EXHIBIT A

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Text and Multimedia Messaging: Emerging Issues for Congress

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Summary

The first text messages were sent during 1992 and 1993, although commercially, text messaging was not widely offered or used until 2000. Even then, messages could only be sent between users subscribed to the same wireless carrier, e.g., Sprint customers could only exchange messages with other Sprint customers. In November 2001, however, wireless service providers began to connect their networks for text messaging, allowing subscribers on different networks to exchange text messages. Since then, the number of text messages in the United States has grown to over 48 billion messages every month. Additionally, text messages are no longer only sent as "point-to-point" communications between two mobile device users. More specifically, messages are also commonly sent from Web-based applications within a Web browser (e.g., from an Internet e-mail address) and from instant messaging clients like AIM or MSN.

For Congressional policymakers, two major categories of issues have arisen: (1) "same problem, different platform" and (2) issues stemming from the difficulty in applying existing technical definitions to a new service, such as whether a text message is sent "phone-to-phone" or using the phone's associated email address. An example of the first category would be consumer fraud and children's accessing inappropriate content, which have existed previously in the "wired world," but have now found their way to the "wireless world." An example of the second category would be that spam sent between two phones or from one phone to many phones does not fall under the definition of spam in the CAN-SPAM Act of 2003 (Controlling the Assault of Non-Solicited Pornography and Marketing Act, P.L. 108-187); however, if that same message were to be sent from a phone or computer using the phone's associated e-mail address, it would.

The increasing use of text and multimedia messaging has raised several policy issues: applicability of CAN-SPAM Act to unwanted wireless messages; refusal of some carriers to allow users to disable text messaging; carrier blocking of Common Short Code messages; deceptive and misleading Common Short Code programs; protecting children from inappropriate content on wireless devices; mobile cyberbullying; and balancing user privacy with "Sunshine," Open Government, and Freedom of Information Laws.

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Introduction

The first text messages were sent during 1992 and 1993, although commercially, text messaging was not widely offered or used until 2000. Even then, messages could only be sent between users subscribed to the same wireless carrier, e.g., Sprint customers could only exchange messages with other Sprint customers. In November 2001, however, wireless service providers began to connect their networks for text messaging, allowing subscribers on different networks to exchange text messages. Since then, the number of text messages in the United States has grown to over 48 billion messages every month. Additionally, text messages are no longer only sent as "point-to-point" communications between two mobile device users. More specifically, messages are also commonly sent from Web-based applications within a Web browser and from instant messaging clients like AIM or MSN. **Table 1** tracks the historic growth of monthly text messaging between 2001 and 2007 from about 33 million to over 48 billion messages; **Table 2** tracks the historic and projected growth in the number of mobile customers using text messaging between 2003 and 2010 from about 32 million users to 100 million.

Table 1. Text Messaging Sent per Month in the United States

	Number of Text Messages
December 2007	48,100,000,000
June 2007	28,800,000,000
December 2006	18,660,000,000
June 2006	12,040,000,000
June 2005	7,250,000,000
June 2004	2,860,000,000
June 2003	1,220,000,000
June 2002	930,000,000
June 2001	33,500,000

Source: Adapted from CellSigns "Mobile Statistics," available online at http://www.cellsigns.com/industry.shtml and CTIA "Wireless Quick Facts," available online at http://www.ctia.org/media/industry_info/index.cfm/ AID/ 10323.

Table 2. Actual and Projected Total U.S. Text Messaging Users

	Number of Text Messaging Users
2010	100,000,000
2009	96,200,000
2008	92,000,000
2007	85,300,000
2006	75,300,000
2005	62,900,000
2004	49,700,000
2003	32,000,000

Source: Adapted from CellSigns "Mobile Statistics," available online at http://www.cellsigns.com/industry.shtml.

Definitions

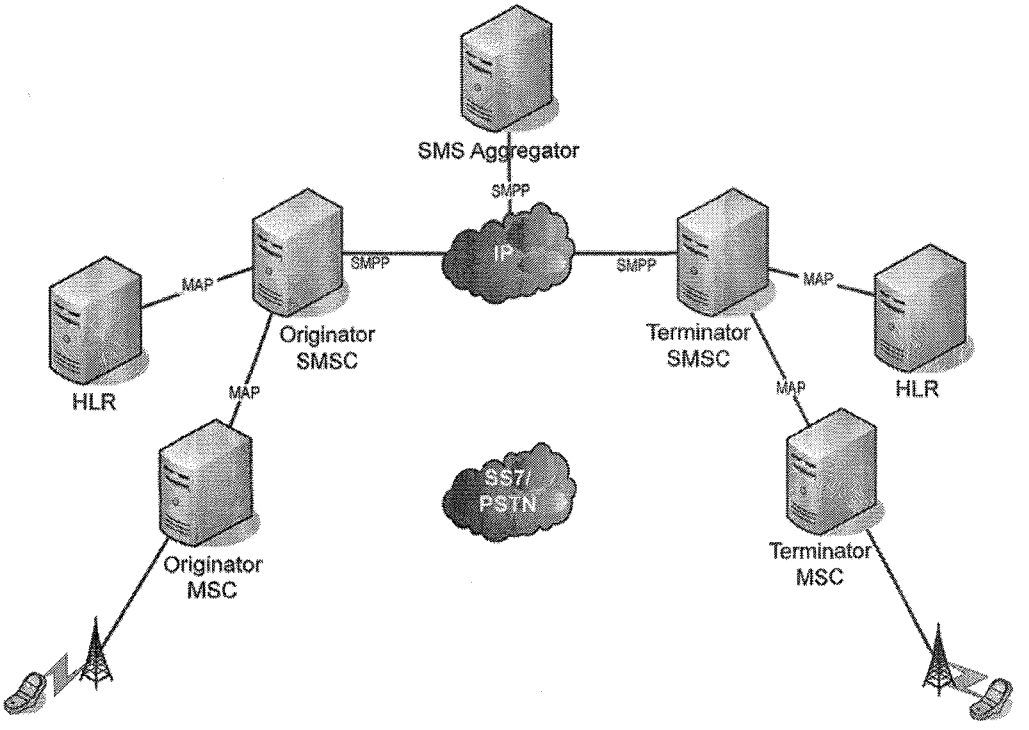
Short Message Service

Short Message Service (SMS) is a method of communication that sends text between cell phones, or from a computer or handheld device to a cell phone. The "short" part refers to the maximum size of the text messages: 160 characters.[1] The term "SMS" is generally used interchangeably with the term "text message."

Even when not being used for a voice call, a mobile phone is constantly sending and receiving information. It is communicating to its cell phone tower over a control channel. The reason for this communication is so that the cell phone system knows which cell a phone is in, and so that the phone can change cells as the user moves around. Every so often, a phone and a tower will exchange a packet of data that lets both "know" that everything is working properly.

The control channel also provides the pathway for SMS messages. When someone sends an SMS message, the message flows through the SMS Center (SMSC), then to the cell tower, and the tower then sends the message to the recipient's phone as a packet of data on the control channel. **Figure 1** illustrates how a SMS message is processed.

Figure 1. Path of Intercarrier SMS Messages



Source: Used with permission from Motorola. Definitions: The "Internet Protocol (IP) cloud" represents an Internet Protocol network used to carry data traffic; HLR = Home Location Register (the central database that

[1] For some alphabets, such as Chinese, the maximum SMS size is 70 characters.

contains details of each mobile phone subscriber); MAP = Mobile Application Part signaling protocol; MSC = Mobile Switching Center; the "Public Switched Telephone Network (PSTN) cloud" is included to demonstrate that SMS messages are not carried over it; SMS Aggregator = an intermediary between mobile service providers providing SMS service; SMSC = SMS Center; SMPP = Short Message Peer-to-Peer Protocol.

Enhanced and Multimedia Message Service

While SMS only allows plain text to be sent, two alternative messaging services allow for more elaborate types of messages. With Enhanced Messaging Service (EMS), formatted text, sound effects, small pictures, and icons can be sent. MMS (Multimedia Messaging Service) allows animations, audio, and video files in addition to text to be sent

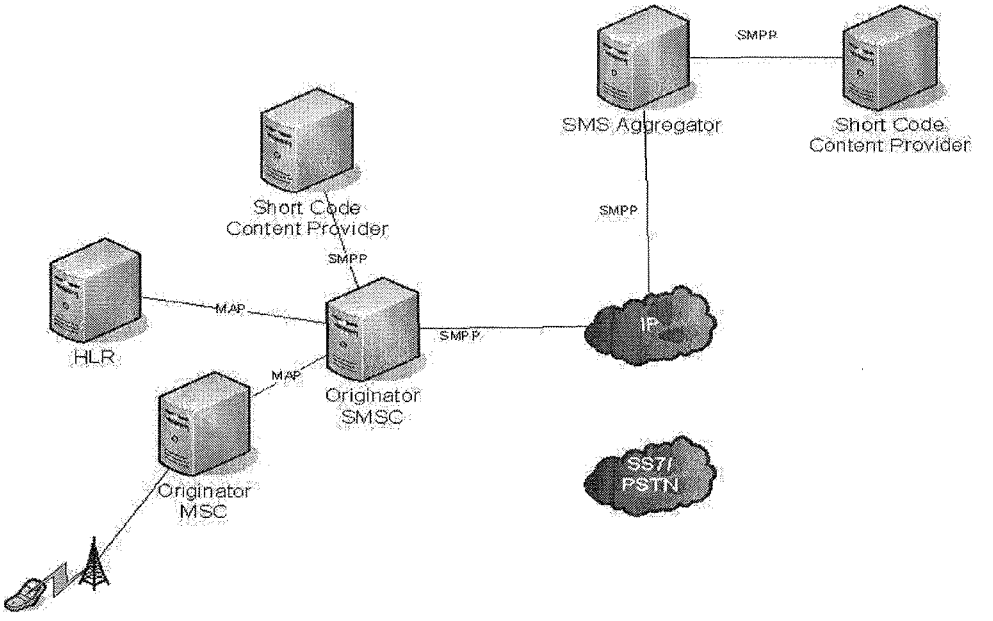
E-mail-to-SMS Messaging

As noted above, SMS messages may be sent between a computer and a mobile phone. However, these messages are sent using the e-mail address associated with the mobile device, such as 2025551212@carrier.com. For that reason, these messages are classified as e-mail and therefore are subject to different and more stringent regulation under the CAN-SPAM Act.

Common Short Codes (CSCs)

Introduced in the U.S. market in October 2003, Common Short Codes (CSCs) are short numeric codes of five or six digits, compatible across carriers, to which text messages can be sent from a mobile phone. Wireless subscribers send text messages to short codes to access a wide variety of mobile content, for example, to vote for contestants on American Idol. Many entities use CSCs to communicate with interested parties: television stations; individual television shows; radio stations; instant messaging services; political, advocacy, and other organizations; magazines, and sports teams—among others. Users send a message to the CSC to subscribe to alerts or other messages. Sometimes these messages are delivered for free by the originator, sometimes there is a fee. **Figure 2** illustrates how a CSC message is processed.

Figure 2. Path of Common Short Code Messages



Source: Used with permission from Motorola. See **Figure 1** for acronym definitions.

"Vanity" CSCs are also available (for a higher price)—these CSCs use letters on a mobile device keypad to spell out words that are easy to remember and are chosen to reflect the service the short code is being used to access.[2] Furthermore, although CSCs can be "compatible" across all carriers, some CSCs are established as business partnerships between a specific carrier and another entity. For example, American Idol has an exclusive partnership with AT&T Wireless.[3]

Issues for Congress

For Congressional policymakers, the major issues that have arisen stem from what could be called "same problem, different platform." For example, issues such as consumer fraud and children's accessing inappropriate content, which have existed previously in the "wired world," have now found their way to the "wireless world."

Other issues stem from the difficulty in applying technical definitions to a given service, such as whether a text message is sent "phone-to-phone" or using the phone's associated e-mail address. For example, spam sent between two phones or from one phone to many phones does not fall under the definition of spam in the CAN-SPAM Act of 2003 (Controlling the Assault of Non-

[2] See https://www.usshortcodes.com/csc/search/publicsearchCSC.do?method=showVanity & group=all for examples of such codes.

[3] See http://www.americanidol.com/mobile/ for specific instructions.

Solicited Pornography and Marketing Act, P.L. 108-187); but if that same message is sent from a phone or computer using the phone's associated e-mail address, it does.

Applicability of CAN-SPAM Act to Unwanted Wireless Messages

The CAN-SPAM Act was and is intended to curb the amount of spam that consumers receive in their e-mail accounts. At the time the act was being considered in 2003, text messaging was in its infancy as a service. As discussed above, SMS messaging is not the same as messaging that uses a mobile phone's associated e-mail address (i.e., 2025551212@carrier.com). At this time, only the latter type of message is covered by CAN-SPAM; messages that are sent "phone-to-phone" through the SMSC are not.

There is no evident reason for messages that appear the same to a user and have the same effect on a user (generally, annoyance) to be treated differently under CAN-SPAM. Resolving this discrepancy in the treatment of these two types of messages would require a change to the statute.

Inability of Consumers to Disable Text Messaging

Some mobile service customers have expressed frustration to their Congressional representatives about unwanted text messages and the inability to selectively block or completely disable text messaging on their phones. While carriers generally offer a range of text messaging packages, for example, 500 messages for $10, some customers do not use text messaging and, therefore, pay a small fee every time they receive a message. A number of user discussion sites contain posts from users who are frustrated with the extra charges they incur from unwanted messages.[4] In December 2007, a class-action lawsuit was filed against T-Mobile in this matter.[5]

Most carriers offer some form of text blocking to their customers. A June 12, 2008, article by David Pogue in the New York Times[6] outlined the various options being offered by different carriers. The **Appendix** contains information from that article that may be helpful to consumers.

Given that carriers are beginning to offer various forms of text blocking to their customers, it may be advantageous to consumers to wait to see what options the different carriers develop. In that way, competition is given a chance to succeed in this area and carriers are offered the opportunity to assess what their competitors are doing and perhaps improve their own services. Eventually, however, Congress may wish to investigate whether customers are being offered the best possible options to assure that they are not receiving unwanted text messages.

Carrier Blocking of Common Short Code Messages

In September 2007, Verizon notified NARAL Pro-Choice America that it would not participate in its CSC program. NARAL does not charge for its messages and users may opt-in or opt-out as

[4] See, for example, Mobiledia Forum at http://forums.mobiledia.com/topic35359-0-asc-10.html.

[5] RCR Wireless News, "Class Action Nails T-Mobile USA Over Texting Services," January 30, 2008, available online at http://www.rcrnews.com/apps/pbcs.dll/article?AID=/20080130/FREE/927035123/1005/rss01.

[6] New York Times, "How to Block Cellphone Spam," by David Pogue, June 12, 2008, available online at http://www.nytimes.com/2008/06/12/technology/personaltech/12pogue-email.html.

desired, but Verizon stated that it does not accept programs from any group "that seeks to promote an agenda or distribute content that, in its discretion, may be seen as controversial or unsavory to any of [its] users."[7]

This decision was immediately criticized by free-speech advocates, although communications scholars pointed out that the company most likely, from a legal standpoint, did have the right to refuse to participate in the program.[8] Since text messages are not carried over the traditional telephone network, such messages are not protected under common carrier regulation. The next day, Verizon changed its decision and is now participating in NARAL's CSC program, saying in a statement that the decision had been "an incorrect interpretation of a dusty internal policy" that "was designed to ward against communications such as anonymous hate messaging and adult materials sent to children." The policy had been developed "before text messaging protections such as spam filters adequately protected customers from unwanted messages."[9]

This issue highlights the difficulty in applying the current regulatory structure to new services. While mobile providers appear to have the legal right to determine what information is available through their CSC programs, Congress may wish to consider whether and how political and other speech might be better protected in those programs.

Deceptive and Misleading Common Short Code Programs

Many third-party content providers use the CSC program and bill the usage through the mobile service provider. For example, content providers can allow mobile device users to download content (e.g., ringtones) or participate in SMS-based "chat." While most of these content providers are legitimate businesses, others use deceptive tactics to gain customers and run up unexpected charges.[10]

For example, as reported by CBS News in February 2008, some customers have subscribed to monthly services without reading the "fine print" and find that the charge is often difficult to remove because it is an independent third party rather than the customer's mobile service provider.[11]

The Mobile Marketing Association has developed "Consumer Best Practices Guidelines"[12] that it expects its members to follow. This code includes limiting subscription periods to one month, after which consumers must re-subscribe, and providing alerts to customers when their chat-related charges reach $25 increments. Although the best practices have not eliminated all misleading programs, over time the industry may bring its members into compliance. More

[7] New York Times, "Verizon Blocks Messages of Abortion Rights Group," by Adam Liptak, September 27, 2007, available online at http://www.nytimes.com/2007/09/27/us/27verizon.html.

[8] New York Times, "Verizon Blocks Messages of Abortion Rights Group," by Adam Liptak, September 27, 2007, available online at http://www.nytimes.com/2007/09/27/us/27verizon.html.

[9] New York Times, "Verizon Reverses Itself on Abortion Messages," by Adam Liptak, September 28, 2007, available online at http://www.nytimes.com/2007/09/28/business/28verizon.html.

[10] See Class Action Connect online at http://www.classactionconnect.com/cell_phone_issues/category/complaints-in-the-news/ for examples of these types of complaints.

[11] CBS News, "Ringing Up Big Charges For 'Free' Tones," February 22, 2008, available online at http://www.cbsnews.com/stories/2008/02/22/eveningnews/main3867197.shtml.

[12] This document is available online at http://www.mmaglobal.com/bestpractices.pdf.

clarity on industry efforts might allow policymakers an opportunity to assess the efficacy of those efforts.

Protecting Children from Inappropriate Content on Wireless Devices

As more mobile devices become equipped to access the World Wide Web and additional content services are made available via CSCs, the risk of children downloading inappropriate content will likely increase. While carriers may follow a set of voluntary guidelines[13] to promote wireless safety for children, there is no way to guarantee that children will not be able to access inappropriate content by circumventing carrier-implemented safeguards.

The following types of material can be downloaded on many wireless devices, and may include content inappropriate for children.

- Images, such as background "wallpaper" for the phone screen.
- Games, including some games that are also available for gaming systems.
- Music and songs, including ring tones, ringback tones, and downloads of full songs.
- Video, including certain television shows, movies, and music videos, as well as video programming specially made for, and only available on, wireless devices.[14]

The wireless industry is working to ensure that children do not access inappropriate information over their wireless devices, but there is no definitive research on the success of these efforts. Whether current efforts to protect children from inappropriate content over wireless devices may be an issue of interest to policymakers.

Mobile Cyberbullying

"Cyberbullying," harassing communications sent, for example, via e-mail or text messages or through social networking sites such as Facebook or MySpace, is a growing problem. The issue made national headlines in November 2007 after the suicide of Megan Meier, a 13-year-old

[13] CTIA—The Wireless Association® has voluntary guidelines for wireless carriers to use in classifying content that they provide directly over wireless handsets. These voluntary guidelines apply only to content that you purchase from your wireless carrier, either on a one-time use or download basis, or as part of a package with a monthly fee such as ring tones, wallpaper, games, music, video clips, or TV shows. Content that is generated or owned by a wireless user, such as text messages, instant messages, e-mail (through chat rooms, message boards, etc.) and picture mail is not included in the wireless carrier's content classification system. Also, content that is accessed by surfing the Internet on a wireless handset is not currently included in the classification system. The guidelines urge carriers to provide separate Web filtering software for Web browsing services. Wireless carriers choosing to follow these voluntary guidelines agree to use at least two content ratings: (1) Generally Accessible or available to consumers of all ages; and (2) Restricted or accessible only to those age 18 and older or to those younger than 18 years old, when specifically authorized by a parent or guardian. The Restricted ratings system generally is based on or uses criteria under existing ratings systems for movies, television, music, and games. CTIA Guidelines are available online at http://www.ctia.org/advocacy/policy_topics/topic.cfm/TID/36.

[14] FCC Consumer Fact Sheet, "Protecting Children from Adult Content on Wireless Devices," available online at http://www.fcc.gov/cgb/consumerfacts/protectingchildren.html.

Missouri girl. In that case, the mother of a former friend of Megan's set up a fake MySpace page, pretending to be a boy who had just moved to the area and was home-schooled. Within a few weeks of becoming "friends" with "Josh," on October 15, 2006, the tone of his messages changed drastically, with "Josh" saying he no longer wanted to be friends with Megan, because "he" had heard that she had been mean to some of her friends. On October 16, 2006, Megan hanged herself in her closet.

Although, as in the case described above, much cyberbullying takes place in the "wired" world, more recently, these sorts of messages are being sent from and to mobile devices. Since many mobile devices are capable of performing the same tasks as computers, these messages are now being sent via mobile instant messaging, the mobile websites of social networking sites, and text messaging.

The subsequent public outcry over the Megan Meier case led to four bills being introduced in the 110th Congress, three by Representative Linda Sanchez and one by Senator John Kerry; each contained language that would have included the use of wireless devices in the definition of cyberbullying.

- H.R. 3577 was introduced on September 17, 2007, and referred to the House Committee on Energy and Commerce Subcommittee on Telecommunications and the Internet; no further action was taken.
- H.R. 4134 was introduced on November 9, 2007; it was passed by the House on November 13, 2007, and referred to the Senate Committee on the Judiciary on November 14, 2007.
- H.R. 6120 was introduced on May 21, 2007, and referred to the House Committee on the Judiciary; no further action was taken.
- S. 3016 was introduced on May 14, 2007, and referred to the Senate Committee on the Judiciary; no further action was taken.

The bills were substantially similar. All would have defined cyberbullying to include "verbal, visual, or written psychological bullying or harassment by an individual or group, using an electronic device or devices including e-mail, instant messaging, text messages, blogs, telephones, pagers, and websites, to support deliberate, repeated, and hostile behavior that is intended to harm others." H.R. 3577, H.R. 4134, and S. 3016 would have authorized $5,000,000 for educational grants to carry out Internet crime prevention education programs from 2008 through 2012; H.R. 6120 would have authorized $10,000,000 for the time period 2009 through 2013.

Disclosure of Text Messages Under Freedom of Information Laws and the Stored Communications Act[15]

Text messages are routinely used to conduct government business. As a result employers, litigants, newspapers, and public interest groups are increasingly seeking access to the contents of such communications in order to shed light on the workings of government. One of the arguments against disclosure of text messages emerging from public officials is that certain delivery

[15] Gina Marie Stevens, Legislative Attorney in the CRS American Law Division, contributed to this section.

platforms or technological devices should, by their very nature, be private because the official owns them, or keeps them in her pocket. Because text messaging represents a relatively new form of electronic communications, state and federal courts are considering requests for access to and disclosure of text messages pursuant to freedom of information and privacy laws.

Courts have begun exploring ways to apply open government laws to text messages. In Texas, a state judge ordered the City of Dallas to turn over e-mails and text messages sent by city officials from personal accounts and personal hand-held devices to conduct city business, and held that the e-mails and messages were subject to disclosure under the Texas Public Information Act."[16] Newspapers in Detroit, Michigan, filed a Freedom of Information Act (FOIA) lawsuit against the city seeking disclosure of text messages sent by Detroit elected officials on city-issued pagers that relate to the city's $8.4 million settlement of two whistle-blower lawsuits brought by former Detroit police officers.[17] The city has argued that disclosure of the text messages would violate the federal Stored Communications Act. A public records directive issued by the city states that all electronic communications sent on city equipment "is not considered to be personal or private."[18] Although the newspapers obtained the text messages through an anonymous source, they continue to press for the release of additional information under public records law.[19] A court ruled part of the information the newspapers wanted was public, the Free Press published text messages related to the cover-up and the Mayor and Chief of Staff were charged with eight felonies.[20] The newspapers are continuing to pursue additional information using the state FOIA.

New York legislators worked to revise the state's open records law to specifically add text messages to the list of records covered.[21] A new Freedom of Information Law became effective in New York on August 7, 2008, and includes provisions which reflect a recognition of advances in information technology, but does not include a provision on text messaging.[22]

Subject to certain exceptions, the Stored Communications Act (SCA), which is part of the Electronic Communications Privacy Act, bars "a person or entity providing an electronic communications service to the public" from knowingly divulging to any person or entity the contents of a communication while in electronic storage by that service." The SCA distinguishes between two types of providers: "remote computing services" and "electronic communications services."

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[16] Jennifer LaFleur, *Dallas: City Must Provide Messages From Officials' Personal Accounts*, Dallas Morning News, October 30, 2007, available at http://www.dallasnews.com/sharedcontent/dws/news/localnews/stories/DN-emails_30met.ART0.State.Edition1.421befa.html.

[17] *Detroit Free Press, Inc., et al. v. City of Detroit*, No. 08-100214 CZ, Wayne County Circuit Court, MI, at http://info.detnews.com/2008/0307motiontocompel.pdf.

[18] On June 26, 2000, Mayor Kilpatrick signed a "Directive for the Use of the City of Detroit's Electronic Communications System."

[19] A "public record" under the Michigan Freedom of Information Act is a writing that is: (1) prepared; (2) owned; (3) used; (4) in the possession of, or (5) retained by a public body in the performance of an official function..... MCL 15.232(e).

[20] For an excellent chronology of developments, see Reporters Committee for Freedom of the Press, at http://www.rcfp.org/newsitems/index.php?key=121&op=keyword.

[21] "Battle Over Public Information Expands," by Ledyard King, Federal Times, March 24, 2008, p. 14.

[22] N.Y. Pub. Off. Law § 84 *et seq.* For a summary of the amendments to the Freedom of Information Law, see http://www.dos.state.ny.us/coog/foilnews2.html.

Courts have been examining whether the disclosure of text messages sent by employees on employer-issued pagers violates the privacy rights of employees, and whether such disclosure is barred by the Stored Communications Act.[23] The Ninth Circuit Court of Appeals recently held that the city employer violated the constitutional rights of an employee when the employer reviewed text messages sent and received by the employee on his employer-provided pager. The court of appeals also held that the text-messaging service provider violated the federal Stored Communications Act by giving the city transcripts of the text messages. In Quon v. Arch Wireless,[24] the Ninth Circuit held that a city's text message provider was an electronic communications service for purposes of the act because it enabled city employees to send and receive wire communications. In Quon, city employees sued their employer after they were fired for using their employer-provided mobile devices for personal communications.

Using SMS to Support Law Enforcement and Emergency Response

In April 2008, the FCC adopted rules for the Commercial Mobile Alert System (CMAS), which will deliver emergency text messages to the public during emergencies and natural disasters,[25] and recommended that the Federal Emergency Management Agency (FEMA) be the program's aggregator. The program was mandated by the Warning, Alert and Response Network Act that was signed into law in 2006.[26] Under this law, the FCC was required to develop plans for a commercial mobile-alert system through which wireless carriers would voluntarily transmit text messages sent out by the government. The FCC has divided the types of messages the government will send out to mobile-phone users into three broad categories:[27]

- Presidential Alerts deal with national emergencies and will take precedence over any other impending alerts
- Imminent Threat Alerts deal with emergencies that may pose an imminent risk to people's lives or well-being.
- Child Abduction Emergency/AMBER alerts will be related to missing or abducted children.

In addition, the FCC says that all subscribers with roaming agreements will receive timely alerts "provided the subscriber's mobile device is configured for and technically capable of receiving alert messages from the roamed upon network."[28]

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[23] 18 U.S.C. § 2701 *et seq.*

[24] No. 07-55282, (9th Cir. June 18, 2008). The opinion is online at http://www.ca9.uscourts.gov/ca9/newopinions.nsf/D2CDDB4098D7AFB28825746C0048ED24/$file/0755282.pdf?openelement.

[25] Federal Communications Commission, In the Matter of the Commercial Mobile Alert System, First Report and Order, FCC 08-99, PS Docket No. 07-287, April 9, 2008, available online at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-99A1.pdf ("Commercial Mobile Alert System, First Report and Order"). See also, FCC Adopts Rules for Delivery of Commerical Mobile Alerts to the Public During Emergencies (FCC 08-99), April 9, 2008, available online at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-99A1.pdf. See also the FCC's Consumer Fact Sheet on CMAS at http://www.fcc.gov/cgb/consumerfacts/cmas.html.

[26] Warning, Alert, and Response Network Act, Title VI of the Security and Accountability for Every Port Act of 2006, P.L. 109-347, 120 Stat. 1884 (2006).

[27] Commercial Mobile Alert System, First Report and Order, paras. 26-32.

[28] Commercial Mobile Alert System, First Report and Order, para. 79.

The architecture adopted by the FCC calls for a centralized alert-aggregator where federal and state emergency-response agencies would send their warning messages to be authenticated and dispersed to the appropriate participating commercial mobile services. Noting FEMA's role in developing the proposal for the adopted architecture, the FCC recommended the agency as its first choice to serve as the alert aggregator and FEMA has accepted that role

The FCC has issued a Second Report and Further Notice of Proposed Rulemaking;[29] an Order on Reconsideration and Erratum;[30] and a Third Report and Order.[31] Of particular note, in the Third Report and Order, the FCC—

- adopted notification requirements for wireless providers that elect not to participate, or to participate only in part, with respect to new and existing subscribers;
- adopted procedures by which wireless providers may elect to transmit emergency alerts and to withdraw such elections;
- adopted a rule governing the provision of alert opt-out capabilities for subscribers;
- allowed participating wireless providers to recover costs associated with the development and maintenance of equipment supporting the transmission of emergency alerts; and
- adopted a compliance timeline under which participating wireless providers must begin CMAS deployment.

At this time, the technical standardization process at FEMA is not yet complete and CMAS is, therefore, not operational.

Congressional and Industry Response to SMS-Related Issues

The issues discussed in this report have prompted different levels of response from Congress and the wireless industry:

- Issues that are being addressed by industry, so policymakers may wish to wait and see how those efforts play out;
- Issues that have not risen to a level of priority in Congress, but would require statutory action to effect change; and

[29] Federal Communications Commission, In the Matter of the Commercial Mobile Alert System, Second Report and Further Notice of Proposed Rulemaking , FCC 08-164, PS Docket No. 07-287, July 8, 2008, available online at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-164A1.pdf.

[30] Federal Communications Commission, In the Matter of the Commercial Mobile Alert System, Order on Reconsideration and Erratum, FCC 08-166, PS Docket No. 07-287, July 15, 2008, available online at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-166A1.pdf.

[31] Federal Communications Commission, In the Matter of the Commercial Mobile Alert System, Third Report and Order, FCC 08-184, PS Docket No. 07-287, July 15, 2008, available online at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-184A1.pdf.

- Issues that have triggered a legislative response.

As wireless communications technologies, and the issues that accompany them, evolve over time, so likely will the approaches that industry and Congress will take to ensure consumer safety and satisfaction.

Appendix. Text Blocking with Selected Major Carriers—Information for Consumers

AT&T

Customers must log in at mymessages.wireless.att.com. Text-blocking and alias options are available under "Preferences." Messages from specific e-mail addresses or websites can also be blocked from this page.

Verizon Wireless

Customers must log in at vtext.com. Text blocking options are available under "Text Messaging"/"Preferences." Select "Text Blocking." Consumers may block text messages from e-mail or from the Web, including blocking specific addresses or websites.

Sprint

Customers must log in at http://www.sprint.com. Sprint does not offer auto-blocking, but consumers can block specific phone numbers and addresses. On the top navigation bar, select, "My Online Tools"/"Communication Tools"/"Text Messaging." On the Compose a Text Message page, under Text Messaging Options, select "Settings & Preferences." In the text box, customers can enter a phone number, e-mail address, or domain name to block.

T-Mobile

Customers must log in at http://www.t-mobile.com and select "Communication Tools." T-Mobile doesn't yet offer a "block text messages from the Internet" option. Customers can block all messages sent by e-mail, though, or permit only messages sent to the phone's e-mail address or alias, or create filters that block text messages containing certain phrases.[32]

[32] "How to Block Cellphone Spam," NYTimes.com, Pogue's Posts, June 12, 2008, available online at http://pogue.blogs.nytimes.com/2008/06/12/how-to-block-cellphone-spam/?scp=1&sq=Text%20Blocking&st=cse.

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EXHIBIT B

9/27/07 N.Y. Times A1
2007 WLNR 18960271

New York Times (NY)
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September 27, 2007

Section: A

Verizon Rejects Text Messages From an Abortion Rights Group

ADAM LIPTAK

Verizon Wireless rejects request from Naral Pro-Choice America, abortion rights group, to make Verizon's mobile network available for text-message program; other wireless carriers have accepted program, which allows people to sign up for text messages from Naral; text messaging is growing political tool used by many candidates and advocacy groups to reach supporters; legal experts say private companies probably have legal right to decide which messages to carry; dispute is part of larger battle over 'net neutrality'--whether carriers or Internet service providers should have choice in content they provide to customers; Naral says companies should not be allowed to censor

Saying it had the right to block "controversial or unsavory" text messages, Verizon Wireless has rejected a request from Naral Pro-Choice America, the abortion rights group, to make Verizon's mobile network available for a text-message program.

The other leading wireless carriers have accepted the program, which allows people to sign up for text messages from Naral by sending a message to a five-digit number known as a short code.

Text messaging is a growing political tool in the United States and a dominant one abroad, and such sign-up programs are used by many political candidates and advocacy groups to send updates to supporters.

But legal experts said private companies like Verizon probably have the legal right to decide which messages to carry. The laws that forbid common carriers from interfering with voice transmissions on ordinary phone lines do not apply to text messages.

The dispute over the Naral messages is a skirmish in the larger battle over the question of "net neutrality" -- whether carriers or Internet service providers should have a voice in the content they provide to customers.

"This is right at the heart of the problem," said Susan Crawford, a visiting professor at the University of

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Michigan law school, referring to the treatment of text messages. "The fact that wireless companies can choose to discriminate is very troubling."

In turning down the program, Verizon, one of the nation's two largest wireless carriers, told Naral that it does not accept programs from any group "that seeks to promote an agenda or distribute content that, in its discretion, may be seen as controversial or unsavory to any of our users." Naral provided copies of its communications with Verizon to The New York Times.

Nancy Keenan, Naral's president, said Verizon's decision interfered with political speech and activism.

"No company should be allowed to censor the message we want to send to people who have asked us to send it to them," Ms. Keenan said. "Regardless of people's political views, Verizon customers should decide what action to take on their phones. Why does Verizon get to make that choice for them?"

A spokesman for Verizon said the decision turned on the subject matter of the messages and not on Naral's position on abortion. "Our internal policy is in fact neutral on the position," said the spokesman, Jeffrey Nelson. "It is the topic itself" -- abortion -- "that has been on our list."

Mr. Nelson suggested that Verizon may be rethinking its position. "As text messaging and multimedia services become more and more mainstream," he said, "we are continuing to review our content standards." The review will be made, he said, "with an eye toward making more information available across ideological and political views."

Naral provided an example of a recent text message that it has sent to supporters: "End Bush's global gag rule against birth control for world's poorest women! Call Congress. (202) 224-3121. Thnx! Naral Text4Choice."

Messages urging political action are generally thought to be at the heart of what the First Amendment protects. But the First Amendment limits government power, not that of private companies like Verizon.

In rejecting the Naral program, Verizon appeared to be acting against its economic interests. It would have received a small fee to set up the program and additional fees for messages sent and received.

Text messaging programs based on five- and six-digit short codes are a popular way to receive updates on news, sports, weather and entertainment. Several of the leading Democratic presidential candidates have used them, as have the Republican National Committee, Save Darfur and Amnesty International.

Most of the candidates and advocacy groups that use text message programs are liberal, which may reflect the demographics of the technology's users and developers. A spokeswoman for the National Right to Life Committee, which is in some ways Naral's anti-abortion counterpart, said, for instance, that it has not dabbled in text messaging.

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Texting has proved to be an extraordinarily effective political tool. According to a study released this month by researchers at Princeton and the University of Michigan, young people who received text messages reminding them to vote in November 2006 were more likely to go to the polls. The cost per vote generated, the study said, was much smaller than other sorts of get-out-the-vote efforts.

Around the world, the phenomenon is even bigger.

"Even as dramatic as the adoption of text messaging for political communication has been in the United States, we've been quite slow compared to the rest of the world," said James E. Katz, the director of the Center for Mobile Communication Studies at Rutgers University. "It's important in political campaigns and political protests, and it has affected the outcomes of elections."

Timothy Wu, a law professor at Columbia, said it was possible to find analogies to Verizon's decision abroad. "Another entity that controls mass text messages is the Chinese government," Professor Wu said.

Jed Alpert, the chief executive officer of Mobile Commons, which says it is the largest provider of mobile services to political and advocacy groups, including Naral, said he had never seen a decision like Verizon's.

"This is something we haven't encountered before, that is very surprising and that we're concerned about," Mr. Alpert said.

Professor Wu pointed to a historical analogy. In the 19th century, he said, Western Union, the telegraph company, engaged in discrimination, based on the political views of people who sought to send telegrams. "One of the eventual reactions was the common carrier rule," Professor Wu said, which required telegraph and then phone companies to accept communications from all speakers on all topics.

Some scholars said such a rule was not needed for text messages because market competition was sufficient to ensure robust political debate.

"Instead of having the government get in the game of regulating who can carry what, I would get in the game of promoting as many options as possible," said Christopher S. Yoo, a law professor at the University of Pennsylvania. "You might find text-messaging companies competing on their openness policies."

PHOTO: An example of a Naral Pro-Choice America text message. (pg. A1)
CHART: SENDING A MESSAGE: Sample communications from some of the organizations that use text messaging for political advocacy. (ILLUSTRATION BY THE NEW YORK TIMES) Chart showing text messages used for political advocacy. (pg. A30)

---- INDEX REFERENCES ---

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COMPANY: NARAL PRO CHOICE AMERICA; TEXT CO LTD; VERIZON LABORATORIES; REPUBLICAN NATIONAL COMMITTEE; CELLCO PARTNERSHIP; RUTGERS UNIVERSITY; VERIZON WIRELESS INC; VERIZON WIRELESS

NEWS SUBJECT: (Legal (1LE33); Major Corporations (1MA93); Online Legal Issues (1ON39))

INDUSTRY: (Internet Regulatory (1IN49); I.T. (1IT96); Internet Services (1IN96); Telecom Carriers & Operators (1TE56); Internet Service Providers Equipment (1IN52); Internet Service Providers (1IN56); Internet (1IN27); Healthcare (1HE06); Women's Health (1WO30); Networking (1NE45); Telecom (1TE27); Contraception (1CO66); Healthcare Practice Specialties (1HE49); Wireless Internet & Messaging (1WI49); Wireless Networking (1WI62))

REGION: (Americas (1AM92); North America (1NO39); USA (1US73); Michigan (1MI45))

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OTHER INDEXING: (AMNESTY INTL; CHOICE AMERICA; LIFE COMMITTEE; NARAL; NARAL PRO; NARAL PRO CHOICE AMERICA; NEW YORK TIMES; REPUBLICAN NATIONAL COMMITTEE; RUTGERS UNIVERSITY; TEXT; UNIVERSITY OF MICHIGAN; UNIVERSITY OF PENNSYLVANIA; VERIZON; VERIZON REJECTS TEXT; VERIZON WIRELESS) (Alpert; Call Congress; Christopher S. Yoo; James E. Katz; Jed Alpert; Jeffrey Nelson; Keenan; Nelson; Save Darfur; Susan Crawford; Timothy Wu; Wu)

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EXHIBIT C

9/28/07 N.Y. Times A20
2007 WLNR 18998680

New York Times (NY)
Copyright 2007 The New York Times Company

September 28, 2007

Section: A

In Reversal, Verizon Says It Will Allow Group's Texts

ADAM LIPTAK

Reversing course, Verizon Wireless announced yesterday that it would allow an abortion rights group to send text messages to its supporters on Verizon's mobile network.

"The decision to not allow text messaging on an important, though sensitive, public policy issue was incorrect," said Jeffrey Nelson, a spokesman for Verizon, in a statement issued yesterday morning, adding that the earlier decision was an "isolated incident."

Last week, Verizon rejected a request from the abortion rights group, Naral Pro-Choice America, for a five-digit "short code." Such codes allow people interested in hearing from businesses, politicians and advocacy groups to sign up to receive text messages.

Verizon is one of the two largest mobile carriers. The other leading carriers had accepted Naral's request for the code.

In turning down the request last week, Verizon told Naral that it "does not accept issue-oriented (abortion, war, etc.) programs -- only basic, general politician-related programs (Mitt Romney, Hillary Clinton, etc.)."

In yesterday's statement, Mr. Nelson called that "an incorrect interpretation of a dusty internal policy" that "was designed to ward against communications such as anonymous hate messaging and adult materials sent to children." The policy, Mr. Nelson said, had been developed "before text messaging protections such as spam filters adequately protected customers from unwanted messages."

But the program requested by Naral would have sent messages only to people who had asked to receive them.

Nancy Keenan, Naral's president, expressed satisfaction yesterday. "The fight to defeat corporate censorship

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was won," she said. But Ms. Keenan added that her group "would like to see Verizon make its new policy public."

Verizon did not respond to repeated requests for copies of the policy or an explanation for why it is withholding it.

Text messaging is an increasingly popular tool in American politics and an established one abroad. In his statement, Mr. Nelson acknowledged that the technology is "being harnessed by organizations and individuals communicating their diverse opinions about issues and topics." He said Verizon has "great respect for this free flow of ideas."

But the company did not retreat from its position that it is entitled to decide what messages to transmit.

Legal experts said Verizon's position is probably correct under current law, though some called for regulations that would require wireless carriers of text messages to act like common carriers, making their services available to all speakers on all topics.

"This incident, more than ever, shows the need for an open, nondiscriminatory, neutral Internet and telecommunications system that Americans once enjoyed and took for granted," said Gigi B. Sohn, the president of Public Knowledge, a consumer advocacy group.

Some of Verizon's customers said they were outraged by the company's initial stance.

Gary Mitchell, a lawyer in New Jersey, said he called a Verizon customer sales representative yesterday morning to cancel his wireless service in protest. After spending a few minutes on hold, he said, the representative read him an e-mail message that she said all the customer service representatives had just received. The message instructed representatives to tell callers that the policy had been reversed.

Verizon kept Mr. Mitchell's business but lost some of his respect. "It was an incredibly foolish corporate decision," he said.

Wyn Hoag, a photographer in California, said he was still mulling whether to cancel his Verizon service.

"I'm a supporter of abortion rights, but I could be a Christian-right person and still be in favor of free speech," Mr. Hoag said. "If they think they can censor what's on my phone, they've got another thing coming."

---- INDEX REFERENCES ---

COMPANY: VERIZON LABORATORIES; CELLCO PARTNERSHIP

NEWS SUBJECT: (Major Corporations (1MA93))

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INDUSTRY: (Telecom Carriers & Operators (1TE56); Telecom (1TE27))

Language: EN

OTHER INDEXING: (PUBLIC KNOWLEDGE; REVERSAL; VERIZON) (Gary Mitchell; Gigi B. Sohn; Hillary Clinton; Hoag; Jeffrey Nelson; Keenan; Mitchell; Mitt Romney; Nancy Keenan; Naral; Naral Pro-Choice America; Nelson; Wyn Hoag)

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EXHIBIT D

BusinessWeek

NEWS December 13, 2007, 5:00PM EST

Not on Our Network, You Don't

The big wireless guys talk about opening up—while rejecting some competing mobile text services

by Bruce Meyerson

Even as the wireless industry spreads a new gospel about opening mobile-phone networks to outside devices and applications, some of the biggest U.S. carriers are blocking new services that would compete with their own.

At issue is a type of mobile text message known as a short code, a shortcut that lets cell-phone users access an array of services—say, getting sports scores or voting for a contestant on *American Idol*—by punching in five or six digits instead of the usual seven plus area code. While it's illegal for phone companies to dictate which numbers customers can or can't dial, carriers don't appear to be breaking regulations by blocking short codes.

The Federal Communications Commission, which declined to comment, has never regulated the codes. However, on Dec. 11, Public Knowledge and other consumer groups complained that interference in text messaging is a threat to free speech. They asked the FCC to ban the practice, citing Verizon Wireless' refusal in September to allow a short code for NARAL Pro-Choice America. Verizon quickly reversed that decision and apologized.

LUCRATIVE LITTLE MESSAGES

Verizon and other carriers say short-code applicants can still use regular text messaging to offer their services. Therefore, some experts say, carriers may be acting within their rights. But consumers are coming to expect short codes much as they expect companies to have toll-free numbers. And the messages can be lucrative. In the popular TV show *Deal or No Deal*, for instance, viewers pay $1 a pop for a chance to win $10,000. Further, the restrictions seem to fly in the face of proclamations by Verizon and AT&T (T) about allowing competing devices and services on their tightly controlled networks.

One company rebuffed by some carriers is Rebtel Networks, a Swedish provider of cheap international calls over the Web. Rebtel wants to use short codes to bring its service to mobile phones. Users would send a text message containing the desired overseas phone number to Rebtel's short code. They would receive a text message with a local phone number to dial, and pay pennies per minute rather than the quarters and dollars cellular carriers charge for overseas connections. In May, Rebtel applied for a short code with five big U.S. wireless providers. Sprint Nextel (S) and AT&T approved the request. But Verizon, T-Mobile USA, and Alltel (at) denied it. Co-founder Greg Spector says the company handling its application was told by Alltel that Rebtel's service "cannibalizes their international rates."

T-Mobile and Alltel declined to comment. Verizon says it did nothing wrong. "They can still text-message our customers," says spokesman Jeffrey Nelson. Just as a newspaper can reject ads from a rival, he says, "we don't need to provide special access to our customers and network to a company that's in direct competition with us."

It's not just small fry that are having trouble. AT&T recently refused to approve short-code applications by four banks wanting to offer customers a mobile application to check account balances, transfer funds, and perform

other transactions, say people familiar with the matter. One of the institutions was Bank of Stockton, a 140-year-old California bank, while two others were among the 20 largest U.S. banks.

The applications, submitted in the third quarter, were initially rejected in October, the sources say. Under pressure from the banks and financial industry groups, AT&T relented in mid-November. But around the same time, the phone giant launched its own mobile-banking service in partnership with Wachovia (WB) and SunTrust Banks (STI). AT&T declined to discuss specific applications, but stressed that it had approved other banking short codes in the past.

Meyerson is Deputy Technology Editor for BusinessWeek.com.