Text and Multimedia Messaging: 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; for example, 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. There are numerous examples of each. 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: distracted driving, SMS spam, the inability of consumers to disable text messaging, text messaging price fixing, carrier blocking of common short code messages, deceptive and misleading common short code programs, protecting children from inappropriate content on wireless devices, "sexting," mobile cyberbullying, privacy of text messages, and using SMS to support law enforcement and emergency response.

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Introduction

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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 an SMS message is processed.

Enhanced and Multimedia Message Service

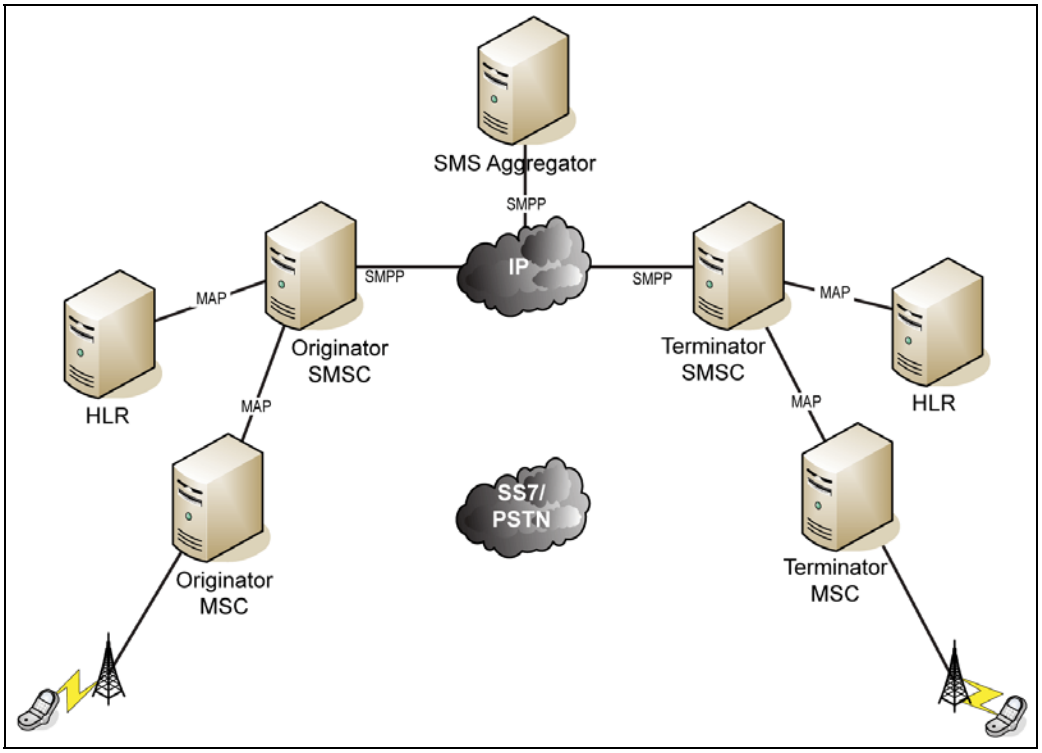
While SMS only allows plain text to be sent, two alternative messaging services allow for more elaborate types of messages. With Enhanced Messaging Service (EMS), formatted text, sound effects, small pictures, and icons can be sent. MMS (Multimedia Messaging Service) allows animations, audio, and video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

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

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 (see "SMS Spam").

Figure 1. Path of Intercarrier SMS Messages

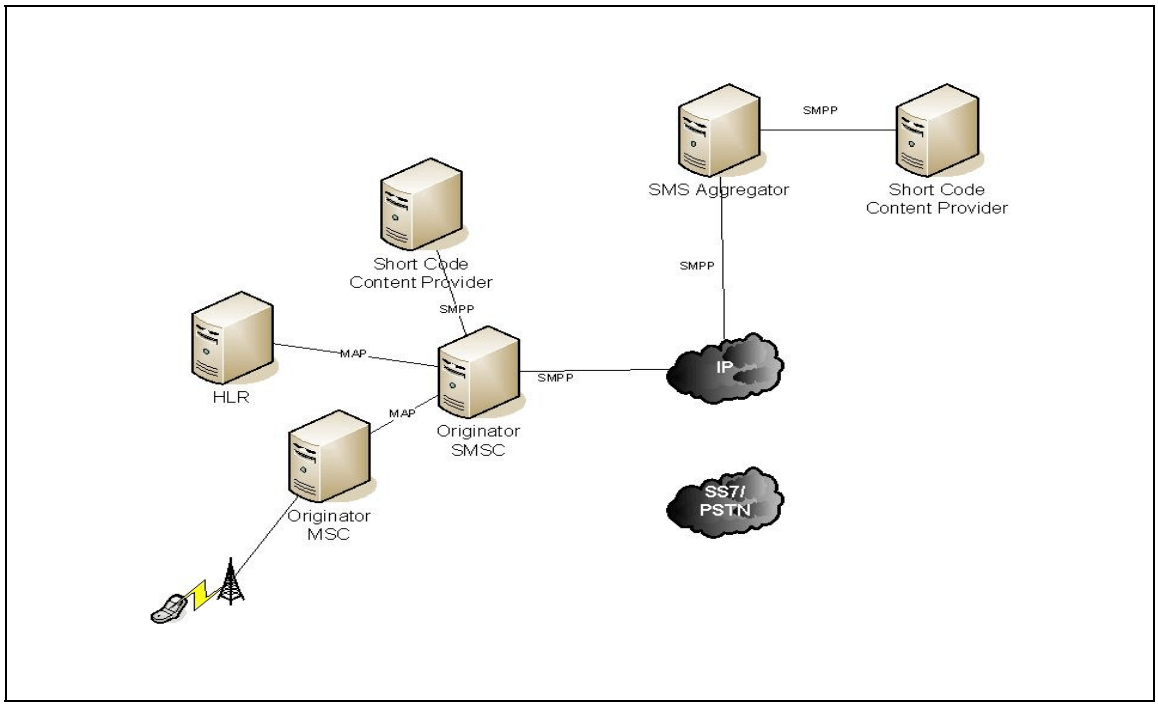


Source: Used with permission from Motorola. Definitions: The "Internet Protocol (IP) cloud" represents an Internet Protocol network used to carry data traffic; HLR = Home Location Register (the central database that contains details of each mobile phone subscriber); MAP = Mobile Application Part signaling 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.

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 legal definition of spam; but if that same message is sent from a phone or computer using the phone's associated e-mail address, it does.

[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.

Distracted Driving Caused By Texting

According to the U.S. Department of Transportation (DOT), approximately 16% of fatalities in distraction-related crashes were caused in at least some part by mobile devices. Further,

- In 2009, 5,474 people were killed in U.S. roadways and an estimated additional 448,000 were injured in motor vehicle crashes that were reported to have involved distracted driving.
- The age group with the greatest proportion of distracted drivers was the under-20 age group—16% of all drivers younger than 20 involved in fatal crashes were reported to have been distracted while driving.
- Drivers who use hand-held devices are four times as likely to get into crashes serious enough to injure themselves.
- Using a cell phone while driving, whether it is hand-held or hands-free, delays a driver's reactions as much as having a blood alcohol concentration at the legal limit of 0.08 percent.[4]

While reading and composing text messages while driving is only one of numerous factors that can lead to distracted driving, such activity is a growing concern among safety and regulatory groups. In response to this concern, there have been various actions taken at the federal and state levels.

Legislation—112th Congress

A number of bills have been introduced in the 112th Congress on the issue of "distracted driving."

Motorcoach Enhanced Safety Act of 2011, H.R. 873
Motorcoach Enhanced Safety Act of 2011, S. 453
Commercial Motor Vehicle Safety Enhancement Act of 2011, S. 1950

The Motorcoach Enhanced Safety Act was introduced in the Senate by Senator Sherrod Brown and in the House by Representative John Lewis on March 2, 2011. With respect to text messaging, the Motorcoach Enhanced Safety Act would require the Secretary of Transportation to

- prescribe regulations on the use of electronic or wireless devices (including cell phones and other distracting devices) by motorcoach operators; and
- prohibit their use in cases where they interfere with the driver's safe operation of a motorcoach, but not when necessary for driver or public safety in emergency situations.

S. 453 was referred to the Senate Committee on Commerce, Science, and Transportation on December 14, 2011, and ordered to be reported with an amendment in the nature of a substitute favorably. The text of S. 453 was included in Commercial Motor Vehicle Safety Enhancement Act of 2011, S. 1950. That bill was introduced by Senator Frank Lautenberg on December 7,

[4] Official U.S. Government website for Distracted driving, http://www.distraction.gov/stats-and-facts/.

2011;[5] the bill was ordered to be reported with an amendment in the nature of a substitute favorably.

Mariah's Act, S. 1449

Senator Mark Pryor introduced Mariah's Act on July 29, 2011. The bill would create grants to states that enact and enforce a law that

- prohibits drivers from texting while driving;
- prohibits drivers age 18 or younger from using a cell phone while driving, making violation of the law a primary offense; and
- establishes certain minimum fines and increased civil and criminal penalties. The bill would also create a distracted driving grant program at the National Highway Traffic Safety Administration (NHTSA).

The bill was referred to the Committee on Commerce, Science, and Transportation. On December 14, 2011, the committee ordered the bill to be reported with an amendment in the nature of a substitute favorably.

Students Taking Action for Road Safety Act (STARS Act) of 2011, S. 1422

Senator Amy Klobuchar introduced this bill on July 27, 2011. The bill focuses on teen traffic safety in general, including providing grants to educate teens on issues related to safe driving. Specifically, the bill:

- Directs the Secretary of Transportation to establish a teen traffic safety grant program to award formula grants to states to implement statewide programs to improve the traffic safety of teen drivers.
- Authorizes a state to use grant funds to implement such statewide program to improve the traffic safety of teen drivers, including activities to support peer-to-peer education and prevention strategies in schools and communities to increase safety belt use and reduce speeding, impaired and distracted driving, underage drinking, and other destructive teen driver decisions that lead to injuries and fatalities.
- Authorizes the Secretary to contract with a national, nonprofit organization to establish a technical assistance center to provide training and technical assistance to state and local officials, student leaders, school advisors, and other entities associated with the grant program. Authorizes the center to operate a national teen traffic safety clearinghouse.
- Directs the Secretary to establish the National Teen Driver Advisory Council to study and develop an education and prevention strategy to reduce teen driver injuries and fatalities.

The bill was referred to the Committee on Commerce, Science, and Transportation. No further action has been taken.

[5] Section 712 addresses distracted driving.

Safe Drivers Act of 2011, H.R. 2333

Representative Carolyn McCarthy introduced this bill on June 23, 2011. The act would:

- Direct the Secretary of Transportation to study distracted driving, including cognitive distraction when driving and driver distraction impacts on young, inexperienced drivers.
- Require the Secretary to withhold 25% of a state's apportionment of certain federal-aid highway program funds for the fiscal year if the state has not enacted or is not enforcing a law that (1) prohibits, except in an emergency, an operator of a moving or idling motor vehicle on a public road from using a hand-held mobile device (other than a voice-activated, vehicle-integrated, or similar device, or a global positioning system [GPS] which is not vehicle-integrated); and (2) requires, upon conviction of a violation of such prohibition, the imposition of certain minimum penalties.

The bill was referred to the House Transportation and Infrastructure Committee Subcommittee on Highways and Transit. No further action has been taken.

Distracted Driving Prevention Act of 2011, H.R. 1772

Representative Eliot Engel introduced this bill on May 5, 2011. The bill would:

- Direct the Secretary of Transportation to make distracted driving prevention incentive grants for each fiscal year to states that enact laws that prohibit, with certain exceptions, and establish fines for texting and/or handheld cellphone use while driving.
- Require a state that receives a grant to allocate (1) at least 50% to educate and advertise to the public about the dangers of texting or using a cellphone while driving as well as to enforce the distracted driving law; and (2) up to 50% for other traffic safety improvement projects.
- Direct the Administrator of the NHTSA to administer a distracted driving national education program with at least two high-visibility education and advertising campaigns.
- Require the Secretary to establish a research program to study distracted driving by passenger and commercial vehicle drivers.
- Direct the FCC to report to Congress on existing and developing wireless communications technology that may be used to reduce problems associated with distracted driving.
- Require the Secretary to (1) issue regulations on the use of electronic or wireless devices, including cell phones and other distracting devices, by operators of commercial motor vehicles and school buses; and (2) prohibit their use in circumstances where it interferes with the driver's safe operation of the vehicles.

This bill was referred to the Committee on Transportation and Infrastructure and Committee on Energy and Commerce. No further action has been taken.

Consolidated and Further Continuing Appropriations Act, 2012, P.L. 112-55 (S. 1596) (Originally Transportation, Housing and Urban Development, and Related Agencies Appropriations Act, 2012 (H.R. 2112))

P.L. 112-55 directs the NHTSA and the Centers for Disease Control to report on the extent to which electronic devices can be causally linked to the reported rise in fatal accidents or injuries involving distracted driving, as well as the impact distracted driving prevention laws and enforcement actions can have on motorist behavior.

SMS Spam

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 (e.g., 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 (Controlling the Assault of Non-Solicited Pornography and Marketing Act, P.L. 108-187). 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

In the past, some mobile service customers had expressed frustration to their congressional representatives about unwanted text messages and the inability to selectively block or completely disable text messaging on their phones. Carriers generally offer a range of text messaging packages, for example, 500 messages for $10, but some customers simply do not use text messaging and, therefore, pay a small fee every time they receive a message.

In December 2007, a class-action lawsuit was filed against T-Mobile in this matter.[6] At that time, most carriers already offered some form of text blocking to their customers. The **Appendix** contains information from that article that may be helpful to consumers.[7] In August 2008, T-Mobile began allowing text blocking. At this time, all major carriers provide this service.

Text Messaging Price Fixing

A class-action suit pending before the district court for the Northern District of Illinois accuses the four national wireless carriers—AT&T, Verizon, Sprint, and T-Mobile—of colluding to set the price of text messages. Plaintiffs allege that the defendants agreed, in 2005, to set the price for a single text message at $0.10 and then subsequently agreed to raise that price twice, first to $0.15

[6] 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.

[7] 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.

and then to $0.20. The plaintiffs allege that it is reasonable to infer that those price changes were the result of a prior agreement because the industry is concentrated, the defendants made identical price changes at about the same time, no defendant attempted to gain an advantage in the market by lowering its price (even though the price is far in excess of cost), and the defendants had ample opportunity to conspire through participation in a trade association, which frequently discussed matters related to text messaging. Plaintiffs' complaint also notes that the Antitrust Subcommittee of the Senate Judiciary Committee initiated an investigation into the price increases.

Defendants have denied that they engaged in any collusion and dispute the claim that the facts support any inference of unlawful conduct. Defendants have pointed out that most consumers do not purchase text messaging services on a message-by-message basis, but instead buy packaged plans that include hundreds of messages—or an unlimited number—each month. The structure and pricing of those bundled plans varies among the carriers—plaintiffs do not claim that defendants reached any agreement with respect to those plans—and the effective price of text messaging service has declined sharply as output has expanded dramatically. The wireless carriers have also argued that the increases in prices for single-use text messages occurred over the space of 6 to 11 months, a pattern that is more suggestive of "follow-the-leader" pricing—which is lawful—than any advance coordination. Defendants dispute that the wireless service providers ever discussed pricing at meetings of their trade association, and they note that neither the Antitrust Subcommittee's investigation, nor a DOJ investigation initiated at the subcommittee's request, found any evidence of collusion among the carriers.

Carrier Blocking of Common Short Code Messages

In 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 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."[8]

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.[9] 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."[10]

[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 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.

[10] 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.

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. However, there have been no recent cases in which carriers have blocked CSCs.

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.[11]

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.[12]

The Mobile Marketing Association has developed "Consumer Best Practices Guidelines"[13] 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 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 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[14] to promote wireless safety for

[11] 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.

[12] 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.

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

[14] 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 (continued...)

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.[15]

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.

"Sexting"

Sexting is a term coined by the media that generally refers to youth writing sexually explicit messages, taking sexually explicit photos of themselves or others in their peer group, and transmitting those photos and/or messages to their peers.[16] Sexting is not the same as a child sending a sexually explicit photo to an adult, however, the ramifications can be extremely serious because of how child pornography laws are written. In general, regardless of the age of the person who takes the photograph and/or sends it, that photograph is considered child pornography. This has led to situations in which underage girls have been charged with distributing child pornography and others in which teenagers have been required to register as sex offenders.

Although no federal charges have been brought in these types of cases yet, it is conceivable that they could. Congress may wish to consider whether children should be prosecuted under statutes intended to prosecute child predators and pornographers and whether, in certain cases, such prosecutions might be warranted.

A report conducted in 2008 by the National Campaign to Prevent Teen and Unplanned Pregnancy found that 20% of its respondents had indicated they had engaged in sexting. That study, however, had included 18- to 19-year-old adults, which significantly skewed the findings.[17] A more recent study published in January 2012 indicated that the problem is not as widespread as

(...continued)

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.

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

[16] National Conference of State Legislatures, 2009 Legislation Related to "Sexting" http://www.ncsl.org/?tabid=17756.

[17] "Sexting Far Less Prevalent Than Previously Reported," CNET, December 5, 2011, http://news.cnet.com/8301-19518_3-57336423-238/sexting-far-less-prevalent-than-previously-reported/.

originally thought. The second study, published in *Pediatrics*, asked tweens and teens (ages 10-17) if they had ever engaged in sexting. Of those asked, 2.5% of the respondents in the survey said "they had appeared in or created images that depicted themselves nude or nearly nude." But, when the researchers asked if the images "showed breasts, genitals or someone's bottom," only 1.3% said they had appeared in or created such images.[18]

The study also found that older teens are much more likely to appear in such images than younger children. Just under three-quarters of the 2.5% who appeared in or created nude or nearly nude images were 16 or 17. Only 6% of that 2.5% were between 10 and 12. About 7% of the youth had received a nude or nearly nude picture, but only 1% reported forwarding or posting the image. Of those who received such images, 56% were girls and 55% were 16 or 17. Just under 6% reported receiving sexually explicit images. The study found that some—but far from most—youth engaged in sexting were emotionally upset as a result. For example, "21 percent of respondents appearing in or creating images reported feeling very or extremely upset, embarrassed or afraid as a result, as did 25 percent of the youth receiving images."[19]

Legislation—112th Congress

In the 112th Congress, one bill has been introduced that includes a section on sexting.

Anti-Bullying and Harassment Act of 2011, H.R. 975

Representative Danny Davis introduced H.R. 975, the Anti-Bullying and Harassment Act of 2011, on March 9, 2011. The bill was referred to the Committee on Education and the Workforce Subcommittee on Early Childhood, Elementary, and Secondary Education on March 21, 2011. The bill includes language that includes sexting in the definition of cyberbullying if the transmittal of a "nude picture" constitutes bullying[20] "that is undertaken, in whole or in part, through use of technology or electronic communications (including electronic mail, internet communications, instant messages, or facsimile communications) to transmit images, text, sounds, or other data."

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 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

[18] The "nude or nearly nude" category included youth wearing underwear or bathing suits or even fully clothed but in sexy poses.

[19] "Sexting Far Less Prevalent Than Previously Reported," CNET, December 5, 2011, http://news.cnet.com/8301-19518_3-57336423-238/sexting-far-less-prevalent-than-previously-reported/.

[20] The term "bullying" is defined in the act as conduct, including conduct that is based on a student's actual or perceived identity with regard to race, color, national origin, gender identity, disability, sexual orientation, religion, or any other distinguishing characteristics that may be defined by a state or local educational agency that (1) is directed at one or more students; (2) substantially interferes with educational opportunities or educational programs of such students; and (3) adversely affects the ability of a student to participate in or benefit from the school's educational programs or activities by placing a student in reasonable fear of physical harm."

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.

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Privacy of Text Messages[22]

Text messages are routinely used to conduct government business, both officially and unofficially. As a result employers,[23] litigants, newspapers, law enforcement,[24] and public interest groups are increasingly seeking access to the contents of such communications in order to shed light on the workings of government. Most states have laws "prohibiting public officials from discussing official business privately and failing to disclose information regarding the operations of government."[25] On the other hand, some contend that text messages should be treated as private because of the nature of the delivery platforms or technological devices employed to send text messages. States are increasingly disregarding the public nature of the employee's position and

[21] The term "bullying" is defined in the act as conduct, including conduct that is based on a student's actual or perceived identity with regard to race, color, national origin, gender identity, disability, sexual orientation, religion, or any other distinguishing characteristics that may be defined by a State or local educational agency that (1) is directed at one or more students; (2) substantially interferes with educational opportunities or educational programs of such students; and (3) adversely affects the ability of a student to participate in or benefit from the school's educational programs or activities by placing a student in reasonable fear of physical harm."

[22] Gina Stevens, Legislative Attorney in the CRS American Law Division, wrote this section.

[23] Lavis, Amanda J., "Employers Cannot Get the Message: Text Messaging and Employee Privacy," 54 Vill. L. Rev. 516 (2009).

[24] Alyssa H. DaCunha, "Txts R Safe 4 2Day: Quon v. Arch Wireless and the Fourth Amendment Applied to Text Messages," 17 Geo. Mason L. Rev. 296 (Fall 2009).

[25] Cooper, Cheryl, "Sending the Wrong Message: Technology, Sunshine Law, and the Public Record in Florida," 39 Stetson L. Rev. 411, 413 (2009-2010).

the property ownership of the device used to send e-mail and text messages, and instead defining public communication based on whether the individual is conducting the public's business. Thus, communication about the public's business, and records documenting the communication are a part of the public record. Because text messaging represents a relatively new form of electronic communication, federal and state courts,[26] legislatures,[27] and commissions[28] are considering access to text messages pursuant to Sunshine Laws, Open Meetings Laws, Public Records Acts, Freedom of Information Acts, and electronic surveillance laws.

In Detroit, MI, newspapers filed a Michigan Freedom of Information Act (FOIA) lawsuit against that city seeking disclosure of text messages sent by Detroit elected officials on city-issued pagers that related to the city's $8.4 million settlement of two whistle-blower lawsuits brought by former Detroit police officers.[29] The city argued that disclosure of the text messages would violate the federal Stored Communications Act, which outlaws unlawful access to stored communications.[30] 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."[31] Although the newspapers obtained the text messages through an anonymous source, they continued to press for the release of additional information under public records law.[32] 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 and convicted.[33] In *Flagg v. City of Detroit*,[34] the district court held that a city's text messages satisfied the definition of "public records" under Michigan's Freedom of Information Act (FOIA)[35] because they captured communications among city officials or employees in the performance of an official function. For purposes of the discovery rule governing production of documents, the district court concluded that the city had "control" over any such "public records" in the possession of a third party service provider under

[26] See Disclosure of Electronic Data Under State Public Records and Freedom of Information Acts, 54 A.L.R.6th 653.

[27] 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. N.Y. Pub. Off. Law §84 *et seq.* (McKinney 2009). For a summary of the amendments to the Freedom of Information Law, see http://www.dos.state.ny.us/coog/foilnews2.html. See also "Battle Over Public Information Expands," by Ledyard King, *Federal Times*, March 24, 2008, p. 14.

[28] The Florida Commission on Open Government Reform reviewed open government laws to recommend areas for legislative review and amendment, and found that while e-mail communications between public officials become part of the public record, text or instant messages "most likely" do not. Ibid. at 413.

[29] *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.

[30] 18 U.S.C. §2701-2708. 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." 18 U.S.C. §2702(a)(1).

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

[32] 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...." Mich. Comp. Laws Ann. §15.232(e).

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

[34] 252 F.R.D. 346 (E.D. Mich. 2008) (applying Michigan law).

[35] Mich. Comp. Laws Ann. §15.232(e).

contract with the city by virtue of its statutory obligation to maintain these records and make them available for examination or inspection.[36]

Courts also have examined 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 (SCA).[37] The United States Supreme Court in *City of Ontario v. Quon* overturned a federal appellate court decision which had held that officials in the city of Ontario, CA, engaged in an unconstitutional search and seizure when they acquired and read the contents of messages sent to and from a city police officer's city-provided pager.[38] In *Quon v. Arch Wireless Operating Company*,[39] the court of appeals for the Ninth Circuit concluded that, under certain circumstances, an employee sending text messages from an employer's device has a reasonable expectation of privacy under the Fourth Amendment. The United States Supreme Court resolved the case by applying settled principles for determining when a search is reasonable.[40] In *City of Ontario v. Quon*, the Supreme Court held that officials had acted reasonably when they reviewed transcripts of messages sent to and from Sergeant Quon's city-issued pager in order to determine whether service limits on the pager's use should be increased. The Court assumed, without deciding, that Quon had a reasonable expectation of privacy for Fourth Amendment purposes, but found that the search of the transcripts was reasonable.

Courts also 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.[41]

Using SMS to Support Law Enforcement and Emergency Response

In May 2011, the FCC and FEMA announced the implementation of a Personal Localized Alerting Network (PLAN). This program was previously called the Commercial Mobile Alert System (CMAS), which has been under development since April 2008 under rules developed by the FCC.

The PLAN system will be operational in Washington, DC, and New York City by the end of 2011 and in the rest of the country by April 2012. PLAN will deliver emergency text messages to the public during emergencies and natural disasters.[42]

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[36] Ibid. at 356.

[37] 18 U.S.C. §2701 et seq.

[38] *City of Ontario v. Quon,* 130 S.Ct. 2619 (2010), rev'g, *Quon v. Arch Wireless Operating Co., Inc.*, 529 F.3d 892 (9th Cir. 2008), cert. granted sub nom., *City of Ontario v. Quon* (Doc. No. 08-1332), 130 S.Ct. 1011 (2009).

[39] 529 F. 3d 892 (9th Cir, 2008) *re'hg. en banc denied,* 554 F. 3d 769 (9th Cir. 2009).

[40] CRS Report R41344, *Public Employees' Right to Privacy in Their Electronic Communications: City of Ontario v. Quon in the Supreme Court*, by Charles Doyle.

[41] 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.

[42] 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 (continued...)

The program was mandated by the Warning, Alert and Response Network Act that was signed into law in 2006.[43] 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:[44]

- 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."[45]

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;[46] an Order on Reconsideration and Erratum;[47] and a Third Report and Order.[48] 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;

(...continued)

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.

[43] 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).

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

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

[46] 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.

[47] 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.

[48] 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.

- 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.

The FCC continues to refine the rules for providing PLAN/CMAS. The most recent set of requirements is contained in the *Third Report and Order*, released August 7, 2008 (Docket No. 07-287). The WARN Act did not provide a mandatory deadline for the implementation of PLAN/CMAS.

The National Continuity Programs (NCP) Directorate, within the Federal Emergency Management Administration (FEMA), will take on the responsibility of acting as a gateway and aggregator of alerts for dissemination through PLAN/CMAS.[49] On December 7, 2009, FEMA and the FCC jointly announced that FEMA had adopted the CMAS Government Interface Design specifications. This triggered requirements in the *Third Report and Order* for wireless carriers that have agreed to participate in the PLAN/CMAS program to begin development and testing. The deadlines established by the FCC give these carriers until April 7, 2012, to provide PLAN/CMAS alerts sent through the IPAWS gateway.[50] The four major wireless carriers will participate in the program.[51]

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
- Issues that have triggered a legislative response.

[49] "Nationwide Emergency Mobile Telephone Alert System Soon to Be Realized," Press Release, U.S. House of Representatives, Committee on Homeland Security, May 30, 2008.

[50] FCC Public Notice, "FCC's Public Safety and Homeland Security Bureau Sets Timetable in Motion for Commercial Mobile Alert Service Providers to Develop a System that Will Deliver Alerts to Mobile Devices," December 7, 2009, at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-09-2556A1.pdf.

[51] Daily Report for Executives, "FCC, FEMA Initiate Testing Phase of Wireless Emergency Alert System," by Alexel Alexis, December 8, 2009.

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.[52]

[52] "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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