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FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 20

[PS Docket No. 10-255 and PS Docket No. 11-153; FCC 13-64]

RIN 3060-AJ60

Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications

AGENCY: Federal Communications Commission.

ACTION: Final rule**.**

SUMMARY: In this document, the Commission requires all commercial mobile radio service (CMRS) providers and providers of interconnected text messaging services (i.e., all providers of software applications that enable a consumer to send text messages to all or substantially all text-capable U.S. telephone numbers and receive text messages from the same) to provide an automatic "bounce-back" text message where a consumer attempts to send a text message to 911 in a location where text-to-911 is not available. The rules are adopted with the goal of reducing the risk of individuals sending text messages to 911 during an emergency and mistakenly believing that 911 authorities had received it, particularly during the transition to Next Generation 911 (NG911), when text-to-911 will be available in some areas sooner than others and may be supported by certain service providers but not by others.

DATES: This rule is effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

FOR FURTHER INFORMATION CONTACT: Timothy May, Federal Communications Commission, Public Safety and Homeland Security Bureau, 445 12th

Street, SW, Room 7-A727, Washington, DC 20554. Telephone: (202) 418-1463, email: timothy.may@fcc.gov.

SUPPLEMENTARY INFORMATION: In this Report & Order (R&O), FCC 13-64, adopted May 8, 2013, and released May 17, 2013, the Commission requires all CMRS providers and providers of interconnected text messaging services (i.e., all providers of software applications that enable a consumer to send text messages to all or substantially all text-capable U.S. telephone numbers and receive text messages from the same) (collectively, "covered text providers") to provide an automatic "bounce-back" text message in situations where a consumer attempts to send a text message to 911 in a location where text-to-911 is not available. The rules the Commission adopts will substantially reduce the risk of a person sending a text message to 911 in an emergency and mistakenly believing that 911 authorities have received it. Instead, the text sender will receive an immediate response that text-to-911 is not supported along with direction to use another means to contact emergency services, e.g., place a voice call to 911.

Requiring all covered text providers to implement a bounce-back mechanism is particularly important because while deployment of text-to-911 has begun, the transition is still in the very early stages and will not be uniform. During the transition, text-to-911 will be available in certain geographic areas sooner than it is available in others and may be supported by certain service providers but not by others. At the same time, as text-to-911 becomes more widely available, it is likely to generate increased consumer expectations as to its availability, which makes it increasingly important for consumers to be made aware when it is not available in an emergency.

The Commission finds that it is technically feasible for all covered text providers to provide automatic bounce-back messages. The record in this proceeding indicates that some service providers already send an automatic bounce-back message to their subscribers when a subscriber attempts to send a text to 911. In addition, the four largest CMRS providers – AT&T, Sprint Nextel, T-Mobile, and Verizon – have voluntarily committed to provide bounce-back messaging capability throughout their networks by June 30, 2013. While the Commission finds that it is technically and economically feasible for all covered text providers to implement this capability quickly, the Commission recognizes that not all providers may be able to do so by the June 30, 2013 date to which the four major carriers are committed. Therefore, the Commission establishes September 30, 2013 as the deadline for all covered text providers to implement the bounce-back capability required by this R&O. However, the Commission encourages covered text providers to implement bounce-back message capabilities as soon as possible in order to deal expeditiously with the existing consumer confusion about the availability of text-to-911. Although this new requirement will impose additional costs on some of the covered text providers, the Commission has determined that these costs are small and likely will be far exceeded by the public benefits of substantially reducing the risk of persons sending a text message to 911 in an emergency and mistakenly believing that 911 authorities have received it.

In addition to all CMRS providers, the Commission extends the bounce-back requirements adopted in the R&O to all interconnected text messaging providers. The Commission defines interconnected text providers as those providers that enable a consumer to send text messages to all or substantially all text-capable U.S. telephone

numbers and receive text messages from the same. Such providers of interconnected text messaging service include providers that enable the transmission of covered messages over their own networks or facilities (e.g., CMRS licensees), as well as third-party or over-the-top (OTT) providers that enable the transmission of covered texts over another providers' network or facilities, including through the use of applications downloaded on mobile phones. For interconnected text applications on the market prior to the adoption of the R&O, interconnected text providers must make an update available by the September 30, 2013 implementation date. For future applications not on the market as of the date of the adoption of this R&O, interconnected text providers must incorporate a bounce-back message capability into their initial programming.

The Commission affirms that it is extending this provision only to interconnected text message applications as defined in the R&O, and not to non-interconnected IP-based messaging applications that support communication with a defined set of users of compatible applications but that do not support general communication with text-capable telephone numbers. Additionally, the Commission clarifies that the rules adopted in the R&O do not apply to voice-only service providers.

For clarity, the Commission states that the service must be capable of reaching "all or substantially all" text-capable U.S. telephone numbers and removing the reference to mobile numbers, since the North American Numbering Plan does not make distinctions between numbers in the plan. The Commission also affirms that the definition of interconnected text does not extend to text messages that are directed by IP-based messaging applications that support communication with a defined set of users of

compatible applications but that do not support general communication with all or substantially all text-capable telephone numbers.

The Commission adopts its proposal with certain modifications to address concerns raised by commenters to the FNPRM.[1] In general, the R&O requires all covered text providers (i.e., both CMRS providers and interconnected text providers) to provide a bounce-back message when a consumer attempts to send a text message to a PSAP by means of the three-digit short code "911" and the covered text provider cannot deliver the text because (1) the consumer is located in an area where text-to-911 is not available, or (2) the covered text provider either does not support text-to-911 generally or does not support it in the particular area at the time of the consumer's attempted text.

The first scenario addresses the situation where the PSAP serving the consumer's geographic area has not yet implemented text-to-911 capability. The Commission includes the second scenario to address instances where a covered text provider does not support text-to-911, even in areas where the PSAP has implemented text-to-911 capability. This is necessary because implementation of text-to-911 by covered text providers will not be uniform across the nation or within any given area. For example, most of the text-to-911 trials and deployments to date have involved PSAPs only receiving texts from a single carrier. In those situations, consumers of other carriers that are not yet supporting the PSAP's trial or deployment will be unable to send text messages to 911 for some period of time. Therefore, the Commission requires these carriers to provide a bounce-back message to consumers – even though the PSAP is making text-to-911 "available" in the area.

The Commission also notes that the rule it adopts today requires all covered text providers to implement bounce-back capability even though some providers contend that they cannot and should not be required to support text-to-911. The Commission has not yet decided the issue of whether all covered text providers should be required to support text-to-911 as proposed in the FNPRM. That issue remains pending in this proceeding, and the Commission does not prejudge it here. However, regardless of whether all covered text providers are eventually required to support text-to-911, the fact that they provide the ability to text to telephone numbers generally is likely to lead some consumers to assume that they also have text-to-911 capability. This could further lead consumers to put themselves at risk by attempting to send emergency text messages over such applications. The Commission therefore concludes that to prevent consumer confusion and protect life and safety in such situations, the bounce-back requirement should apply to all covered text providers that do not support text-to-911 services.

As proposed in the FNPRM, the Commission requires covered text providers to provide bounce-back messages only in those cases where the provider (or the provider's text-to-911 vendor) has direct control over the transmission of the text message.[2] The Commission does not require that a bounce-back be provided in every instance where a confirmation of delivery is not received by the text provider, because this may include circumstances outside the text provider's control. However, the Commission agrees that

[1] In the Matter of Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications Framework for Next Generation 911 Deployment, PS Docket No. 11-153, PS Docket No. 10-255, Further Notice of Proposed Rulemaking, 27 FCC Rcd 15659, 78 FR 1799 (2012) (FNPRM).

[2] In the case of a preinstalled or downloadable interconnected text application, the Commission defines the application provider as having "control" for purposes of the bounce-back requirement. However, if the user or a third party modifies or manipulates the application after it is installed or downloaded so that it no longer supports bounce-back, the provider will be presumed not to have control.

a bounce-back message should be provided when the text provider cannot determine the PSAP to which the text should be routed.

The Commission further clarifies that the obligation of an interconnected text provider with respect to providing an automatic bounce-back message may differ depending on whether the application uses an IP-based network or a CMRS provider's underlying SMS network to deliver text messages to text-capable telephone numbers. Some interconnected text applications use IP-based transmissions to route text messages to a server, which then converts the message to SMS if necessary for delivery to the destination number.[3] In such cases, the interconnected text service provider is responsible for delivering an application-based automatic bounce-back message to consumers if and when text-to-911 is unavailable. Other interconnected text applications are configured to transmit text messages in SMS format directly over the SMS network of the consumer's underlying CMRS provider, which will result in the application user receiving a bounce-back message from the CMRS provider when text-to-911 is not available.[4] In these cases, where the text message defaults to the underlying CMRS provider's network, the interconnected text provider satisfies its consumer notification obligation so long as it does not prevent or inhibit the CMRS provider's automatic bounce-back message from being delivered to the application user.

The Commission also requires covered text providers that are delivering texts to PSAPs that are supporting text-to-911 to provide a mechanism for the PSAP to request temporary suspension of text for any reason, including but not limited to network

[3] For example, TextMe (go-text.me/) and Heywire (www.heywire.com).
[4] For example, Apple Messages (www.apple.com/ios/messages/).

congestion, call-taker overload, PSAP failure, or security breach.[5] In those circumstances, the covered text provider must provide a bounce-back message to any consumer attempting to send a text to 911 in the area covered by the temporary suspension. Covered text providers must also provide a mechanism to allow PSAPs to resume text-to-911 service after such temporary suspension. The Commission encourages carriers, interconnected text messaging providers and PSAPs to establish standard protocols and interfaces for triggering these mechanisms. The Commission also emphasizes that the bounce-back requirement will only apply where the PSAP requests the temporary shutdown using a notification mechanism established by the provider or the provider's vendor for this purpose. The Commission encourages PSAPs and covered text providers to work together when establishing temporary shutdown mechanisms, so that both PSAPs and providers are clearly apprised of their respective roles and have established procedures in place for establishing such temporary shutdowns.

For the reasons of public safety and public awareness cited above, the Commission does not find it appropriate to adopt any form of blanket exemption of the September 30, 2013 requirement for CMRS providers and interconnected text messaging providers that believe they will not be able to meet the deadline. Any covered providers who are unable to implement the bounce-back requirement by September 30, 2013 should file a request for waiver. Waivers or exemptions from these requirements are best suited to a case-by-case analysis under the waiver standard, where the facts and

[5] See, e.g., FNPRM, 27 FCC Rcd at 15670 para., 32 & n.70 (proposing and seeking comment on whether an automatic bounce-back notification should be provided when, inter alia, a PSAP is unable to accept texts to 911, including circumstances where the PSAP may not be able to handle all incoming text messages, and discussing the temporary blocking of messages and sending of return bounce-back messages).

circumstances of each individual case can be determined on its own merits.[6] Notwithstanding the availability of the waiver process, we emphasize the important public safety purpose of this requirement and our expectation that providers will implement bounce-back messaging by the deadline.

The Commission requires all covered text providers to provide an automatic bounce-back message that includes, at a minimum, two essential points of information: (1) that text-to-911 is not available; and (2) that the consumer should try to contact 911 using another means. As an example, a sufficient bounce-back message that satisfies these criteria could say: There is no text-to-911 service available. Make a voice call to 911 or use another means to contact emergency services. The Commission declines to require covered text providers to use specific wording.[7] The Commission believes its approach affords covered text providers with the necessary guidance and flexibility to create bounce-back messages that are understood by their particular consumer base. In addition, the approach enables covered text providers to continue to use the messages they presently have in operation, to the extent that they conform to these criteria.[8] This approach also provides sufficient uniformity in automatic bounce-back messages to allow for consistent training and public education materials.

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[6] The Commission may, on its own motion, waive its rules for good cause shown. 47 CFR 1.3. See also Northeast Cellular Telephone Co., L.P. v. FCC, 897 F.2d 1164, 1166 (D.C. Cir. 1990) ("FCC has authority to waive its rules if there is 'good cause' to do so."). The Commission may also exercise its discretion to waive a rule where particular facts would make strict compliance inconsistent with the public interest, and grant of a waiver would not undermine the policy served by the rule. See WAIT Radio v. FCC, 418 F.2d 1153, 1159 (D.C. Cir. 1969), aff'd, 459 F.2d 1203 (D.C. Cir. 1972), cert. denied, 409 U.S. 1027 (1972).

[7] The Commission notes that its action does not preclude the voluntary adoption of a common automatic bounce-back message by covered text providers, developed by industry in coordination with public safety, consumer groups, disability rights advocates, and other interested parties. The Commission encourages close and continued coordination among all relevant parties to ensure the successful implementation of the automatic bounce-back message requirement.

[8] Examples of current bounce-back messages that would satisfy our criteria include those offered by Heywire ("Heywire does not support Enhanced 911. If you are in need of emergency services, please dial

Additionally, the Commission requires all CMRS providers to provide an automatic bounce-back message when a consumer roaming on a network initiates a text-to-911 in an area where text-to-911 service is not available. Consumers roaming on other carriers' networks have an expectation that they can access 911 services in an emergency. Given the important safety of life implications, carriers should make automatic bounce-back messages available to consumers roaming on their network to the same extent they provide such messages to their own subscribers.

The Commission recognizes that certain legacy devices are not capable of sending text messages to a three-digit short code. For those devices that are not capable of generating messages to 911 and whose text messaging software cannot be upgraded over the air (e.g., through a push software upgrade), the CMRS provider will never receive a message and thus cannot generate a bounce-back message.[9] The Commission clarifies that legacy devices that are incapable of sending texts via three digit short codes are not subject to the bounce-back message requirement, provided the software for these devices cannot be upgraded over the air to allow text-to-911. In such cases, the messaging application or interface on the mobile device will likely provide an error message indicating an invalid destination number, reducing user confusion somewhat even if the message is less specific than the bounce-back message. If the text messaging software can be upgraded, however, the Commission treats such devices in the same manner as the software offered by interconnected text providers.

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911 on your landline or mobile phone") and Verizon ("Please make a voice call to 911. There is no text service to 911 available at this time").

[9] See Motorola Mobility Comments at 2-3 (arguing that the proposed bounce-back message requirement would not help customers who may be located in an area where text-to-911 is supported but who are using a device that is not technically capable of sending a three digit short code).

The Commission clarifies that CMRS providers are not required to provide an automatic bounce-back message when a consumer attempts to text 911 on a non-service initialized phone. Deliberations of the EAAC have affirmed that the text capability of non-service initialized handsets is neither technically nor economically feasible.[10] At the same time, the Commission notes that some providers may provide text messaging solutions that allow users to send text messages even on NSI phones (e.g., Wi-Fi-enabled text applications). The Commission clarifies that those text providers must still provide bounce-back messaging consistent with the rules we adopt today.

Finally, the Commission declines to require covered text providers to provide consumers with text-to-911 testing capability at this time. Until operational experience indicates otherwise, the Commission believes that consumer education efforts should discourage the sending of texts to 911 except in actual emergencies.

The Commission has already committed the Public Safety and Homeland Security Bureau (PSHSB) and the Consumer and the Consumer and Governmental Affairs Bureau (CGB) to implement a comprehensive consumer education program concerning text-to-911, and to coordinate their efforts with state and local 911 authorities, other federal and state agencies, public safety organizations, industry, disability organizations, and consumer groups. The Commission directs PSHSB and CGB to put in place a consumer information website that provides the public with information and instructions on how and when to use text-to-911 no later than June 30, 2013.

The R&O is available at http://www.fcc.gov/document/text-911-bounce-back-message-order.

[10] See, e.g., Report of Emergency Access Advisory Committee (EAAC) Subcommittee 1 on Interim Text Messaging to 9-1-1, March 1, 2013 at 9.

PROCEDURAL MATTERS

Paperwork Reduction Act

The R&O does not contain new information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law No. 104-13. Therefore, it does not contain any new or modified information collection burden for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198.

Congressional Review Act

The Commission will send a copy of this Report & Order to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. 801(a)(1)(A).

FINAL REGULATORY FLEXIBILITY ANALYSIS

As required by the Regulatory Flexibility Act (RFA),[11] the Commission has prepared this present Final Regulatory Flexibility Analysis (FRFA) of the possible significant economic impact on small entities by the policies and rules proposed in this R&O. The Commission will send a copy of this R&O, including this FRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).[12] In addition, the R&O and FRFA (or summaries thereof) will be published in the Federal Register.[13]

A. Need for, and Objectives of, the Proposed Rules

In this Report & Order (R&O), the Commission requires all CMRS providers and providers of interconnected text messaging services (i.e., all providers of software

[11] See 5 U.S.C. 603. The RFA, see 5 U.S.C.. 601 et. seq., has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).
[12] See 5 U.S.C. 603(a).
[13] See id.

applications that enable a consumer to send text messages to all or substantially all text-capable U.S. telephone numbers and receive text messages from the same) to provide an automatic "bounce-back" text message in situations where a consumer attempts to send a text message to 911 in a location where text-to-911 is not available. The rules the Commission adopts in R&O will substantially reduce the risk of a person sending a text message to 911 in an emergency and mistakenly believing that 911 authorities have received it. Instead, the text sender will receive an immediate response that text-to-911 is not supported along with direction to use another means to contact emergency services.

Requiring all CMRS providers and interconnected text providers to implement a bounce-back mechanism is particularly important because while deployment of text-to-911 has begun, the transition is still in the very early stages and will not be uniform. During the transition, text-to-911 will be available in certain geographic areas sooner than it is available in others and may be supported by certain service providers but not by others. At the same time, as text-to-911 becomes more widely available, it is likely to generate increased consumer expectations as to its availability, which makes it increasingly important for consumers to be made aware when it is not available in an emergency.

The record in this proceeding indicates that some service providers already send an automatic bounce-back message to their subscribers when a subscriber attempts to send a text to 911. In addition, the four largest CMRS providers – AT&T, Sprint Nextel, T-Mobile, and Verizon – have voluntarily committed to provide bounce-back messaging capability throughout their networks by June 30, 2013. In this R&O, the Commission builds on this voluntary commitment and concludes that all CMRS providers and

interconnected text providers (collectively, "covered text providers") should be required to provide this capability. The Commission further specifies the circumstances under which a bounce-back message must be provided and the information that the message must contain. Finally, while the Commission finds it is technically and economically feasible for all covered text providers to implement this capability quickly, the Commission recognizes that not all providers may be able to do so by the June 30, 2013 date to which the four major carriers are committed. Therefore, the Commission establishes September 30, 2013 as the deadline for all covered text providers to implement the bounce-back capability required by this R&O. However, the Commission encourages covered text providers to implement bounce-back message capabilities as soon as possible in order to deal expeditiously with the existing consumer confusion about the availability of text-to-911. Although this new requirement will impose additional costs on some of the covered text providers, the Commission has determined that these costs likely will be far exceeded by the public benefits of substantially reducing the risk of persons sending a text message to 911 in an emergency and mistakenly believing that 911 authorities have received it.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

No commenter raised issues in response to the bounce-back portion of the IRFA included in the FNPRM. The Commission concludes that the proposed mandates here provide covered text providers and Public Safety Answering Points (PSAPs) with a sufficient measure of flexibility to account for technical and cost-related concerns. In the event that small entities face unique circumstances that restrict their ability to comply with

the Commission's rules, the Commission can address them through the waiver process. The Commission has determined that implementing bounce-back messages is technically feasible and the cost of implementation is small.

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply

The RFA directs agencies to provide a description of, and, where feasible, an estimate of the number of small entities that may be affected by the rules adopted, herein.[14] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[15] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[16] A "small business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.[17] Below, the Commission describes and estimates the number of small entity licensees that may be affected by the adopted rules of this R&O.

Small Businesses, Small Organizations, and Small Governmental Jurisdictions. As of 2009, small businesses represented 99.9% of the 27.5 million businesses in the United States, according to the SBA.[18] Additionally, a "small organization" is generally

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[14] 5 U.S.C. 603(b)(3).
[15] 5 U.S.C. 601(6).
[16] 5 U.S.C.. 601(3) (incorporating by reference the definition of "small-business concern" in the Small Business Act, 15 U.S.C. 632). Pursuant to 5 U.S.C. 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."
[17] 15 U.S.C. 632.
[18] See SBA, Office of Advocacy, "Frequently Asked Questions," available at http://web.sba.gov/faqs/faqindex.cfm?areaID=24 (last visited Dec. 11, 2012).

"any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."[19] Nationwide, as of 2007, there were approximately 1,621,315 small organizations.[20] Finally, the term "small governmental jurisdiction" is defined generally as "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."[21] Census Bureau data for 2007 indicate that there were 89,527 governmental jurisdictions in the United States.[22] The Commission estimates that, of this total, as many as 88,761 entities may qualify as "small governmental jurisdictions."[23] Thus, the Commission estimates that most governmental jurisdictions are small.

1. Wireless Telecommunications Service Providers

Below, for those services subject to auctions, the Commission notes that, as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business

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[19] 5 U.S.C.. 601(4).
[20] INDEPENDENT SECTOR, THE NEW NONPROFIT ALMANAC & DESK REFERENCE (2010).
[21] 5 U.S.C. 601(5).
[22] U.S. CENSUS BUREAU, STATISTICAL ABSTRACT OF THE UNITED STATES: 2011, Table 427 (2007).
[23] The 2007 U.S Census data for small governmental organizations are not presented based on the size of the population in each such organization. There were 89,476 local governmental organizations in 2007. If we assume that county, municipal, township, and school district organizations are more likely than larger governmental organizations to have populations of 50,000 or less, the total of these organizations is 52,095. If we make the same population assumption about special districts, specifically that they are likely to have a population of 50,000 or less, and also assume that special districts are different from county, municipal, township, and school districts, in 2007 there were 37,381 such special districts. Therefore, there are a total of 89,476 local government organizations. As a basis of estimating how many of these 89,476 local government organizations were small, in 2011, we note that there were a total of 715 cities and towns (incorporated places and minor civil divisions) with populations over 50,000. CITY AND TOWNS TOTALS: VINTAGE 2011 – U.S. Census Bureau, *available at* http://www.census.gov/popest/data/cities/totals/2011/index.html. If we subtract the 715 cities and towns that meet or exceed the 50,000 population threshold, we conclude that approximately 88,761 are small. U.S. CENSUS BUREAU, STATISTICAL ABSTRACT OF THE UNITED STATES 2011, Tables 427, 426 (Data cited therein are from 2007).

size unless, in the context of assignments or transfers, unjust enrichment issues are implicated.

Wireless Telecommunications Carriers (except satellite). This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular phone services, paging services, wireless Internet access, and wireless video services.[24] The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[25] Census Bureau data for 2007, which now supersede data from the 2002 Census, show that there were 3,188 firms in this category that operated for the entire year. Of this total, 3,144 had employment of 999 or fewer, and 44 firms had employment of 1,000 employees or more. Thus under this category and the associated small business size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities that may be affected by our actions.[26]

Incumbent Local Exchange Carriers (Incumbent LECs). Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to incumbent local exchange services. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[27] According to Commission data, 1,307 carriers

[24] http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517210&search=2007%20NAICS%20Search
[25] 13CFR 121.201, NAICS code 517110.
[26] See http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-_skip=600&-ds_name=EC0751SSSZ5&-_lang=en
[27] See 13 CFR 121.201, NAICS code 517110.

reported that they were incumbent local exchange service providers.[28] Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees.[29] Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by rules adopted pursuant to the NPRM.

The Commission has included small incumbent LECs in this present RFA analysis. As noted above, a "small business" under the RFA is one that, inter alia, meets the pertinent small business size standard (*e.g.*, a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation."[30] The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not "national" in scope.[31] The Commission has therefore included small incumbent LECs in this RFA analysis, although it emphasizes that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

Competitive Local Exchange Carriers (Competitive LECs), Competitive Access Providers (CAPs), Shared-Tenant Service Providers, and Other Local Service Providers. Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a

[28] See Federal Communications Commission, Trends in Telephone Service (Sep. 2010) at Table 5.3, available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf (last accessed Apr. 25, 2013).
[29] See id.
[30] 5 U.S.C. 601(3).

[31] See Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (May 27, 1999). The Small Business Act contains a definition of "small business concern," which the RFA incorporates into its own definition of "small business." See 15 U.S.C. 632(a); see also 5 U.S.C.

business is small if it has 1,500 or fewer employees.[32] According to Commission data, 1,442 carriers reported that they were engaged in the provision of either competitive local exchange services or competitive access provider services.[33] Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees and 186 have more than 1,500 employees.[34] In addition, 17 carriers have reported that they are Shared-Tenant Service Providers, and all 17 are estimated to have 1,500 or fewer employees.[35] In addition, 72 carriers have reported that they are Other Local Service Providers.[36] Of the 72, seventy have 1,500 or fewer employees and two have more than 1,500 employees.[37] Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, Shared-Tenant Service Providers, and Other Local Service Providers are small entities that may be affected by rules adopted pursuant to the NPRM.

Broadband Personal Communications Service. The broadband personal communications services (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission initially defined a "small business" for C- and F-Block licenses as an entity that has average gross revenues of $40 million or less in the three previous calendar years.[38] For F-Block licenses, an additional small business size standard for "very small business"

601(3). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. *See* 13 CFR 121.102(b).

[32] See 13 CFR 121.201, NAICS code 517110.

[33] See Trends in Telephone Service at Table 5.3.

[34] See id.

[35] See id.

[36] See id.

[37] See id.

[38] See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap*;* Amendment of the Commission's Cellular/PCS

was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than $15 million for the preceding three calendar years.[39] These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.[40] No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that claimed small business status in the first two C-Block auctions. A total of 93 bidders that claimed small business status won approximately 40 percent of the 1,479 licenses in the first auction for the D, E, and F Blocks.[41] On April 15, 1999, the Commission completed the reauction of 347 C-, D-, E-, and F-Block licenses in Auction No. 22.[42] Of the 57 winning bidders in that auction, 48 claimed small business status and won 277 licenses.

On January 26, 2001, the Commission completed the auction of 422 C and F Block Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in that auction, 29 claimed small business status.[43] Subsequent events concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant. On February 15, 2005, the Commission completed an auction of 242 C-, D-, E-, and F-Block licenses in Auction No. 58. Of the 24 winning

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Cross-Ownership Rule; WT Docket No. 96-59, GN Docket No. 90-314, Report and Order, 11 FCC Rcd 7824, 7850–52, paras. 57–60 (1996) ("PCS Report and Order"); see also 47 CFR 24.720(b).

[39] See PCS Report and Order, 11 FCC Rcd at 7852, para. 60.

[40] See Alvarez Letter *1998*.

[41] See Broadband PCS, D, E and F Block Auction Closes, Public Notice, Doc. No. 89838 (rel. Jan. 14, 1997).

[42] See C, D, E, and F Block Broadband PCS Auction Closes, Public Notice, 14 FCC Rcd 6688 (WTB 1999). Before Auction No. 22, the Commission established a very small standard for the C Block to match the standard used for F Block. Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licensees, WT Docket No. 97-82, Fourth Report and Order, 13 FCC Rcd 15743, 15768, para. 46 (1998).

[43] See C and F Block Broadband PCS Auction Closes*;* Winning Bidders Announced, Public Notice, 16 FCC Rcd 2339 (2001).

bidders in that auction, 16 claimed small business status and won 156 licenses.[44] On May 21, 2007, the Commission completed an auction of 33 licenses in the A, C, and F Blocks in Auction No. 71.[45] Of the 12 winning bidders in that auction, five claimed small business status and won 18 licenses.[46] On August 20, 2008, the Commission completed the auction of 20 C-, D-, E-, and F-Block Broadband PCS licenses in Auction No. 78.[47] Of the eight winning bidders for Broadband PCS licenses in that auction, six claimed small business status and won 14 licenses.[48]

Narrowband Personal Communications Services. To date, two auctions of narrowband personal communications services (PCS) licenses have been conducted. For purposes of the two auctions that have already been held, "small businesses" were entities with average gross revenues for the prior three calendar years of $40 million or less. Through these auctions, the Commission has awarded a total of 41 licenses, out of which 11 were obtained by small businesses. To ensure meaningful participation of small business entities in future auctions, the Commission has adopted a two-tiered small business size standard in the Narrowband PCS Second Report and Order.[49] A "small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than $40 million. A "very small business" is an entity that, together with affiliates and controlling interests, has average

[44] See Broadband PCS Spectrum Auction Closes; Winning Bidders Announced for Auction No. 58, Public Notice, 20 FCC Rcd 3703 (2005).
[45] See Auction of Broadband PCS Spectrum Licenses Closes; Winning Bidders Announced for Auction No. 71, Public Notice, 22 FCC Rcd 9247 (2007).
[46] Id.
[47] See Auction of AWS-1 and Broadband PCS Licenses Closes; Winning Bidders Announced for Auction 78, Public Notice, 23 FCC Rcd 12749 (WTB 2008).
[48] Id.
[49] Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS, GEN Docket No. 90-314, ET Docket No. 92-100, PP Docket No. 93-253, Second Report and Order and Second Further Notice of Proposed Rulemaking, 15 FCC Rcd 10456 (2000).

gross revenues for the three preceding years of not more than $15 million. The SBA has approved these small business size standards.[50]

Rural Radiotelephone Service. The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service. A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System ("BETRS"). In the present context, the Commission uses the SBA's small business size standard applicable to Wireless Telecommunications Carriers (except Satellite), i.e., an entity employing no more than 1,500 persons.[51] There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

Wireless Communications Services. This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses in the 2305-2320 MHz and 2345-2360 MHz bands. The Commission defined "small business" for the wireless communications services (WCS) auction as an entity with average gross revenues of $40 million for each of the three preceding years, and a "very small business" as an entity with average gross revenues of $15 million for each of the three preceding years.[52] The SBA has approved these definitions.[53] The Commission auctioned geographic area licenses in the WCS service. In the auction, which commenced on April 15, 1997 and closed on April 25, 1997, there were seven bidders that won 31 licenses that qualified as

[50] See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Dec. 2, 1998).
[51] NAICS Code 51210.
[52] Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service (WCS), Report and Order, 12 FCC Rcd 10785, 10879 para. 194 (1997).

very small business entities, and one bidder that won one license that qualified as a small business entity.

220 MHz Radio Service – Phase I Licensees. The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a small business size standard for small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, the Commission applies the small business size standard under the SBA rules applicable. The SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.[54] For this service, the SBA uses the category of Wireless Telecommunications Carriers (except Satellite). Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.[55] Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small.

220 MHz Radio Service – Phase II Licensees. The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is a new service, and is subject to spectrum auctions. In the 220 MHz Third Report and Order, the Commission adopted a small business size standard for defining "small" and "very small" businesses

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[53] See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

[54] 13 CFR 121.201, NAICS code 517210 (2007 NAICS). The now-superseded, pre-2007 CFR citations were 13 CFR 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.[56] This small business standard indicates that a "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding $15 million for the preceding three years.[57] A "very small business" is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed $3 million for the preceding three years.[58] The SBA has approved these small size standards.[59] Auctions of Phase II licenses commenced on and closed in 1998.[60] In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold.[61] Thirty-nine small businesses won 373 licenses in the first 220 MHz auction. A second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.[62] A third auction included four licenses: 2 BEA licenses and 2 EAG licenses in the 220 MHz Service. No small or very small business won any of these

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[55] U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

[56] Amendment of Part 90 of the Commission's Rules to Provide For the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, Third Report and Order, 12 FCC Rcd 10943, 11068-70 paras.291-295 (1997).

[57] Id. at 11068 para. 291.

[58] Id.

[59] See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998 (Alvarez to Phythyon Letter 1998).

[60] See generally "220 MHz Service Auction Closes," Public Notice, 14 FCC Rcd 605 (WTB 1998).

[61] See "FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses After Final Payment is Made," Public Notice, 14 FCC Rcd 1085 (WTB 1999).

[62] See "Phase II 220 MHz Service Spectrum Auction Closes," Public Notice, 14 FCC Rcd 11218 (WTB 1999).

licenses.[63] In 2007, the Commission conducted a fourth auction of the 220 MHz licenses.[64] Bidding credits were offered to small businesses. A bidder with attributed average annual gross revenues that exceeded $3 million and did not exceed $15 million for the preceding three years ("small business") received a 25 percent discount on its winning bid. A bidder with attributed average annual gross revenues that did not exceed $3 million for the preceding three years received a 35 percent discount on its winning bid ("very small business"). Auction 72, which offered 94 Phase II 220 MHz Service licenses, concluded in 2007.[65] In this auction, five winning bidders won a total of 76 licenses. Two winning bidders identified themselves as very small businesses won 56 of the 76 licenses. One of the winning bidders that identified themselves as a small business won 5 of the 76 licenses won.

Wireless Telephony. Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. As noted, the SBA has developed a small business size standard for Wireless Telecommunications Carriers (except Satellite).[66] Under the SBA small business size standard, a business is small if it has 1,500 or fewer employees.[67] According to Trends in Telephone Service data, 413 carriers reported that they were engaged in wireless telephony.[68] Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500

[63] See "Multi-Radio Service Auction Closes," Public Notice, 17 FCC Rcd 1446 (WTB 2002).
[64] See "Auction of Phase II 220 MHz Service Spectrum Scheduled for June 20, 2007, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Procedures for Auction 72, Public Notice, 22 FCC Rcd 3404 (2007).
[65] See "Auction of Phase II 220 MHz Service Spectrum Licenses Closes, Winning Bidders Announced for Auction 72, Down Payments due July 18, 2007, FCC Forms 601 and 602 due July 18, 2007, Final Payments due August 1, 2007, Ten-Day Petition to Deny Period, Public Notice, 22 FCC Rcd 11573 (2007).
[66] 13 CFR 121.201, NAICS code 517210.
[67] *Id*.
[68] Trends in Telephone Service at Table 5.3.

employees.[69] Therefore, more than half of these entities can be considered small.

Satellite Telecommunications Providers. Two economic census categories address the satellite industry. The first category has a small business size standard of $15 million or less in average annual receipts, under SBA rules.[70] The second has a size standard of $25 million or less in annual receipts.[71]

The category of Satellite Telecommunications "comprises establishments primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications."[72] Census Bureau data for 2007 show that 512 Satellite Telecommunications firms that operated for that entire year.[73] Of this total, 464 firms had annual receipts of under $10 million, and 18 firms had receipts of $10 million to $24,999,999.[74] Consequently, the Commission estimates that the majority of Satellite Telecommunications firms are small entities that might be affected by our action.

The second category, i.e., "All Other Telecommunications," comprises "establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from,

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[69] Id.
[70] 13 CFR 121.201, NAICS code 517410.
[71] 13 CFR 121.201, NAICS code 517919.
[72] U.S. Census Bureau, 2007 NAICS Definitions, "517410 Satellite Telecommunications."
[73] See http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=900&-ds_name=EC0751SSSZ4&-_lang=en.

satellite systems. Establishments providing Internet services or Voice over Internet Protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry."[75] For this category, Census Bureau data for 2007 show that there were a total of 2,383 firms that operated for the entire year.[76] Of this total, 2,346 firms had annual receipts of under $25 million and 37 firms had annual receipts of $25 million to $49, 999,999.[77] Consequently, the Commission estimates that the majority of All Other Telecommunications firms are small entities that might be affected by our action.

2. Equipment Manufacturers

Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing. The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment."[78] The SBA has developed a small business size standard for firms in this category, which is: all such firms having 750 or fewer employees.[79] According to Census Bureau data for 2010, there were a total of 810

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[74] http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=900&-ds_name=EC0751SSSZ4&-_lang=en.
[75] *http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517919&search=2007%20NAICS%20Search*.
[76] U.S. Censhttp://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=900&-ds_name=EC0751SSSZ4&-_lang=en.
[77]http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=900&-ds_name=EC0751SSSZ4&-_lang=en.
[78] U.S. Census Bureau, 2007 NAICS Definitions, "334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing"; http://www.census.gov/naics/2007/def/ND334220.HTM#N334220.
[79] 13 CFR 121.201, NAICS code 334220.

establishments in this category that operated for the entire year.[80] Of this total, 787 had employment of fewer than 500, and an additional 23 had employment of 500 to 999.[81] Thus, under this size standard, the majority of firms can be considered small.

Semiconductor and Related Device Manufacturing. These establishments manufacture "computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media. The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees' storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media."[82] According to data from the 2007 U.S. Census, in 2007, there were 954 establishments engaged in this business. Of these, 545 had from 1 to 19 employees; 219 had from 20 to 99 employees; and 190 had 100 or more employees.[83] Based on this data, the Commission concludes that the majority of the businesses engaged in this industry are small.

3. Information Service and Software Providers

Software Publishers. Since 2007 these services have been defined within the broad economic census category of Custom Computer Programming Services; that category is defined as establishments primarily engaged in writing, modifying, testing, and supporting software to meet the needs of a particular customer. The SBA has

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[80] U.S. Census Bureau, American FactFinder, 2010 Economic Census, Industry Series, Industry Statistics by Employment Size, NAICS code 334220 (released June 26, 2012); http://factfinder.census.gov. The number of "establishments" is a less helpful indicator of small business prevalence in this context than would be the number of "firms" or "companies," because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses.

[81] Id. Eighteen establishments had employment of 1,000 or more.

[82] U.S. Census Bureau, 2007 Economic Census, Industry Series: Manufacturing, "Semiconductor and Related Device Manufacturing ," NAICS code 334413.

[83] http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=300&-ds_name=EC0731I1&-_lang=en.

developed a small business size standard for this category, which is annual gross receipts of $25 million or less. According to data from the 2007 U.S. Census, there were 41,571 establishments engaged in this business in 2007. Of these, 40,149 had annual gross receipts of less than $10,000,000. Another 1,422 establishments had gross receipts of $10,000,000 or more. Based on this data, the Commission concludes that the majority of the businesses engaged in this industry are small.

Internet Service Providers. Since 2007, these services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: "This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies."[84] The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees.[85] According to Census Bureau data for 2007, there were 3,188 firms in this category, total, that operated for the entire year.[86] Of this total, 3,144 firms had employment of 999 or fewer employees, and 44 firms had employment of 1000 employees or more.[87] Thus, under this size standard, the majority of firms can be considered small. In addition, according to Census Bureau data for 2007, there were a total of 396 firms in the category Internet Service Providers (broadband) that operated for

[84] U.S. Census Bureau, 2007 NAICS Definitions, "517110 Wired Telecommunications Carriers" (partial definition), available at http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517110&search=2007%20NAICS%20Search (last visited Mar. 27, 2013).

[85] 13 CFR 121.201, NAICS code 517110.

[86] U.S. Census Bureau, 2007 Economic Census, Information: Subject Series – Estab and Firm Size: Table 5, "Employment Size of Firms for the United States: 2007, NAICS Code 517110" (issued Nov. 2010).

the entire year.[88] Of this total, 394 firms had employment of 999 or fewer employees, and two firms had employment of 1000 employees or more.[89] Consequently, the Commission estimates that the majority of these firms are small entities that may be affected by rules adopted pursuant to the R&O.

Internet Publishing and Broadcasting and Web Search Portals. The Commission's action may pertain to interconnected Voice over Internet Protocol (VoIP) services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled services. The Commission has not adopted a size standard for entities that create or provide these types of services or applications. However, the Census Bureau has identified firms that "primarily engaged in (1) publishing and/or broadcasting content on the Internet exclusively or (2) operating Web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format (and known as Web search portals)."[90] The SBA has developed a small business size standard for this category, which is: all such firms having 500 or fewer employees.[91] According to Census Bureau data for 2007, there were 2,705 firms in this category that operated for the entire year.[92] Of this total, 2,682 firms had employment of 499 or fewer employees, and 23 firms had employment of 500 employees or more.[93] Consequently,

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[87] *See id*.
[88] U.S. Census Bureau, 2007 Economic Census, Information: Subject Series – Estab and Firm Size: Table 5, "Employment Size of Firms for the United States: 2007, NAICS Code 5171103" (issued Nov. 2010).
[89] See id.
[90] U.S. Census Bureau, "2007 NAICS Definitions: 519130 Internet Publishing and Broadcasting and Web Search Portals," available at http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=519130&search=2007%20NAICS%20Search (last visited Mar. 27, 2013).
[91] See 13 CFR 121.201, NAICS code 519130.
[92] U.S. Census Bureau, 2007 Economic Census, Information: Subject Series – Estab and Firm Size: Table 5, "Employment Size of Firms for the United States: 2007, NAICS Code 519130" (issued Nov. 2010).
[93] Id.

the Commission estimates that the majority of these firms are small entities that may be affected by rules adopted pursuant to the R&O.

All Other Information Services. The Census Bureau defines this industry as including "establishments primarily engaged in providing other information services (except news syndicates, libraries, archives, Internet publishing and broadcasting, and Web search portals)."[94] The Commission's action pertains to interconnected VoIP services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled services. The SBA has developed a small business size standard for this category; that size standard is $7.0 million or less in average annual receipts.[95] According to Census Bureau data for 2007, there were 367 firms in this category that operated for the entire year.[96] Of these, 334 had annual receipts of under $5.0 million, and an additional 11 firms had receipts of between $5 million and $9,999,999.[97] Consequently, the Commission estimates that the majority of these firms are small entities that may be affected by our action.

All Other Telecommunications. The Census Bureau defines this industry as including "establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more

[94] U.S. Census Bureau, "2007 NAICS Definitions: 519190 All Other Information Services", available at http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=519190&search=2007%20NAICS%20Search (last visited Mar. 27, 2013).
[95] See 13 CFR 121.201, NAICS code 519190.
[96] U.S. Census Bureau, 2007 Economic Census, Information: Subject Series – Estab and Firm Size: Table 5, "Employment Size of Firms for the United States: 2007, NAICS Code 519190" (issued Nov. 2010).

terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Establishments providing Internet services or Voice over Internet Protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry."[98] The SBA has developed a small business size standard for this category; that size standard is $30.0 million or less in average annual receipts.[99] According to Census Bureau data for 2007, there were 2,383 firms in this category that operated for the entire year.[100] Of these, 2,305 establishments had annual receipts of under $10 million and 84 establishments had annual receipts of $10 million or more.[101] Consequently, the Commission estimates that the majority of these firms are small entities that may be affected by our action.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

In the R&O, the Commission amends its part 20 rules to require CMRS providers and certain interconnected text providers to implement "bounce-back" messages when a consumer attempts to text 911 in an area where text-to-911 is unavailable. Specifically, the rules apply to all CMRS providers as well as all providers of interconnected text messaging services that enable consumers to send text messages to and receive text messages from all or substantially all text-capable U.S. telephone numbers, including through the use of applications downloaded or otherwise installed on mobile phones. The

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[97] U.S. Census Bureau, 2007 Economic Census, Information: Subject Series – Estab and Firm Size: Table 4, "Receipts Size of Firms for the United States: 2007, NAICS Code 519190" (issued Nov. 2010).
[98] U.S. Census Bureau, "2007 NAICS Definitions: 517919 All Other Telecommunications," available at http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517919&search=2007%20NAICS%20Search (last visited Mar. 27, 2013).
[99] See 13 CFR 121.201, NAICS code 517919.
[100] U.S. Census Bureau, 2007 Economic Census, Information: Subject Series – Estab and Firm Size: Table 4, "Receipts Size of Firms for the United States: 2007, NAICS Code 517919" (issued Nov. 2010).
[101] See id.

rules also require covered text providers that are delivering texts to PSAPs that are supporting text-to-911 to provide a mechanism for the PSAP to request temporary suspension of text for any reason, including but not limited to network congestion, call-taker overload, PSAP failure, or security breach. In those circumstances, the covered text provider must provide a bounce-back message to any consumer attempting to send a text to 911 in the area covered by the temporary suspension. Covered text providers must also provide a mechanism to allow PSAPs to resume text-to-911 service after such temporary suspension.

The projected compliance requirements resulting from the R&O will apply to all entities in the same manner. The Commission believes that applying the same rules equally to all entities in this context is necessary to alleviate potential consumer confusion from adopting different rules for different providers. As the nation transitions to full text-to-911, it is critical that all consumers, including consumers of services offered by small entities, be made aware of the limitations of text-to-911 in their area. The Commission believes, and the record in this proceeding confirms, that the costs and/or administrative burdens associated with the rules will not unduly burden small entities.

Compliance costs for the new rule will be small, requiring only minor coding and/or server changes. Based on the record, CMRS providers and interconnected text providers have agreed that these changes are technically and financially feasible, with small costs to the covered provider. Additionally, the Commission provides an example of language that covered providers may use to satisfy the bounce-back requirement, further reducing potential administrative, legal and technical costs of compliance.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

The RFA requires an agency to describe any significant, specifically small business alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities."[102]

Based on the Commission's review of the record, the Commission finds that it is practicable for all CMRS providers, including small providers, to implement a bounce-back notification without incurring unduly burdensome costs. The record also reflects that it would not be unduly burdensome for covered text providers to implement bounce-back capability.[103] The record in this proceeding indicates that some service providers, including small or rural providers,[104] as well as covered text providers,[105] already send an automatic bounce-back message to their subscribers when a subscriber attempts to send a text to 911. The R&O recognizes the technical and operational issues that must be addressed before imposing a specific notification requirement, and allows time for implementation of a standardized message.

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[102] 5 U.S.C. 603(c)(1)-(c)(4).
[103] See, e.g., Letter from Rebecca Murphy Thompson, General Counsel, to Marlene H. Dortch, Secretary, Federal Communications Commission, in PS Docket No. 11-153 and PS Docket No. 10-255, March 25, 2013 (CCA Ex Parte); Proximiti Comments at 1.
[104] For example, SouthernLINC.
[105] For example, textPlus and Heywire.

In considering the record received in response to the FNPRM, the Commission examined alternatives to ease the burden on small and rural covered text providers. These alternatives included extending the implementation deadline, or exempting small and rural covered text providers. However, the record in this proceeding indicates that the technical and financial costs for implementing bounce-back messages are small. Many small carriers have argued that they can meet the requirements imposed in this R&O on a faster timeline than the one established in the rules. For example, the Competitive Carriers Association (CCA), which represents many small and rural CMRS providers, states that, "…based on recent business developments cultivated by CCA and its members, most CCA carrier members will now be able to implement a bounce-back message by June 30, 2013."[106] Nonetheless, in order to further ease the burden on small and rural covered providers, the rules the Commission adopts in the R&O extend the deadline proposed in the Further Notice of Proposed Rulemaking from June 30, 2013 to September 30, 2013. Additionally, the rules adopted in the R&O allow for certain limited exemptions in cases where it is technologically infeasible to implement a bounce-back message (e.g., for certain handsets that are incapable of doing so).

Further, the R&O contains a detailed Cost-Benefit Analysis which finds that the life-saving public safety benefits of imposing a bounce-back requirement on covered text providers far outweigh the costs of such a rule.

Finally, in the event that small entities face unique circumstances with respect to these rules, such entities may request waiver relief from the Commission. Accordingly, the Commission finds that it has discharged its duty to consider the burdens imposed on small entities.

[106] CCA Ex Parte at 1.

E. Legal Basis

The legal basis for any action that may be taken pursuant to this R&O is contained in Sections 1, 4(i), 301, 303(b), 303(r), 307, 309, 316, 319, 324, 332, 333, 615a, 615a-1, and 615b of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(i), 301, 303(b), 303(r), 307, 309, 316, 319, 324, 332, 333, 615a, 615a-1, 615b, and 47 U.S.C.. 615c.

F. Federal Rules that May Duplicate, Overlap, or Conflict With the Proposed Rule

None.

List of subjects in 47 CFR Part 20

Communications common carriers, Communications equipment, Radio.

FEDERAL COMMUNICATIONS COMMISSION

Marlene Dortch,
Secretary.

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR Part 20 as follows:

PART 20 – COMMERCIAL MOBILE SERVICES

1. The authority citation for part 20 is revised to read as follows:

   Authority: 47 U.S.C. Sections 151, 154, 160, 201, 251-254, 301, 303, 303(b), 303(r), 307, 309, 316, 319, 324, 332, 333, 615a, 615a-1, 615b, and 615c unless otherwise noted. Section 20.12 is also issued under 47 U.S.C. 1302.

2. Section 20.18 is amended by adding paragraph (n) to read as follows:

§ 20.18 911 Service.

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(n) Text-to-911 Requirements. (1) Covered Text Provider: Notwithstanding any other provisions in this section, for purposes of this paragraph (n) of this section, a "covered text provider" includes all CMRS providers as well as all providers of interconnected text messaging services that enable consumers to send text messages to and receive text messages from all or substantially all text-capable U.S. telephone numbers, including through the use of applications downloaded or otherwise installed on mobile phones.

(2) Automatic Bounce-back Message: an automatic text message delivered to a consumer by a covered text provider in response to the consumer's attempt to send a text message to 911 when the consumer is located in an area where text-to-911 service is unavailable or the covered text provider does not support text-to-911 service generally or in the area where the consumer is located at the time.

(3) No later than September 30, 2013, all covered text providers shall provide an automatic bounce-back message under the following circumstances:

(i) A consumer attempts to send a text message to a Public Safety Answering Point (PSAP) by means of the three-digit short code "911"; and

(ii) The covered text provider cannot deliver the text because the consumer is located in an area where:

(A) Text-to-911 service is unavailable; or

(B) The covered text provider does not support text-to-911 service at the time.

(4)(i) A covered text provider is not required to provide an automatic bounce-back message when:

(A) Transmission of the text message is not controlled by the provider;

(B) A consumer is attempting to text 911, through a text messaging application that requires CMRS service, from a non-service initialized handset;

(C) When the text-to-911 message cannot be delivered to a PSAP due to failure in the PSAP network that has not been reported to the provider; or

(D) A consumer is attempting to text 911 through a device that is incapable of sending texts via three digit short codes, provided the

software for the device cannot be upgraded over the air to allow text-to-911.

(ii) The provider of a preinstalled or downloadable interconnected text application is considered to have "control" over transmission of text messages for purposes of paragraph (n)(4)(i)(A) of this section. However, if a user or a third party modifies or manipulates the application after it is installed or downloaded so that it no longer supports bounce-back messaging, the application provider will be presumed not to have control.

(5) The automatic bounce-back message shall, at a minimum, inform the consumer that text-to-911 service is not available and advise the consumer or texting program user to use another means to contact emergency services.

(6) Covered text providers that support text-to-911 must provide a mechanism to allow PSAPs that accept text-to-911 to request temporary suspension of text-to-911 service for any reason, including, but not limited to, network congestion, call taker overload, PSAP failure, or security breach, and to request resumption of text-to-911 service after such temporary suspension. During any period of suspension of text-to-911 service, the covered text provider must provide an automatic bounce-back message to any consumer attempting to text to 911 in the area subject to the temporary suspension.

(7) A CMRS provider subject to § 20.12 shall provide an automatic bounce-back message to any consumer roaming on its network who sends a text message to 911 when

(i) The consumer is located in an area where text-to-911 service is unavailable, or

(ii) The CMRS provider does not support text-to-911 service at the time.

(8) A software application provider that transmits text messages directly into the SMS network of the consumer's underlying CMRS provider satisfies the obligations of paragraph (n)(3) of this section provided it does not prevent or inhibit delivery of the CMRS provider's automatic bounce-back message to the consumer.

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