effective October 31, 2003.[19] Under the EU policy, prior affirmative consent of the recipient must be obtained before sending commercial e-mail unless there is an existing customer relationship. In that case, the sender must provide an opt-out opportunity. The EU directive sets the broad policy, but each member nation must pass its own law as to how to implement it.[20]

Labels

Another approach to restraining spam is requiring that senders of commercial e-mail use a label, such as "ADV," in the subject line of the message, so the recipient

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[15] Krim, Jonathan. Senate Votes 97-0 to Restrict E-Mail Ads; Bill Could Lead to No-Spam Registry. Washington Post, October 23, 2003, p. A1 (via Factiva).

[16] FTC. Statement of Timothy J. Muris Regarding Passage of the Can-Spam Act of 2003. November 21, 2003. [http://www.ftc.gov/opa/2003/11/spamstmt.htm]

[17] Kerr, Jennifer C. Regulator Says He's Not Optimistic About Success for Do-Not-Spam List. Associated Press, March 11, 2004, 16:50 (via Factiva).

[18] See [http://www.cauce.org/pressreleases/20030522.shtml].

[19] See [http://www.europa.eu.int/scadplus/leg/en/lvb/l24120.htm].

[20] Not all EU nations have yet passed such legislation. According to the Associated Press (December 7, 2003, 12:30), the EU asked nine countries (Belgium, Germany, Greece, Finland, France, Luxembourg, the Netherlands, Portugal, and Sweden) to provide within two months an explanation of when they will pass such legislation. AP identified six countries that have taken steps to implement the EU law: Austria, Britain, Denmark, Ireland, Italy, and Spain. Sweden reportedly adopted spam legislation in March 2004.

will know before opening an e-mail message that it is an advertisement. That would also make it easier for spam filtering software to identify commercial e-mail and eliminate it. Some propose that adult-oriented spam have a special label, such as ADV-ADLT, to highlight that the e-mail may contain material or links that are inappropriate for children, such as pornography.

The CAN-SPAM Act: (1) requires clear and conspicuous identification that a commercial e-mail is an advertisement, but is not specific about how or where that identification must be made; (2) requires the FTC to prescribe warning labels for sexually-oriented e-mails within 120 days of enactment (see **Implementation** below); and (3) requires the FTC to submit a report within 18 months of enactment setting forth a plan for requiring commercial e-mail to be identifiable from its subject line using ADV or a comparable identifier, or by means of compliance with Internet Engineering Task Force standards. However, the clear and conspicuous identification that a commercial e-mail is an advertisement, and the warning label for sexually-oriented material, are not required if the recipient has given prior affirmative consent to receipt of such messages.

FTC Implementation Actions

The FTC has begun its rulemaking process to implement certain provisions of the Act, as discussed below. The Act requires the Federal Communications Commission (FCC) to issue regulations concerning spam on wireless devices such as cell phones; see CRS Report RL31636 for more information about wireless spam.

Warning Labels for Sexually Oriented E-mail. On April 13, 2004, the FTC adopted (5-0) a final rule regarding labeling of e-mail with sexually oriented material. A press release and the text of the ruling are available on the FTC's Web site at [http://www.ftc.gov/opa/2004/04/adultlabel.htm]. The rule requires that the mark "SEXUALLY-EXPLICIT" be included both in the subject line of any e-mail containing sexually oriented material, and in the body of the message in what the FTC called the "electronic equivalent of a 'brown paper wrapper.'" The FTC explained that the "brown paper wrapper" is what a recipient initially sees when opening the e-mail, and it may not contain any other information or images except what the FTC prescribes. The rule also clarifies that the FTC interprets the CAN-SPAM Act provisions to include both visual images and written descriptions of sexually explicit conduct. The rule goes into effect on May 19, 2004.

A National Do Not E-mail Registry. On March 10, 2004, the FTC announced that it would publish an Advance Notice of Proposed Rulemaking (ANPR) in the March 11 *Federal Register* requesting comment on several sections of the CAN-SPAM Act, including the proposal to create a National Do Not E-Mail Registry. Comments were due by March 31, 2004. The text of the ANPR is available at: [http://www.ftc.gov/opa/2004/03/canspam.htm].

Other Matters. The ANPR announced on March 10 also requested comments on other sections of the Act in which Congress authorized or directed FTC action. They include how to define the relevant criteria to facilitate determination of an e-mail's "primary purpose"; whether to modify the definition in the Act of "transactional or relationship messages"; whether to modify the 10-day time period

specified in the Act within which an opt-out request must be honored; what activities and practices, if any, should be added to the list of aggravated violations specified in the Act; any additional regulations that might be needed to help implement the Act; and about the several reports the FTC is required to submit under the law. The text of the ANPR is available at: [http://www.ftc.gov/opa/2004/03/canspam.htm]. Comments were due by April 12, 2004, but the deadline for comments on the "primary purpose" definition was extended to April 20, 2004.

Reaction to the CAN-SPAM Act

Both praise and criticism greeted enactment of the CAN-SPAM Act. Among those praising the law are marketing groups such as the DMA,[21] ISPs such as America Online,[22] and Microsoft chairman Bill Gates.[23] Generally, they support a single federal law, instead of a "patchwork quilt" of state laws, and legislation that permits "legitimate" commercial e-mail while taking measures against fraudulent e-mail. The DMA did express reservations, however, about the provision authorizing the FTC to create a "do not e-mail" registry, even though the law does not, in fact, require the FTC to do so.

Some commercial e-mailers also appeared pleased. For example, Scott Richter, the president of an e-mail marketing firm in Colorado, expressed relief that the federal law preempted a stricter California law that was slated to become effective January 1, 2004 (discussed below).[24]

Critics include those who wanted opt-in legislation, including advocates of California's opt-in law. California State Senator Debra Bowen was quoted as saying that the CAN-SPAM Act, "... doesn't can spam. It legalizes it.... It's full of loopholes. It's difficult to enforce. It's weaker than many state laws."[25] The Coalition Against Unsolicited Commercial E-Mail (CAUCE) expressed disappointment with the final version of the law, saying that it "fails the most fundamental test of any anti-spam law, in that it neglects to actually tell any

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[21] Direct Marketing Association. Senate Updates Spam Bill; Must Return to House for Final Action. News Release, November 25, 2003 [http://www.the-dma.org/cgi/dispnewsstand?article=1662+++++]

[22] America Online, an Industry Leader in the Fight for Tougher Anti-Spam Laws, Applauds Bipartisan Congressional Agreement and Action on Tough New Spam Laws, America Online, Press Release November 21, 2003 [http://media.aoltimewarner.com/media/newmedia/cb_press_view.cfm?release_num=55253625]

[23] Gates, Bill. A Spam-Free Future. Washington Post, November 24, 2003, p. A 21 (via Factiva).

[24] Quoted in: Andrews, Edmund L. and Saul Hansell. Congress Set to Pass Bill That Restrins Unsolicited E-Mail. New York Times, November 22, 2003, p. 1 (via Factiva).

[25] Quoted in: Lee, Jennifer B. Antispam Bill Passes Senate by Voice Vote. New York Times, November 26, 2003, p. 3 (via Factiva).

marketers not to spam."[26] Another criticism is that the law does not allow individuals to sue spammers, only the FTC, ISPs, and state attorneys general can sue.

The effectiveness of this legislation in reducing spam probably cannot be ascertained in the near term. One of the bill's sponsors, Senator Conrad Burns, acknowledged that "I don't think you will see really a cutback in spam until someone is caught and prosecuted and they know for sure that we are serious about the enforcement of the law...."[27]

Another factor in the law's effectiveness is that it does not affect spam sent from other countries. Some observers anticipate that U.S.-based spammers will simply move offshore. Members of Congress and others have called for an international approach to restraining spam, which, as noted earlier, is a world-wide problem.

Finally, the extent to which it reduces "spam" depends in part on how that word is defined. Some consider spam to be only fraudulent commercial e-mail, and anticipate that the civil and criminal penalties in the law may reduce the volume of that type of commercial e-mail. Others consider spam to be any unsolicited commercial e-mail, and since the law permits commercial e-mail to be sent as long as it complies with the law's requirements, they argue that consumers may see an increase, not a decrease, in commercial e-mail.

Restraining Spam: State Laws

According to the SpamLaws Web site [http://www.spamlaws.com], 36 states passed laws regulating spam: Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Maryland, Michigan, Minnesota, Missouri, Nevada, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming. The specifics of each law varies. Summaries of and links to each law are provided on that Web site. CRS Report RL31488, *Regulation of Unsolicited Commercial E-Mail*, provides a brief review of the state laws and challenges to them.

The CAN-SPAM Act preempts state spam laws, but not other state laws that are not specific to electronic mail, such as trespass, contract, or tort law, or other state laws to the extent they relate to fraud or computer crime. California's anti-spam law is considered relatively strict, requiring opt-in for unsolicited commercial e-mail, unless there is a prior business relationship (in which case, opt-out is required), and would have become effective January 1, 2004. The impending implementation of

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[26] CAUCE Statement on House and Senate Spam Bill Vote. November 25, 2003. Available at: [http://www.cauce.org/news/index.shtml].

[27] Quoted in: Lee, Jennifer B. Antispam Bill Passes Senate by Voice Vote. New York Times, November 26, 2003, p. 3 (via Factiva).

the California law is often cited as one of the factors that stimulated Congress to complete action on a less restrictive, preemptive federal law before the end of 2003.[28]

Restraining Spam: Non-Legislative Approaches

The fact that the amount of spam grew despite passage of those state laws suggests that legislation is not a sure solution to the spam problem. It is difficult to determine so soon after the passage of the CAN-SPAM Act what effect it will have, in part because it will take time for lawsuits to proceed through the courts. Conflicting information is currently available. Statistics from Brightmail indicate that the percentage of spam in Internet e-mail continues to grow,[29] and a March 2004 study by the Pew Internet & American Life Project concluded that "growing numbers of Internet users are becoming disillusioned with e-mail, despite the first national anti-spam legislation which went into effect on January 1."[30] However, an America Online (AOL) official reported on March 19, 2004 that the company experienced a 27% drop in spam since February 20, 2004.[31]

Many argue that legislation alone is insufficient. Senator McCain, for example, was quoted as saying that he supported the passage of legislation, but is not optimistic about its effect: "I'll support it, report it, vote for it, take credit for it, but will it make much difference? I don't think so."[32]

In congressional testimony and other speeches, FTC Chairman Muris has repeatedly argued that a combination of legislation, technological advancements, and consumer education is needed. Calling spam "one of the most daunting consumer protection problems that the Commission has ever faced," he noted that "Despite the concerted efforts of government regulators, Internet service providers, and other interested parties, the problem continues to worsen."[33] During congressional debate on the CAN-SPAM Act, the White House, and the Departments of Justice and Commerce also warned that federal legislation alone cannot solve the spam problem — that development and adoption of new technologies also is needed.[34,35]

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[28] For example, see: Glanz, William. House Oks Measure Aimed at Spammers; Senate Likely to Approve Changes. Washington Times, November 22, 2003, p. A1 (via Factiva).

[29] Statistics available at [http://www.brightmail.com] show the amount of spam as a percentage of all Internet e-mail was 58% in December 2003, just prior to the law becoming effective, and 62% in February 2004.

[30] Pew, op. cit., p. 1.

[31] Sullivan, Andy. AOL Says It Sees Sharp Decline in 'Spam' E-Mail. Reuters, March 19, 2004, 13:18 (via Factiva).

[32] Chris Taylor. Spam's Big Bang. Time, June 16, 2003, p. 52.

[33] August 19, 2003 Aspen Institute speech

[34] Statement of Administration Policy. Available at [http://www.whitehouse.gov/omb/legislative/sap/index-date.html]. Scroll down to S. 877.

[35] U.S. Department of Justice. Joint Statement of the Departments of Justice and Commerce

(continued...)

Mr. Muris cited two significant differences between spam and other types of marketing. First, spammers can easily hide their identities and cross international borders. Second, sending additional spam "is essentially costless" to the spammer; the cost is borne by ISPs and recipients instead. This "cost shifting" means there is no incentive to the spammer to reduce the volume of messages being sent, and a bulk e-mailer testified at an FTC forum on spam that he could profit even if his response rate was less than 0.0001%.[36]

ISPs are motivated to reduce spam because they want to retain subscribers who might weary of spam and abandon e-mail entirely, reduce the need to upgrade server capacity to cope with the traffic, and avoid the costs associated with litigation. Though lawsuits may be costly, for the past several years, ISPs have, in fact, taken spammers to court using laws that existed prior to the CAN-SPAM Act. In March 2004, America Online, Earthlink, Microsoft, and Yahoo, filed lawsuits under the provisions of the CAN-SPAM Act.[37] But the ISPs continue to look for new approaches to reducing spam.

Spam filters are widely used today by ISPs, corporations, universities, and other organizations. Spammers are aware of that, however, and routinely find methods for defeating the filters by misspelling words, using symbols instead of letters, or "spoofing" the return address (spoofing is discussed below). Coupled with the fact that the filters may inadvertently block wanted e-mails, they are not considered an ideal solution. Some of the other non-legislative approaches to reducing spam are described below.

Securing Internet Connections

Spammers increasingly are taking advantage of "always on" Internet connections, such as cable modems or Digital Subscriber Lines (DSL), belonging to consumers who are unaware that spam is being routed through their computers. In a January 2004 consumer alert entitled "Who's Spamming Who? Could it Be You?," the FTC called on consumers to be vigilant about securing their computers by using firewalls and anti-virus software, being cautious in opening e-mail attachments from unknown senders, and taking other steps.[38] The FTC estimated that 30% of all spam is sent by compromised computers in home offices and living rooms.

In addition, the FTC and regulatory agencies in more than two dozen countries announced "Operation Secure Your Server" in January 2004,[39] an effort to close

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[35] (...continued)
on E-Mail Spam Legislation. Press Release 03-643. November 21, 2003. Available at: [http://www.usdoj.gov/opa/pr/2003/November/03_opa_643.htm]

[36] Ibid.

[37] Mangalindan, Mylene. Web Firms File Spam Suit Under New Law. Wall Street Hournal, March 11, 2004, p. B4, via Factiva.

[38] See: [http://www.ftc.gov/bcp/conline/pubs/alerts/whospamalrt.htm].

[39] See: [http://www.ftc.gov/secureyourserver]. The other countries participating in this effort
(continued...)

"open relays" or "open proxies" in businesses that similarly can be used by spammers to reroute their messages and thereby disguise their origin. The agencies sent letters to "tens of thousands" of owners or operators of servers that might be used in this manner urging them to take steps to protect their computers from misuse.

Authentication

Another alternative is to require senders to "authenticate" who they are so that recipients may determine whether or not it is spam. There are a variety of approaches to authentication.

Challenge-Response. "Challenge-response" software is one method of authentication. It requires the sender to respond to an action requested in an automatically generated return e-mail before the original e-mail reaches the intended recipient. Challenge-response is based on the concept that spammers are sending e-mail with automated systems that cannot read a return e-mail and respond to a question (such as "how many kittens are in this picture"), but a person can, so if the e-mail was sent by an individual rather than a bulk e-mail system, the person will answer the question or perform a requested action and the e-mail will be delivered. Earthlink offers this option to its subscribers. It is not clear to what extent such software may become popular, however. *Business Week* outlined some of the potential unintended consequences, including recipients not receiving confirmation of orders placed over the Internet (which often are generated by automated systems), and difficulty if the sender is using an Internet-access device that does not display graphics (e.g., a Blackberry) or is visually impaired.[40]

Microsoft's Three-Part Strategy: "Caller ID for E-Mail," Certificates, and "Postage". In a February 24, 2004 speech,[41] Microsoft Corp. Chairman Bill Gates detailed three initiatives for dealing with the spam problem.

One of the initiatives deals with "spoofing," where spammers use false addresses—often legitimate e-mail addresses that the spammer obtained through legitimate or illegitimate means—in the "from" line to avoid spam filters and deceive recipients into opening the message. Mr. Gates announced that his company would pilot test a **"Caller ID for E-Mail"** system to enable ISPs to determine if a "from" line is spoofed. He said that Microsoft would make available a list of all the numeric Internet addresses assigned to Microsoft computers that send out mail. Other ISPs would then be able to check an incoming message purporting to be from a Microsoft computer to determine if that actually was its origin. If not, then the message would

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[39] (...continued)
are: Albania, Argentina, Australia, Brazil, Bulgaria, Canada, Chile, Colombia, Denmark, Ecuador, Finland, Hungary, Jamaica, Japan, Lithuania, Norway, Panama, Peru, Romania, Serbia, Singapore, South Korea, Switzerland, Taiwan, and the United Kingdom.

[40] Stephen H. Wildstrom. A Spam-Fighter More Noxious Than Spam. *Business Week*, July 7, 2003, p. 21.

[41] Microsoft. Bill Gates Outlines Technology Vision to Help Stop Spam. February 24, 2004. [http://www.microsoft.com/presspass/press/2004/feb04/02-24RSAAntiSpamTechVisionPR.asp].

be blocked. Mr. Gates envisions other e-mail senders similarly making their numeric addresses known in order to implement the system broadly. He noted that Brightmail, Amazon.com, and Sendmail Inc. are working with Microsoft on this initiative. Microsoft reportedly also has been working with AOL, Yahoo, and Earthlink for about a year, but agreement on common technical standards has not been reached.[42] An AOL spokesman was quoted as saying that AOL welcomed Mr. Gates' announcement and that AOL would test the Microsoft system.[43]

For "legitimate" high-volume e-mail senders, Microsoft is proposing an approach similar to what has been implemented in the Internet privacy arena, where certain organizations offer "seals of approval" to Web sites that abide by certain privacy principles. These "seals" are offered by organizations such as the Better Business Bureau Online (BBB Online), WebTrust, or TRUSTe.[44] Microsoft is proposing a similar regime where trusted entities would establish "reasonable behavior" practices, and issue a **certificate** that would indicate to a recipient or a spam filter that the sender is not a spammer. The marketers reportedly would fund the certificate system and pay for the certificates.[45]

The concept of requiring e-mail senders to pay **postage** for their messages, analogous to traditional mail service, has been broached for several years on the premise that it would increase the costs to spammers of sending out their messages, making spamming less economical. Since the postage would probably apply to all e-mail senders, however, there are concerns that it would restrain the use of e-mail, and the concept has not been widely embraced. However, Microsoft is proposing a variation wherein rather than paying money, the sender would be required to devote a certain amount of computer processing time to each message as a demonstration that it is not spam. Mr. Gates views this approach as beneficial to legitimate small volume e-mail senders. The concept is based on the assumption that spammers send millions of messages a day, spending only a fraction of a second on each message, but that legitimate small-volume e-mail senders would have "an abundance of computer processing power available. Although they can't afford to spend cash for a certificate, they can afford to spend a few seconds on each message."[46] Microsoft has not ruled out the possibility of requiring a financial payment, however, which it calls a "micropayment."[47] Details were not provided.

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[42] Krim, Jonathan. AOL Blocks Spammers' Web sites. Washington Post, March 20, 2004, p. A1 (via Factiva).

[43] Ibid.

[44] See CRS Report RL31408, Internet Privacy: Overview and Pending Legislation, for more on Internet privacy seals.

[45] Krim, op. cit.

[46] Microsoft, op. cit.

[47] Microsoft—Q&A: Microsoft's Anti-Spam Technology Roadmap. February 24, 2004. [http://www.microsoft.com/presspass/features/2004/Feb04/02-24CallerID.asp].

Other Actions by ISPs

In addition to the activities described above, some ISPs are taking other actions. For example, in 2004, AOL began blocking some of the Web sites that sell products advertised by spammers. AOL subscribers who click on a Web link in a spam message may receive an error message that a connection could not be established. An AOL spokesman was quoted as saying that AOL determines which sites to block based on complaints from subscribers.[48]

Earthlink reportedly blocks only Web sites that pretend to be associated with Earthlink itself. In a practice called "phishing," an e-mail sender pretends to be from a company, such as Earthlink, and includes in the e-mail a link to a Web site that mimics an actual Earthlink site. Recipients who link to the Website are asked to provide personally identifiable information and may respond, believing they are communicating with their ISP or another known entity. The information then may be used for illegitimate purposes.

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[48] Krim, op. cit.

Table 1. Major Provisions of the CAN-SPAM Act

Provision	S. 877 (as passed by the House and Senate)
Title	Controlling the Assault of Non-Solicited Pornography and Marketing (CAN-SPAM) Act
Definition of Commercial E-Mail	E-mail whose primary purpose is commercial advertisement or promotion of commercial product or service, with exceptions. Transactional or relationship message (as defined in the Act) is not commercial e-mail. FTC shall issue regulations within 12 months after enactment further defining the relevant criteria to facilitate the determination of the "primary purpose" of a commercial e-mail message.
Definition of Unsolicited Commercial E-mail	Not defined.
Creates "do not e-mail" registry at FTC	No, but requires FTC to submit to Congress, within 6 months of enactment, plan and timetable for creating such a registry; to explain any concerns it has about creating it; and to explain how it would be applied with respect to children. Authorizes (but does not require) FTC to establish and implement the plan.
Prohibits deceptive subject headings	Yes, in all commercial e-mail.
Prohibits false, misleading, or deceptive information in body of message	No, but does not affect FTC's authority to bring enforcement actions for materially false or deceptive representations in commercial e-mail.
Prohibits transmission of e-mail from improperly or illegally harvested e-mail addresses	Yes, in commercial e-mail prohibited under other sections of the Act. Also prohibits dictionary attacks, and using automated means to register for multiple e-mail or on-line user accounts from which to transmit, or enable someone else to transmit unlawful commercial e-mail as defined by the Act.
Prohibits sending e-mails through computers accessed without authorization	Prohibits accessing a computer without authorization and transmitting multiple commercial e-mail messages from or through it.
Prohibits businesses from knowingly promoting themselves with e-mail that has false or misleading transmission information	Yes
Penalties for falsifying sender's identity	Yes
Requires FTC-prescribed "warning labels" on sexually oriented material	Yes, unless recipient has given prior affirmative consent to receipt of the message.

Provision	S. 877 (as passed by the House and Senate)
Requires specific characters in subject line to indicate the message is an advertisement	No, but commercial e-mail must provide clear and conspicuous identification that it is an advertisement, but not if the recipient has given prior affirmative consent to receive the message. Also, FTC must report to Congress within 18 months of enactment on plan for requiring commercial e-mail to be identifiable from its subject line through use of "ADV" or comparable identifier, or compliance with Internet Engineering Task Force standards, or an explanation of any concerns FTC has about such a plan.
Requires opt-out mechanism	Commercial e-mail must provide clear and conspicuous notice of opportunity to opt-out, and functioning e-mail return address or other Internet-based mechanism to which the recipient may opt-out. Sender cannot send commercial e-mail to recipient more than 10 days after recipient has opted out. Sender, or anyone acting on sender's behalf, cannot sell, lease, exchange, or otherwise transfer recipient's e-mail address for any purpose other than compliance with this Act or if the recipient has given express consent. Opt out does not apply if recipient later opts back in by affirmative consent.
Damages or Penalties	Civil and criminal penalties; vary per violation.
Reward for first person identifying a violator and supplying information leading to the collection of a civil penalty	No, but requires FTC to transmit a report to Congress within 9 months of enactment that sets forth a system for rewarding those who supply information about violations, including granting a reward of not less than 20% of civil penalty collected.
Private Right of Action	For ISPs only.
Affirmative Defense/Safe Harbor	No, but in assessing damages, courts may consider whether defendant established and implemented, with due care, reasonable practices and procedures to effectively prevent violations, or the violation occurred despite commercially reasonable efforts to maintain compliance with such practices and procedures.
Enforcement	By FTC, except for certain entities that are regulated by other agencies.
State action allowed	Yes, but must notify FTC or other appropriate regulator, which may intervene.
Effect on ISPs	ISPs may bring civil action in U.S. district court. Does not affect the lawfulness or unlawfulness under other laws of ISP policies declining to transmit, route, relay, handle, or store certain types of e-mail.

Provision	S. 877 (as passed by the House and Senate)
Supersedes state and local laws and regulations	Yes, but does not preempt other state laws that are not specific to electronic mail, such as trespass, contract, or tort law, or other state laws to the extent that they relate to fraud or computer crime.
Provisions regarding spam on wireless devices	Requires Federal Communications Commission, in consultation with FTC, to promulgate rules within 270 days of enactment to protect consumers from unwanted mobile service commercial messages.