

FCC FACT SHEET*
Implementing the Anti-Spoofing Provisions of the RAY BAUM'S Act
Notice of Proposed Rulemaking – WC Docket Nos. 18-335, 11-39

Background: Malicious caller identification (caller ID) spoofing is a scourge on American consumers. Through these schemes, callers manipulate caller ID information to, for example, deceive consumers into giving away valuable personal information so that it can be used in fraudulent activity or sold illegally. In 2018 alone, the FCC received more than 52,000 consumer complaints about caller ID spoofing.

Congress has recognized the billions of dollars of harm to millions of American consumers from fraudulent spoofing activity, some of which is occurring through means other than traditional phone calls made within the United States. Specifically, last year, Congress enacted Section 503 of the RAY BAUM'S Act to amend section 227(e) of the Communications Act to expand and clarify the prohibition on misleading or inaccurate caller identification information. This *Notice of Proposed Rulemaking* proposes to modify the FCC's Truth in Caller ID rules to implement these recent statutory amendments, and in so doing, take another significant step in the Commission's multi-pronged approach to ending malicious caller ID spoofing.

What the Notice of Proposed Rulemaking Would Do:

- Propose changes to the FCC's current Truth in Caller ID rules by largely tracking the language of the RAY BAUM'S Act statutory amendments. These proposed changes include:
 - extending the reach of the Commission's current Truth in Caller ID rules to include covered communications originating from outside the United States to recipients within the United States; and
 - expanding the scope of covered communications services to include text messages and additional voice services.
- Seek comment on new or revised definitions of the following terms for purposes of section 227(e) of the Communications Act: "text message," "text messaging service," "voice service," "caller identification information," and "caller identification service."
- Seek comment on any other changes to the FCC's Truth in Caller ID rules necessary to effectuate Congress' intent in amending section 227(e).

* This document is being released as part of a "permit-but-disclose" proceeding. Any presentations or views on the subject expressed to the Commission or to its staff, including by email, must be filed in WC Docket Nos. 18-335 and 11-39, which may be accessed via the Electronic Comment Filing System (<https://www.fcc.gov/ecfs/>). Before filing, participants should familiarize themselves with the Commission's *ex parte* rules, including the general prohibition on presentations (written and oral) on matters listed on the Sunshine Agenda, which is typically released a week prior to the Commission's meeting. See 47 CFR § 1.1200 *et seq.*

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Implementing Section 503 of RAY BAUM’S Act) WC Docket No. 18-335
)
Rules and Regulation Implementing the Truth in) WC Docket No. 11-39
Caller ID Act of 2009)
)

NOTICE OF PROPOSED RULEMAKING*

Adopted: []

Released: []

Comment Date: [30 days after date of publication in the Federal Register]

Reply Comment Date: [60 days after date of publication in the Federal Register]

By the Commission:

I. INTRODUCTION

1. Nefarious schemes that manipulate caller identification (caller ID) information to deceive consumers about the name and phone number of the party that is calling them facilitate fraudulent and other harmful activities and are a scourge on American consumers. In 2018 alone, we received over 52,000 consumer complaints about caller ID spoofing. To address these harms, we have issued forfeitures totaling more than \$200 million and have proposed another \$37.5 million in fines for violations of our Truth in Caller ID rules over the last year alone;1 have adopted rules allowing voice service providers to block certain clearly unlawful calls before they reach consumers;2 and are aggressively working with industry to develop a system that enables providers to verify caller ID information by “authenticating” calls to prevent illegal spoofed calls from ever reaching consumers3 and

* This document has been circulated for tentative consideration by the Commission at its January 2019 open meeting. The issues referenced in this document and the Commission’s ultimate resolution of those issues remain under consideration and subject to change. This document does not constitute any official action by the Commission. However, the Chairman has determined that, in the interest of promoting the public’s ability to understand the nature and scope of issues under consideration, the public interest would be served by making this document publicly available. The FCC’s ex parte rules apply and presentations are subject to “permit-but-disclose” ex parte rules. See, e.g., 47 C.F.R. §§ 1.1206, 1.1200(a). Participants in this proceeding should familiarize themselves with the Commission’s ex parte rules, including the general prohibition on presentations (written and oral) on matters listed on the Sunshine Agenda, which is typically released a week prior to the Commission’s meeting. See 47 CFR §§ 1.1200(a), 1.1203.

1 See Press Release, FCC, FCC Calls on Network Voice Providers to Join Effort to Combat Illegal Spoofed Scam Robocalls (Nov. 6, 2018), https://docs.fcc.gov/public/attachments/DOC-354942A1.pdf; 47 CFR §§ 64.1600, 64.1604 (collectively Truth in Caller ID rules).

2 Advanced Methods to Target and Eliminate Unlawful Robocalls, CG Docket No. 17-59, Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd 9706, 9706, para. 1 (2017).

3 Advanced Methods to Target and Eliminate Unlawful Robocalls, Notice of Proposed Rulemaking and Notice of Inquiry, 32 FCC Rcd 2306, 2315 (2017) (seeking comment on whether to permit providers to block unauthenticated calls once SHAKEN/STIR is widely deployed); see also Call Authentication Trust Anchor, WC Docket 17-97,

to “traceback” illegal spoofed calls to their original source.⁴ Notwithstanding these measures, unlawful spoofing persists.

2. Recognizing the billions of dollars of harm to millions of American consumers from fraudulent spoofing activity, some of which is occurring through means other than traditional phone calls made within the United States, last year, as part of the RAY BAUM’S Act, Congress amended section 227(e) of the Communications Act to (1) reach spoofing activities directed at consumers in the United States from actors outside the United States; and (2) extend its reach to caller ID spoofing using alternative voice and text messaging services.⁵ Today, we propose rules to implement these recently adopted amendments⁶ which expand and clarify the Act’s prohibition on the use of misleading and inaccurate caller ID information. In doing so, we take another significant step in our multi-pronged approach to ending malicious caller ID spoofing.

3. Specifically, in this Notice of Proposed Rulemaking (Notice), we propose and seek comment on modifications to our current Truth in Caller ID rules that largely track the language of the recent statutory amendments. We also invite comment on what other changes to our Truth in Caller ID rules we can make to better prevent inaccurate or misleading caller ID information from harming consumers.

II. BACKGROUND

4. In enacting the Truth in Caller ID Act of 2009, Congress amended section 227 of the Communications Act to create a new subsection (e) focused on prohibiting the use of misleading and inaccurate caller ID information for harmful purposes.⁷ In so doing, Congress recognized that there are

Notice of Inquiry, 32 FCC Rcd 5988 (WCB 2017) (seeking comment on methods to authenticate calls to protect against illegally spoofed robocalls). *See also e.g.*, Letter from Ajit V. Pai, Chairman, FCC, to John Donovan, CEO, AT&T Communications, at 1 (Nov. 5, 2018), <https://docs.fcc.gov/public/attachments/DOC-354933A2.pdf>.

⁴ *See* Letter from Rosemary C. Harold, Chief, FCC Enforcement Bureau, et al., to Jonathan Spalter, President & CEO, USTelecom - The Broadband Association (Nov. 6, 2018) at 1 (detailing attempts by USTelecom industry group to “traceback” illegal spoofed robocalls to their original source), <https://docs.fcc.gov/public/attachments/DOC-354942A2.pdf>. The Enforcement Bureau simultaneously issued letters to eight discrete voice providers—382 Communications, Global Voicecom, IP Link Telecom, R Squared Telecom, Sonic Systems dba. Talkie Communications, Thing, TouchTone Communications, and XCast Labs—urging them to cooperate with USTelecom’s effort to trace back illegal spoofed robocalls. *See, e.g.*, Letter from Rosemary C. Harold, Chief, FCC Enforcement Bureau, et al., to Daniel Koch, CEO, 382 Communications (Nov. 6, 2018), <https://docs.fcc.gov/public/attachments/DOC-354942A2.pdf>.

⁵ *See* Consolidated Appropriations Act, 2018, Pub. L. No. 115-141, Div. P, Title V, § 503, 132 Stat. 348, 1091-94 (2018) (codified as amended in 47 U.S.C. § 227(e)) (RAY BAUM’S Act); *see also Spoofing Prevention Act of 2017, Report of the S. Comm. on Commerce, Sci., & Transp. on S. 134*, S. Rep. No. 115-91, at 2-3 (2017) (2017 Senate Report), <https://congress.gov/115/crpt/srpt91/CRPT-115srpt91.pdf> (explaining proposed changes to 47 U.S.C. § 227(e) that were subsequently and largely included in section 503 of the RAY BAUM’S Act; acknowledging increased spoofing fraud coming from overseas calls and text messages; and citing a study estimating spoofing fraud affecting 17.6 million Americans costing \$8.6 billion over a single 12-month period).

⁶ *See* RAY BAUM’S Act § 503, 132 Stat. at 1091-94. The amendments to section 227(e) of the Communications Act contained in section 503(a) of RAY BAUM’S Act will become effective six months after the date that the Commission prescribes implementing regulations. *See* RAY BAUM’S Act § 503(a)(5)(B), 132 Stat. at 1092. While these amendments have not yet been codified, for the sake of convenience, we refer to the statutory changes herein as “section 227(e) as amended,” or “recent amendments to section 227(e).”

⁷ *See generally* Truth in Caller ID Act of 2009, Pub. L. No. 111-331, 124 Stat. 3572, 3572 (2010) (Truth in Caller ID Act).

some legitimate reasons why calling parties may wish to alter their caller ID information.⁸ For example, domestic violence shelters sometimes alter caller ID information to ensure the safety of their residents.⁹ However, bad actors can easily abuse altered caller ID information to mislead and defraud consumers.¹⁰ Therefore, rather than prohibiting all caller ID spoofing, Congress made it “unlawful for any person within the United States, in connection with any telecommunications service or IP-enabled voice service, to cause any caller identification service to knowingly transmit misleading or inaccurate caller identification information with the intent to defraud, cause harm, or wrongfully obtain anything of value. . . .”¹¹

5. Congress explicitly exempted authorized activity by law enforcement agencies and court orders that specifically authorize the use of caller ID manipulation from the Truth in Caller ID Act’s prohibition on caller ID spoofing.¹² Congress also authorized the Commission to adopt additional exemptions to the Act’s prohibition.¹³ Congress further provided for additional civil penalties for violations of the Truth in Caller ID Act, which differ from the general penalty provisions set forth in section 503 of the Communications Act; established a two-year statute of limitations for providing notice of alleged violations; allowed for state enforcement of the Truth in Caller ID Act in federal District Court;¹⁴ and provided for criminal fines for willful and knowing violations of the prohibition on caller ID spoofing.¹⁵ Recognizing the pace of technological changes, Congress directed the Commission to “report to Congress whether additional legislation is necessary to prohibit the provision of inaccurate caller identification information in technologies that are successor or replacement technologies to telecommunications service or IP-enabled voice service.”¹⁶

6. The Commission adopted implementing rules in 2011 that track the language of the Truth in Caller ID Act with a few modifications to provide clarity or eliminate redundancy.¹⁷ Most significantly, in describing the scope of the prohibited practices, the Commission used the term “Interconnected VoIP Services” in place of the Truth in Caller ID Act’s use of the term “IP-enabled voice service.”¹⁸ The Commission did so because the Act specifies that “IP-enabled voice service” has the “meaning given that term by section 9.3 of the Commission’s regulations.”¹⁹ Section 9.3 of the

⁸ See *Truth in Caller ID Act, Report of the S. Comm. on Commerce, Sci., & Transp. on S. 30*, S. Rep. No. 111-96, at 1–2 (2009) (2009 Senate Commerce Committee Report), <https://www.congress.gov/111/crpt/srpt96/CRPT-111srpt96.pdf>.

⁹ 2009 Senate Commerce Committee Report at 2. See also *Truth in Caller ID Act of 2010, Report of the H. Comm. on Energy & Commerce*, H.R. Rep. No. 111-461, at 3 (2010), <https://www.congress.gov/111/crpt/hrpt461/CRPT-111hrpt461.pdf>.

¹⁰ See 2009 Senate Commerce Committee Report at 1-2.

¹¹ 47 U.S.C. § 227(e)(1).

¹² *Id.* § 227(e)(3)(B)(ii); see also § 227(e)(7) (specifying that the subsection “does not prohibit any lawfully authorized investigative, protective, or intelligence activity of a law enforcement agency of the United States, a State, or a political subdivision of a State, or of an intelligence agency of the United States”).

¹³ *Id.* § 227(e)(3)(B)(i).

¹⁴ *Id.* § 227(e)(5)(A)(i), (e)(5)(A)(iv), and (e)(6).

¹⁵ *Id.* § 227(e)(5)(B).

¹⁶ *Id.* § 227(e)(4).

¹⁷ *Rules and Regulations Implementing the Truth in Caller ID Act of 2009*, Report and Order, 26 FCC Rcd 9114, 9119, paras. 12, 14-16 (2011) (2011 Truth in Caller ID Order).

¹⁸ 2011 Truth in Caller ID Order, 26 FCC Rcd at 9120 n.37; 47 CFR § 64.1600(c), (d), (h).

¹⁹ *Id.*; 47 U.S.C. § 227(e)(8)(C).

Commission's rules, however, defines "interconnected Voice over Internet Protocol (VoIP) service," not "IP-enabled voice service."²⁰ The Commission, therefore, found that the Truth in Caller ID Act rules should use the term "interconnected VoIP services" rather than "IP-enabled voice service" to be consistent with the direction in the Truth in Caller ID Act and the Commission's existing rules.²¹

7. In addition, while the Act made it unlawful, subject to certain exemptions, for "any person within the United States, in connection with any telecommunications service or IP-enabled voice service, to cause any caller identification service to knowingly transmit misleading or inaccurate caller identification information with the intent to defraud, cause harm, or wrongfully obtain anything of value," the rule adopted by the Commission does not include the phrase "in connection with any telecommunications service or IP-enabled voice service."²² In adopting that rule, the Commission reasoned that because the terms "caller identification service" and "caller identification information" were included in the rule and encompassed "telecommunications service or interconnected VoIP service,"²³ it was not necessary to specify that those services are covered in the rule.²⁴

8. As directed by the Truth in Caller ID Act, the then-Chairman of the Commission also submitted a report to Congress on "Caller Identification Information in Successor or Replacement Technologies."²⁵ That report identified areas where the statute and the Commission's implementing rules fell short of protecting consumers from caller ID spoofing with the intent to defraud, cause harm, or wrongfully obtain anything of value.²⁶ It also discussed the possibility of spoofing in connection with newer communications services such as text messaging and social media applications.²⁷ The *2011 Commission Report* concluded by recommending that Congress consider: (1) expanding the scope of the Act to include a prohibition on caller ID spoofing directed at people in the United States by persons outside the United States; (2) providing guidance on whether it intended additional IP-enabled voice services, other than interconnected VoIP, to fall within the scope of the Act; (3) giving the Commission appropriate authority to regulate spoofing services offered by third parties; and (4) modifying the Act so that it explicitly covers text messaging.²⁸

9. In section 503 of the RAY BAUM'S Act, Congress amended section 227(e) of the Act and adopted three of the four recommendations made in the *2011 Commission Report*. Consistent with the *2011 Commission Report's* first recommendation, the RAY BAUM'S Act expanded the reach of covered entities from "any person within the United States" to include "any person outside the United

²⁰ 47 CFR § 9.3; see also *2011 Truth in Caller ID Order*, 26 FCC Rcd at 9120 n.37.

²¹ See *2011 Truth in Caller ID Order*, 26 FCC Rcd at 9120 n.37, 9125-26, paras. 27-28; *Caller Identification Information Successor or Replacement Technologies*, Report, 26 FCC Rcd 8643, 8645 n.4 (2011), https://docs.fcc.gov/public/attachments/DA-11-1089A1_Rcd.pdf (*2011 Commission Report*). The Commission defines interconnected VoIP as a service that: "(1) Enables real-time, two-way voice communication; (2) Requires a broadband connection from the user's location; (3) Requires Internet protocol-compatible customer premises equipment (CPE); and (4) Permits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network." 47 CFR § 9.3.

²² Compare 47 U.S.C. § 227(3)(1) with 47 CFR § 64.1604(a).

²³ 47 U.S.C. § 227(e)(8)(B).

²⁴ *2011 Truth in Caller ID Order*, 26 FCC Rcd at 9120, para. 15. For clarity, the Commission also reordered the language in the prohibition, and made explicit that the prohibition covered display as well as transmission of misleading or inaccurate caller ID information. *Id.* at paras. 17-19, 22.

²⁵ *2011 Commission Report*, 26 FCC Rcd 8643.

²⁶ *Id.* at 8645, para. 2.

²⁷ *Id.*

²⁸ *Id.*

States if the recipient is within the United States.”²⁹ It also addressed the *2011 Commission Report’s* second and fourth recommendations, by changing the scope of covered communications from any “telecommunications service or IP-enabled voice service” to a “voice service or a text message sent using a text messaging service.”³⁰ And the RAY BAUM’S Act directed the Commission to prescribe rules implementing these amendments to section 227(e).³¹

III. IMPLEMENTING NEW STATUTORY SPOOFING PREVENTION AUTHORITY

10. As the Commission did when it initially adopted the Truth in Caller ID Act rules, in proposing rules to implement the recent amendments to section 227(e) of the Act, we largely track the relevant statutory language. We seek comment on our proposals to implement the new statutory language in our rules, generally, and with regard to each specific issue addressed below.

A. Communications Originating Outside the United States

11. First, consistent with the recent amendments to section 227(e), we propose to extend the reach of our caller ID spoofing rules to include communications originating from outside the United States to recipients within the United States.³² We seek comment on this proposal. The Truth in Caller ID Act was limited to calls made within the United States; however, as the *2011 Commission Report* to Congress explained, caller ID spoofing “directed by people and entities outside the United States can cause great harm.”³³ Six years later, the 2017 Senate Report recognized an increase in fraud committed through caller ID spoofing originating from outside the United States.³⁴ Incorporating this statutory change into our Truth in Caller ID rules will allow us to bring enforcement actions that allege both statutory and rule violations against bad actors who seek out victims in this country, regardless of where the communications originate.

12. We believe that the statutory language is clear and that mirroring that language will avoid creating ambiguity from any differences between the text of the statute and of our rules.³⁵ Do commenters agree? Is there other language we should consider adopting to implement this provision of the statute? Are there nuances to the statutory language that we should account for? If so, what are they and how should we incorporate such nuances into our rules?

B. Expanding Scope of Covered Communications

13. Also consistent with section 227(e) as amended, we propose to amend our rules to incorporate the phrase “in connection with any voice service or text messaging service” into the prohibition on causing “any caller identification service to transmit or display misleading or inaccurate

²⁹ RAY BAUM’S Act § 503(a)(1), 132 Stat. at 1091.

³⁰ *Id.* at 1091-92.

³¹ *Id.* at 1092.

³² See RAY BAUM’S Act § 503(a)(1), 132 Stat. at 1091 (extending applicability of section 227(e) to calls from “any person outside the United States if the recipient is within the United States, in connection with any voice service or text messaging service”).

³³ See *2011 Commission Report*, 26 FCC Rcd at 8655, para. 25; see also *id.* at 8663, para. 47 & n.92.

³⁴ See *id.* (discussing that the Truth in Caller ID Act did not encompass spoofing coming in to the United States from outside the United States); *2017 Senate Report* at 2-3.

³⁵ *2017 Senate Report* at 2.

³⁵ For example, we interpret the term “person” in amended section 227(e) to have the same meaning as the Commission determined “person” to have in the *2011 Truth in Caller ID Order*. See *2011 Truth in Caller ID Order*, 26 FCC Rcd at 9120, para. 16 (clarifying that “person” applies to “both natural persons and other entities”).

caller identification information.”³⁶ We seek comment on this proposal.

14. The current prohibition on caller ID spoofing in section 64.1604(a) of our rules does not specify that spoofing in connection with “any telecommunications service or interconnected VoIP service” is covered by the rule.³⁷ However, because we are now proposing to include a wider universe of communications services within the prohibition on caller ID spoofing, we believe that explicitly identifying the services at issue better tracks the language of the statute³⁸ and provides more direct notice to covered entities. Do commenters agree with this approach? Are there alternatives that we should consider? Does the phrase “in connection with” that precedes the phrase “any voice or text messaging service”³⁹ warrant clarification or interpretation in our revised rules?

C. Definitions

15. We also propose to adopt definitions of “text message,” “text messaging service,” and “voice service” and to revise the definitions of “caller identification information,” and “caller identification service” to implement Congress’ intent to expand the scope of the prohibition on harmful caller ID spoofing. We seek comment on each proposed new or revised definition and invite commenters to propose different language to better reflect Congress’ intent with respect to the expanded scope of covered communications. We propose to include these definitions in the definitions section of subpart P to our part 64 rules.⁴⁰ We seek comment on this proposal and invite commenters to identify any unidentified consequences of that placement.

16. *Text Message.* Section 227(e) as amended defines the term “text message” as a “message consisting of text, images, sounds, or other information that is transmitted to or from a device that is identified as the receiving or transmitting device by means of a 10-digit telephone number or N11 service code.”⁴¹ Congress further clarified that the term explicitly includes “a short message service (SMS) message and a multimedia message service (MMS) message”⁴² but excludes “a real-time, two-way voice or video communication” or “a message sent over an IP-enabled messaging service to another user of the same messaging service, except for [an SMS or MMS message].”⁴³ We propose to adopt a definition of “text message” that mirrors this statutory language. We seek comment on this proposal and on each component of this definition.

17. Is our proposed definition sufficiently inclusive to capture all types of text messages that could be used for prohibited spoofing activity (but excluding messages that fall within the express statutory exclusions)? The definition would encompass messages that include “text, images, sounds, or other information.” Are commenters aware of examples of “information” that is not text, images or sounds that could comprise the content of a covered text message today, or did Congress include the phrase “other information” out of an abundance of caution to be as inclusive as possible given rapid changes in technology? We seek comment on any examples that may now, or in the future, exist and whether such examples should be identified and included in our rules to clarify the term “other information.”

18. The definition of text message in both section 227(e) as amended and in our proposed

³⁶ RAY BAUM’S Act § 503(a)(1), 132 Stat. at 1091.

³⁷ *2011 Truth in Caller ID Order*, 26 FCC Rcd at 9120, paras. 14-15.

³⁸ See RAY BAUM’S Act § 503(a)(1), 132 Stat. at 1091.

³⁹ See *id.*

⁴⁰ 47 CFR § 64.1600; see also *infra* Appx. A.

⁴¹ RAY BAUM’S Act § 503(a)(2)(C), 132 Stat. at 1091-92.

⁴² *Id.* at 1092.

⁴³ *Id.*

rules specifically include SMS and MMS as types of covered text messages. In amending section 227(e), Congress did not define SMS or MMS, nor are there definitions of SMS or MMS contained in the Commission rules. Should we include definitions of SMS and MMS in our Truth in Caller ID rules? In our recent *Wireless Messaging Service Declaratory Ruling*, we described SMS as a “wireless messaging service” that “enables users to send and receive short text messages, typically 160 characters or fewer, to or from mobile phones and can support a host of applications.”⁴⁴ At the same time, we recognized that MMS is “an extension of the SMS protocol and can deliver a variety of media, and enables users to send pictures, videos, and attachments over wireless messaging channels.”⁴⁵ We believe that our previous description of SMS and MMS are consistent with Congress’ use of the terms in amending section 227(e). Do commenters agree? If not, why not? Should we adopt specific definitions or are the terms sufficiently well understood that we need not adopt definitions? If we do adopt definitions for SMS and MMS, should we use the descriptions of SMS and MMS set forth in the *Wireless Messaging Service Declaratory Ruling* as the definitions? Are there refinements we should make to those descriptions?

19. Are there other types of text messages besides SMS and MMS that we should explicitly include in the definition of text message? For instance, Rich Communication Services (RCS), an IP-based asynchronous messaging protocol, is the next-generation SMS.⁴⁶ Should we explicitly include RCS in our definition of “text message”? If so, should we include a definition of RCS in our rules, and what should that definition be?

20. Like section 227(e) as amended, our proposed definition of text message is limited to messages that are “transmitted to or from a device that is identified as the receiving or transmitting device by means of a 10-digit telephone number or N11 service code.” The Commission has previously described N11 services as “abbreviated dialing arrangements that allow telephone users to connect with a particular node in the network by dialing only three digits.”⁴⁷ We believe that our previous description of N11 service codes is consistent with Congress’ use of the term in amending section 227(e). Do commenters agree? If not, why not? Should we adopt a definition of N11 service code? If so, should we codify our previous description? Are there refinements we should make to that description?

21. Section 227(e) as amended excludes from the definition of “text message” “real-time, two-way voice or video communications.”⁴⁸ By proposing to explicitly exclude “real-time, two-way voice or video communications” in our proposed definition of “text message,” we track the statutory definition.⁴⁹ Should we clarify in our rules what “real-time, two-way voice or video communications”⁵⁰ means for the purpose of being excluded from the term “text message”? We invite commenters to offer specific clarifying language. We believe that “real-time, two-way voice” communications that are transmitted by means of a 10-digit telephone number or N11 service code are excluded from the definition of text message because they are included in the definition of “voice service.”⁵¹ We seek

⁴⁴ *Petitions for Declaratory Ruling Status of Wireless Messaging Service*, WT Docket No. 08-7, Declaratory Ruling, FCC 18-178, 4, para. 8 (Dec. 2018) (*Wireless Messaging Service Declaratory Ruling*).

⁴⁵ *Id.*

⁴⁶ See *Wireless Messaging Service Declaratory Ruling* at n. 28; see also RCS and RCS Business Messaging, Global System for Mobile Communications Association (GSMA), <https://www.gsma.com/futurenetworks/technology/enriched-calling-with-rs/>.

⁴⁷ *Petition by the United States Department of Transportation for Assignment of an Abbreviated Dialing Code (N11) to Access Intelligent Transportation System (ITS) Services Nationwide*, Third Report and Order and Order on Reconsideration, 15 FCC Rcd 16753, 16755, para. 1 (2000).

⁴⁸ See *id.*

⁴⁹ See *id.*; see also *infra* Appx. A (proposed section 64.1600).

⁵⁰ RAY BAUM’S Act § 503(a)(2)(C), 132 Stat. at 1092.

⁵¹ See *infra* para. 30.

comment on that understanding. We also seek comment on whether there are real-time, two-way video communications that are transmitted by means of a 10-digit telephone number or N11 service code that are excluded from the definition of text message and not encompassed by the definition of voice service.

22. Section 227(e) as amended also excludes from the definition of “text message” “a message sent over an IP-enabled messaging service to another user of the same messaging service.”⁵² By tracking the statutory definition of “text message,” our proposed definition incorporates that exclusion.⁵³ We believe we should interpret this exclusion to include non-MMS or SMS messages sent using IP-enabled messaging services such as iMessage, Google Hangouts, WhatsApp, and Skype. For instance, a message sent from one computer to another computer using WhatsApp, or the “chat” function on Google Hangouts would appear to be an IP-enabled messaging service between users of the same messaging service under the second exclusion in the statutory definition of “Text Message.” Likewise, text communications between or among two or more Skype users or iMessages between or among iPhone users would also not appear to be covered. Do commenters agree? If not, why not? What other IP-messaging services should we recognize as falling within the scope of this exclusion? Should we include specific examples in our rules? Will the scope of this exclusion, as we propose to interpret it, allow for adequate enforcement against misleading or inaccurate text messages or provide a safe harbor for bad actors to exploit?

23. We also seek comment on whether there are other messages consisting of forms of text, visual, audio, or other information transfer using telephone numbers or N11 codes that we should exclude from the definition of “text message” beyond those specifically excluded in section 227(e) as amended.⁵⁴ We invite commenters to identify any such text message types, and to explain why we should exclude them. Commenters arguing for specific exclusions should explain why, in their view, adding exclusions would be consistent with congressional intent.

24. We do not believe that the new statutory definition of “text message” or any of the other recent amendments to section 227(e) regarding text messages affects the Commission’s finding that text messages are “calls” for purposes of section 227(b)⁵⁵ which, among other things, places limits on calls made using any automatic telephone dialing system or artificial or prerecorded voice. Congress placed the new definition of “text message” in section 227(e) rather than in section 227(a),⁵⁶ which contains definitions generally applicable throughout section 227. We therefore see nothing in section 227(e) as amended to suggest that Congress intended to disturb the Commission’s long-standing treatment of text messages under section 227(b), which has been in place since 2003.⁵⁷ We seek comment on this view.

25. *Text Messaging Service.* Section 227(e) as amended defines a “text messaging service” as “a service that enables the transmission or receipt of a text message, including a service provided as part of or in connection with a voice service.”⁵⁸ We propose to adopt this same definition as part of our Truth in Caller ID rules and seek comment on this proposal. Maintaining consistency with the statutory definition of text messaging service for unlawful spoofing prevention is particularly important given that

⁵² See RAY BAUM’S Act § 503(a)(2)(C), 132 Stat. at 1091-92.

⁵³ See *id.*; see also *infra* Appx. A (proposed section 64.1600).

⁵⁴ See RAY BAUM’S Act § 503(a)(2)(C), 132 Stat. at 1091-92.

⁵⁵ 47 U.S.C. § 227(b).

⁵⁶ *Id.* § 227(a).

⁵⁷ See, e.g., *Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991*, CG Docket No. 02-278, Report and Order, 18 FCC Rcd 14014, 14115, para. 165 (2003) (section 227(b) applies to “both voice calls and text calls to wireless numbers including, for example, short message service (SMS) calls, provided the call is made to a telephone number assigned to such service”).

⁵⁸ RAY BAUM’S Act § 503(a)(2)(C), 132 Stat. at 1091-92.

it is only text messages “sent using a text messaging service” that Congress includes within the scope of section 227(e) as amended. Do commenters agree? If not, why? We also seek comment on the meaning of “as part of or in connection with a voice service.” Should we include clarifying language in our rules for an avoidance of doubt? If so, what language do commenters suggest?

26. In the *Wireless Messaging Service Declaratory Ruling*, we found that SMS and MMS wireless messaging services fall within the statutory definition of “information service” rather than “telecommunications service.”⁵⁹ We do not believe this classification impacts our proposals in this Notice to implement statutory amendments to section 227(e). Do commenters agree? If not, why?

27. *Voice Service*. Section 227(e) as amended defines “voice service” as “any service that is interconnected with the public switched telephone network and that furnishes voice communications to an end user using resources from the North American Numbering Plan or any successor to the North American Numbering Plan adopted by the Commission under section 251(e)(1). . . .”⁶⁰ It also explicitly “includes” “transmissions from a telephone facsimile machine, computer, or other device to a telephone facsimile machine.”⁶¹ We propose to adopt the identical definition of “voice service” for purposes of our Truth in Caller ID rules. We seek comment on this proposal. Mirroring the definition contained in section 227(e) as amended will avoid potential confusion that might otherwise occur if our rules contain different wording. Do commenters agree? If not, why not and what alternative definition(s) should we consider?

28. Our existing rules cover calls made using “telecommunications service” or “interconnected VoIP service.”⁶² We propose to interpret the term “voice service” to include and be more expansive than “telecommunications service” and “interconnected VoIP service” as currently defined.⁶³ Do commenters agree? What are examples of specific voice communications captured by the term “voice service” but not by the terms “telecommunications service” or “interconnected VoIP service”?

29. Separately, we seek comment on whether we should explicitly include the terms “telecommunications service” and “interconnected VoIP service” within the definition of “voice service.” Would that provide useful clarity to stakeholders? Are there other services we should specifically include within the definition of “voice service”?

30. We also seek comment on whether we should explicitly include within the definition of voice service, “real-time, two-way voice communications” that are transmitted by means of a 10-digit telephone number or N11 service code? Such communications are explicitly excluded from the definition of “text message” in section 227(e) as amended.⁶⁴ We think the best way to understand that exclusion is to find that those types of voice communications are encompassed by the definition of “voice service.” Do commenters agree? Should we modify our proposed definition of “voice service” to explicitly incorporate that understanding? We invite commenters to suggest specific modifications.

31. Relatedly, section 227(e) as amended specifies that communications falling within the “voice service” definition must be “interconnected” with the public switched telephone network

⁵⁹ *Wireless Messaging Service Declaratory Ruling* at 10, para. 23.

⁶⁰ RAY BAUM’S Act § 503(a)(2)(C), 132 Stat. at 1092 (definition of “voice service”).

⁶¹ *Id.*

⁶² 47 CFR § 64.1600(c), (d).

⁶³ See generally RAY BAUM’S Act § 503(a)(2)(B), 132 Stat. at 1091 (striking language in 47 U.S.C. §227(e)(8)); 47 U.S.C. § 227(e)(1). See also 2017 Senate Report at 4 (noting that amendments “expand the categories of services in the United States, namely text messaging and other voice services, as defined by the bill, subject to spoofing prohibitions”).

⁶⁴ RAY BAUM’S Act § 503(a)(2)(C), 132 Stat. at 1092; see also *supra* para. 16.

(PSTN).⁶⁵ Congress neither defined the term “interconnected” for purposes of section 227(e) of the Act nor referred to other statutory provisions or Commission rules where the word “interconnected” is used as part of the definition of specific categories of communications.⁶⁶ For instance, the Act defines “interconnected VoIP service”⁶⁷ and “interconnected service”⁶⁸ in different sections of the statute to identify specific but different services that are covered by such definitions. Similarly, our rules contain definitions for each of these terms.⁶⁹ Yet Congress uses only the word “interconnected” in defining the scope of voice services covered under amended section 227(e).⁷⁰ Indeed, in amending section 227(e), Congress specifically *removed* from the definitions of covered voice services the reference to the definition of “interconnected VoIP service” as defined in section 9.3 of the Commission’s rules.⁷¹ Consequently, we believe Congress no longer intends to limit the scope of IP-enabled voice services implicated by the section 227(e) prohibition to those meeting the definition of “interconnected VoIP service.” We invite comment on this proposed conclusion.

32. In light of this apparent intent by Congress to broaden the definition of voice services subject to the section 227(e) prohibition, should we interpret the term “interconnected” as used in the definition of “voice service” to include any service that enables voice communications either to the PSTN or from the PSTN, regardless of whether it enables both inbound and outbound communications within the same service. For example, should we include within the definition of “voice services” any “one-way” VoIP service that connects with the PSTN and uses telephone numbers that separately enable users to make outbound calls to landline or mobile telephones or to receive inbound calls from landline or mobile telephones?⁷² Such services are not “interconnected VoIP” services because they do not permit users to receive calls originating on the PSTN *and* terminate calls to the PSTN.⁷³ Should we find that section 227(e) as amended, and our proposed implementing rules reach these “one-way” IP-based voice services and any similar IP-based or other technology-based calling capability, whether offered by a service provider, or self-provisioned, as long as they connect with the PSTN and use NANP resources?

33. The *2011 Commission Report* recognized that real-time two-way voice communications between and among closed user groups do not give rise to the same degree of caller ID spoofing concern as “interconnected VoIP services.”⁷⁴ Because these types of services have no connection to the PSTN, we do not believe Congress intends to reach these types of voice communications, nor do we believe that

⁶⁵ See *supra* para. 27.

⁶⁶ See, e.g., 47 U.S.C. § 153(25) (defining “Interconnected VoIP service”); *id.* at § 332(d)(2) (defining “interconnected service”); see also 47 CFR § 9.3 (defining “Interconnected VoIP service”); 47 CFR § 20.3 (defining “Interconnected service”).

⁶⁷ 47 U.S.C. § 153(25).

⁶⁸ *Id.* § 332(d)(2).

⁶⁹ See 47 CFR § 9.3 (defining “Interconnected VoIP service”); 47 CFR § 20.3 (defining “Interconnected service”).

⁷⁰ RAY BAUM’S Act § 503(a)(2)(C), 132 Stat. at 1092 (definition of “voice service”).

⁷¹ See *id.* at 1091-92.

⁷² See *Rural Call Completion*, WC Docket No. 13-39, Report and Order and Further Notice of Proposed Rulemaking, 28 FCC Rcd 16154, 16166-67, paras. 21-23 (2013) (describing one-way VoIP services).

⁷³ 47 CFR § 9.3.

⁷⁴ See *2011 Commission Report*, 26 FCC Rcd at 8655-56 (describing Internet-based corporate VoIP networks that enable enterprise customers to communicate with one another through sophisticated end-to-end authentication techniques). One notable example of real-time voice communications that do not give rise to such caller ID spoofing concerns is voice communications between players in online games such as Fortnite. See, e.g., Erik Kain, How To Use Voice Chat In 'Fortnite' On Mobile Devices, *Forbes* (Mar. 16, 2018, 12:32pm), <https://www.forbes.com/sites/erikkain/2018/03/16/how-to-use-voice-chat-in-fortnite-on-mobile-devices/#58ccc2152826>.

they fall within the definition of “voice services.” We seek comment on this view, and whether we should identify and include specific examples of voice communications that do not fall within the definition of “voice service” in our rules.

34. We seek comment on whether we should interpret “interconnected” to include both direct and indirect interconnection to the PSTN to account for different methods of interconnection. Are there particular types of voice communications that are susceptible to caller ID spoofing that would not be captured by the definition of “voice services” if we fail to interpret “interconnected” to include voice services that are indirectly connected to the PSTN? What are those services? Are there reasons not to interpret “interconnected” to include both direct and indirect connections to the PSTN?

35. Are there other consequences that flow from our proposed interpretation of “interconnected” to the PSTN, including any potential consequences resulting from our use of the term “voice service provider” in the context of section 227(b), that we should consider? If we interpret “interconnected” as we propose to do, should we expressly include a definition of that interpretation within the definition of “voice service” in our rules to provide more specificity about that interpretation? If so, we invite suggestions on how to proceed.

36. Finally, the definition of “voice service” in section 227(e) as amended specifically “includes” transmissions to a “telephone facsimile machine” (fax machine) from a computer, fax machine, or other device.⁷⁵ We propose to incorporate this additional specification into our rules. We seek comment on this proposal.

37. *Caller Identification Information and Caller Identification Service.* Consistent with amended section 227(e)(8),⁷⁶ we also propose to amend the definition of “caller identification information” and “caller identification service” in our rules to mirror the amended statutory text.⁷⁷ Specifically, we propose to substitute “voice services” and “text message sent using a text messaging service” for “telecommunications services” and “interconnected VoIP services,” respectively, currently in each of these definitions.⁷⁸ We seek comment on this proposal.

38. More generally, with respect to all of our proposals to implement new or revised definitions of covered communications within subpart P of part 64 of our rules, we seek comment on whether there are any other uses of these or related terms within this same subpart, or in other parts of our rules, that overlap, are changed or otherwise affected by the definitions we propose and are not specifically addressed above. If so, we invite commenters to identify these other rules and explain how such rules are impacted.

D. Other Potential Changes to the Rules

39. In addition to the proposals we make above to implement the statutory amendments to section 227(e) adopted in the RAY BAUM’S Act, are there other revisions we should make to our Truth in Caller ID rules to effectuate Congress’ intent? For example, are there any other necessary limitations, exceptions, extensions, or clarifications to the proposed rules or our existing rules that we have not addressed that are necessary to implement the amendments to section 227(e)? If so, we seek comment on any such further changes to our rules and why they are necessary. Finally, we do not expect our proposed rules or any alternative rules we may adopt in response to this Notice to impact small businesses. Do commenters agree?

⁷⁵ See RAY BAUM’S Act § 503(a)(2)(C), 132 Stat. at 1092.

⁷⁶ See *id.* at 1091.

⁷⁷ See *infra* Appx. A (proposed sections 64.1600(c), (d)).

⁷⁸ See *id.*

IV. PROCEDURAL MATTERS

40. *Comment Filing Procedures.* Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document in Dockets WC 18-335 and WC 11-39. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS).⁷⁹

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <http://apps.fcc.gov/ecfs/>
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.
- People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an email to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

41. *Ex Parte Presentations.* This proceeding shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.⁸⁰ Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by Rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic

⁷⁹ See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24121 (1998).

⁸⁰ 47 CFR §§ 1.1200 *et seq.*

comment filing system available for that proceeding, and must be filed in their native format (*e.g.*, .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

42. *Regulatory Flexibility Analysis.* Pursuant to the Regulatory Flexibility Act (RFA),⁸¹ the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and actions considered in this Notice of Proposed Rulemaking. The text of the IRFA is set forth in Appendix B. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comment on the Notice of Proposed Rulemaking. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this Notice of Proposed Rulemaking, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).⁸²

43. *Paperwork Reduction Act.* This document does not propose new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. In addition, therefore, it does not contain any new or modified information collection burdens for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198.⁸³

44. *Contact Person.* For further information about this proceeding, please contact E. Alex Espinoza, FCC Wireline Competition Bureau, Competition Policy Division, Room 5-C211, 445 12th Street, S.W., Washington, D.C. 20554, at (202) 418-0849, or alex.espinoza@fcc.gov.

V. ORDERING CLAUSES

45. Accordingly, IT IS ORDERED, pursuant to sections 1, 4(i), 201(b), 227(e), 251(e) and 303 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 201(b), 227(e), 251(e) and 303, and Pub. L. No. 115-141, Div. P, Title V, § 503, 132 Stat. 348 that this Notice of Proposed Rulemaking IS ADOPTED.

46. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis (IRFA), to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

⁸¹ See 5 U.S.C. § 603.

⁸² See *id.* § 603(a).

⁸³ See 44 U.S.C. § 3506(c)(4).

APPENDIX A

Proposed Rules

The Federal Communications Commission proposes to amend part 64 of Title 47 of the Code of Federal Regulations as follows:

PART 64 – MISCELLANEOUS RULES RELATING TO COMMON CARRIERS

* * * * *

1. The authority citation for part 64 is amended as follows:

Authority: 47 U.S.C. 154, 202, 225, 227(e), 251(e), 254(k), 403(b)(2)(B), (c), 616, 620, Pub. L. 104-104, 110 Stat. 56, Pub. L. No. 115-141, 132 Stat. 348 Interpret or apply 47 U.S.C. 201, 202, 218, 222, 225, 226, 227, 228, 215(e), 254(k), 616, 620, and the Middle Class Tax Relief and Job Creation Act of 2012, Pub. L No. 112-96, unless otherwise noted.

2. Amend § 64.1600 by revising paragraphs (c) and (d) and adding paragraphs (l), (m), and (n) to read as follows:

§ 64.1600 Definitions

* * * * *

(c) *Caller identification information.* The term “caller identification information” means information provided by a caller identification service regarding the telephone number of, or other information regarding the origination of, a call made using a voice service or a text message sent using a text messaging service.

(d) *Caller identification service.* The term “caller identification service” means any service or device designed to provide the user of the service or device with the telephone number of, or other information regarding the origination of, a call made using a voice service or a text message sent using a text messaging service.

* * * * *

(l) *Text message.* The term “text message”:

(1) means a message consisting of text, images, sounds, or other information that is transmitted to or from a device that is identified as the receiving or transmitting device by means of a 10-digit telephone number or N11 service code;

(2) includes a short message service (SMS) message, and a multimedia message service (MMS) message and

(3) does not include:

(i) a real-time, two-way voice or video communication; or

(ii) a message sent over an IP-enabled messaging service to another user of the same messaging service, except a message described in paragraph (2).

(m) *Text messaging service.* The term “text messaging service” means a service that enables the transmission or receipt of a text message, including a service provided as part of or in connection with a voice service.

(n) *Voice service.* The term “voice service”:

(1) means any service that is interconnected with the public switched telephone network and that furnishes voice communications to an end user using resources from the North American Numbering Plan or any successor to the North American Numbering Plan adopted by the Commission under section 251(e)(1); and

(2) includes transmissions from a telephone facsimile machine, computer, or other device to a telephone facsimile machine.

3. Amend § 64.1604 by revising paragraph (a) to read as follows:

(a) No person or entity in the United States, nor any person or entity outside the United States if the recipient is within the United States, shall, with the intent to defraud, cause harm, or wrongfully obtain anything of value, knowingly cause, directly, or indirectly, any caller identification service to transmit or display misleading or inaccurate caller identification information in connection with any voice service or text messaging service.

APPENDIX B

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),⁸⁴ the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in this Notice of Proposed Rulemaking (Notice). The Commission requests written public comments on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments provided on the first page of the Notice. The Commission will send a copy of the Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).⁸⁵ In addition, the Notice and IRFA (or summaries thereof) will be published in the Federal Register.⁸⁶

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

2. RAY BAUM'S Act mandates that the Commission issue rules updating the regulations implementing the Truth in Caller ID Act by September 2019.⁸⁷ The Congressional mandate coincides with the need to protect consumers from misleading and inaccurate caller ID spoofing, which can contribute to serious fraud and abuse. In this Notice, we propose to update our rules to implement the changes made to the Communications Act by Congress, by including within their scope: (1) communications originating outside of the United States and (2) forms of communication such as text messaging any interconnected voice communication services that use North American Numbering Plan (NANP) resources, and fax transmissions.

3. The proposed rule changes directly adopt the language contained in RAY BAUM'S Act:⁸⁸ the scope of covered communications now includes those originating outside of the United States, so long as they are directed at recipients within the United States; and the types of services covered are changed from "telecommunications service" and "interconnected VoIP service" to the more precisely defined "voice service" and "text messaging service," with "voice service" including any service interconnected with the PSTN and that furnishes voice communications to an end user using NANP resources. The proposed rules do not impose record keeping or reporting obligations on any entity.

B. Legal Basis

4. The proposed action is authorized under the RAY BAUM'S Act, Pub. L. No. 115-141, Div. P, 132 Stat. 348, and in sections 1, 4(i), 201(b), 227(e), 251(e) and 303 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 201(b), 227(e), 251(e) and 303.

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

5. 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 proposed rules and by the rule revisions on which the Notice seeks comment, if adopted.⁸⁹ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental

⁸⁴ See 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 – 612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

⁸⁵ See 5 U.S.C. § 603(a).

⁸⁶ See 5 U.S.C. § 603(a).

⁸⁷ See Consolidated Appropriations Act, 2018, Pub. L. No. 115-141, Div. P, Title V, § 503 (A)(4)(B), 132 Stat. 348, 1092 (2018) (RAY BAUM'S Act).

⁸⁸ See RAY BAUM'S ACT § 503 (a)(2), 132 Stat. at 1091-92.

⁸⁹ See 5 U.S.C. § 603(b)(3).

jurisdiction.”⁹⁰ In addition, the term “small business” has the same meaning as the term “small-business concern” under the Small Business Act.⁹¹ 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.⁹²

6. *Small Businesses, Small Organizations, Small Governmental Jurisdictions.* Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three broad groups of small entities that could be directly affected herein.⁹³ First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the SBA’s Office of Advocacy, in general a small business is an independent business having fewer than 500 employees.⁹⁴ These types of small businesses represent 99.9% of all businesses in the United States which translates to 28.8 million businesses.⁹⁵

7. Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”⁹⁶ Nationwide, as of Aug 2016, there were approximately 356,494 small organizations based on registration and tax data filed by nonprofits with the Internal Revenue Service (IRS).⁹⁷

8. Finally, the small entity described as a “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.”⁹⁸ U.S. Census Bureau data from the 2012 Census of Governments⁹⁹ indicates that there were 90,056 local governmental jurisdictions consisting of general

⁹⁰ See 5 U.S.C. § 601(6).

⁹¹ 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.”

⁹² See 15 U.S.C. § 632.

⁹³ See 5 U.S.C. § 601(3)-(6).

⁹⁴ See SBA, Office of Advocacy, “Frequently Asked Questions, Question 1 – What is a small business?” https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf (June 2016)

⁹⁵ See SBA, Office of Advocacy, “Frequently Asked Questions, Question 2- How many small businesses are there in the U.S.?” https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf (June 2016).

⁹⁶ 5 U.S.C. § 601(4).

⁹⁷ Data from the Urban Institute, National Center for Charitable Statistics (NCCS) reporting on nonprofit organizations registered with the IRS was used to estimate the number of small organizations. Reports generated using the NCCS online database indicated that as of August 2016 there were 356,494 registered nonprofits with total revenues of less than \$100,000. Of this total, 326,897 entities filed tax returns with 65,113 registered nonprofits reporting total revenues of \$50,000 or less on the IRS Form 990-N for Small Exempt Organizations and 261,784 nonprofits reporting total revenues of \$100,000 or less on some other version of the IRS Form 990 within 24 months of the August 2016 data release date. See <http://nccsweb.urban.org/tablewiz/bmf.php> where the report showing this data can be generated by selecting the following data fields: Show: “Registered Nonprofit Organizations”; By: “Total Revenue Level (years 1995, Aug to 2016, Aug)”; and For: “2016, Aug” then selecting “Show Results.”

⁹⁸ 5 U.S.C. § 601(5).

⁹⁹ See 13 U.S.C. § 161. The Census of Government is conducted every five (5) years compiling data for years ending with “2” and “7.” See also Program Description Census of Government <https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=program&id=program.en.CO G#>.

purpose governments and special purpose governments in the United States.¹⁰⁰ Of this number there were 37, 132 General purpose governments (county¹⁰¹, municipal and town or township¹⁰²) with populations of less than 50,000 and 12,184 Special purpose governments (independent school districts¹⁰³ and special districts¹⁰⁴) with populations of less than 50,000. The 2012 U.S. Census Bureau data for most types of governments in the local government category shows that the majority of these governments have populations of less than 50,000.¹⁰⁵ Based on this data we estimate that at least 49,316 local government jurisdictions fall in the category of “small governmental jurisdictions.”¹⁰⁶

9. *Wired Telecommunications Carriers.* The U.S. Census Bureau defines this industry as “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 communications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.”¹⁰⁷ The SBA has developed a small business size standard for Wired Telecommunications Carriers, which consists of all such companies having 1,500 or fewer employees.¹⁰⁸ Census data for 2012 show that there were 3,117 firms that operated

¹⁰⁰ See U.S. Census Bureau, 2012 Census of Governments, Local Governments by Type and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG02.US01>. Local governmental jurisdictions are classified in two categories - General purpose governments (county, municipal and town or township) and Special purpose governments (special districts and independent school districts).

¹⁰¹ See U.S. Census Bureau, 2012 Census of Governments, County Governments by Population-Size Group and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG06.US01>. There were 2,114 county governments with populations less than 50,000.

¹⁰² See U.S. Census Bureau, 2012 Census of Governments, Subcounty General-Purpose Governments by Population-Size Group and State: 2012 - United States – States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG07.US01>. There were 18,811 municipal and 16,207 town and township governments with populations less than 50,000.

¹⁰³ See U.S. Census Bureau, 2012 Census of Governments, Elementary and Secondary School Systems by Enrollment-Size Group and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG11.US01>. There were 12,184 independent school districts with enrollment populations less than 50,000.

¹⁰⁴ See U.S. Census Bureau, 2012 Census of Governments, Special District Governments by Function and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG09.US01>. [The U.S. Census Bureau data did not provide a population breakout for special district governments.](#)

¹⁰⁵ See U.S. Census Bureau, 2012 Census of Governments, County Governments by Population-Size Group and State: 2012 - United States-States - <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG06.US01>; Subcounty General-Purpose Governments by Population-Size Group and State: 2012 - United States–States - <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG07.US01>; and Elementary and Secondary School Systems by Enrollment-Size Group and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG11.US01>. [While U.S. Census Bureau data did not provide a population breakout for special district governments, if the population of less than 50,000 for this category of local government is consistent with the other types of local governments the majority of the 38, 266 special district governments have populations of less than 50,000.](#)

¹⁰⁶ *Id.*

¹⁰⁷ U.S. Census Bureau, *NAICS Search*, <http://www.census.gov/cgi-bin/sssd/naics/naicsrch> (last visited June 21, 2017)

¹⁰⁸ 13 CFR § 121.201 (NAICS Code 517110).

that year. Of this total, 3,083 operated with fewer than 1,000 employees.¹⁰⁹ Thus, under this size standard, the majority of firms in this industry can be considered small.

10. *Local Exchange Carriers (LECs)*. Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. The closest applicable NAICS Code category is Wired Telecommunications Carriers.¹¹⁰ Under the applicable SBA size standard, such a business is small if it has 1,500 or fewer employees.¹¹¹ U.S. Census Bureau data for 2012 shows that 3,117 firms operated for the entire year.¹¹² Of that total, 3,083 operated with fewer than 1,000 employees.¹¹³ Thus under this category and the associated size standard, the Commission estimates that the majority of local exchange carriers are small entities.

11. *Incumbent LECs*. Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The closest applicable NAICS Code category is Wired Telecommunications Carriers.¹¹⁴ Under the applicable SBA size standard, such a business is small if it has 1,500 or fewer employees.¹¹⁵ U.S. Census Bureau data for 2012 indicate that 3,117 firms operated the entire year.¹¹⁶ Of this total, 3,083 operated with fewer than 1,000 employees.¹¹⁷ Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by our actions. According to Commission data, one thousand three hundred and seven (1,307) Incumbent Local Exchange Carriers reported that they were incumbent local exchange service providers.¹¹⁸ Of this total, an estimated 1,006 have 1,500 or fewer employees.¹¹⁹ Thus using the SBA's size standard the majority of incumbent LECs can be considered small entities.

12. *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 NAICS Code category is Wired Telecommunications Carriers and under that size standard,

¹⁰⁹ See U.S. Census Bureau, *American Fact Finder* (Jan. 08, 2016)

http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table.

¹¹⁰ See, 13 CFR § 121.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition shows the NAICS code as 517311 for Wired Telecommunications Carriers. See, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017>.

¹¹¹ *Id.*

¹¹² See U.S. Census Bureau, *2012 Economic Census of the United States*, Table No. EC1251SSSZ5, *Information: Subject Series - Estab & Firm Size: Employment Size of Firms: 2012* (517110 Wired Telecommunications Carriers). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517110.

¹¹³ *Id.*

¹¹⁴ See, 13 CFR § 121.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition shows the NAICS code as 517311 for Wired Telecommunications Carriers. See, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017>

¹¹⁵ *Id.*

¹¹⁶ See U.S. Census Bureau, *2012 Economic Census of the United States*, Table No. EC1251SSSZ5, *Information: Subject Series - Estab & Firm Size: Employment Size of Firms: 2012* (517110 Wired Telecommunications Carriers). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517110.

¹¹⁷ *Id.*

¹¹⁸ See *Trends in Telephone Service*, Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division at Table 5.3 (Sept. 2010) (*Trends in Telephone Service*).

¹¹⁹ *Id.*

such a business is small if it has 1,500 or fewer employees.¹²⁰ U.S. Census Bureau data for 2012 indicate that 3,117 firms operated during that year.¹²¹ Of that number, 3,083 operated with fewer than 1,000 employees.¹²² Based on these data, the Commission concludes that the majority of Competitive LECS, CAPs, Shared-Tenant Service Providers, and Other Local Service Providers, are small entities. 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.¹²³ Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees.¹²⁴ 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.¹²⁵ Also, 72 carriers have reported that they are Other Local Service Providers.¹²⁶ Of this total, 70 have 1,500 or fewer employees.¹²⁷ Consequently, based on internally researched FCC data, 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.

13. We have 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.”¹²⁸ 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.¹²⁹ We have therefore included small incumbent LECs in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

14. *Interexchange Carriers (IXCs)*. Neither the Commission nor the SBA has developed a definition for Interexchange Carriers. The closest NAICS Code category is Wired Telecommunications Carriers.¹³⁰ The applicable size standard under SBA rules is that such a business is small if it has 1,500 or

¹²⁰ See 13 CFR § 121.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition shows the NAICS code as 517311 for Wired Telecommunications Carriers. See, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017>.

¹²¹ See U.S. Census Bureau, *2012 Economic Census of the United States*, Table No. EC1251SSSZ5, *Information: Subject Series - Estab & Firm Size: Employment Size of Firms: 2012* (517110 Wired Telecommunications Carriers). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517110.s

¹²² *Id.*

¹²³ See Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division, Trends in Telephone Service at Table 5.3 (Sept. 2010) (*Trends in Telephone Service*), https://apps.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ *Id.*

¹²⁷ *Id.*

¹²⁸ 5 U.S.C. § 601(3).

¹²⁹ Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (filed 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.” 15 U.S.C. § 632(a); 5 U.S.C. § 601(3). SBA regulations interpret “small business concern” to include the concept of dominance on a national basis. 13 CFR § 121.102(b).

¹³⁰ See, 13 CFR § 121.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition shows the NAICS code as 517311 for Wired Telecommunications Carriers. See, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017>.

fewer employees.¹³¹ U.S. Census Bureau data for 2012 indicate that 3,117 firms operated for the entire year.¹³² Of that number, 3,083 operated with fewer than 1,000 employees.¹³³ According to internally developed Commission data, 359 companies reported that their primary telecommunications service activity was the provision of interexchange services.¹³⁴ Of this total, an estimated 317 have 1,500 or fewer employees.¹³⁵ Consequently, the Commission estimates that the majority of interexchange service providers are small entities.

15. *Local Resellers.* The SBA has developed a small business size standard for Telecommunications Resellers which includes Local Resellers.¹³⁶ The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households.¹³⁷ Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure. Mobile virtual network operators (MVNOs) are included in this industry.¹³⁸ Under the SBA's size standard, such a business is small if it has 1,500 or fewer employees.¹³⁹ U.S. Census Bureau data for 2012 show that 1,341 firms provided resale services during that year.¹⁴⁰ Of that number, all operated with fewer than 1,000 employees.¹⁴¹ Thus, under this category and the associated small business size standard, the majority of these resellers can be considered small entities. According to Commission data, 213 carriers have reported that they are engaged in the provision of local resale services.¹⁴² Of these, an estimated 211 have 1,500 or fewer employees.¹⁴³ Consequently, the Commission estimates that the majority of Local Resellers are small entities.

16. *Toll Resellers.* The Commission has not developed a definition for Toll Resellers. The closest NAICS Code Category is Telecommunications Resellers. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure. Mobile virtual

¹³¹ *Id.*

¹³² See U.S. Census Bureau, *2012 Economic Census of the United States*, Table No. EC1251SSSZ5, *Information: Subject Series - Estab & Firm Size: Employment Size of Firms: 2012* (517110 Wired Telecommunications Carriers). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517110.

¹³³ *Id.*

¹³⁴ See *Trends in Telephone Service*, Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division at Table 5.3 (Sept. 2010) (*Trends in Telephone Service*). https://apps.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

¹³⁵ *Id.*

¹³⁶ See 13 CFR § 121.201; NAICS Code 517911.

¹³⁷ U.S. Census Bureau, 2012 NAICS Definition, NAICS Code 517911 "Telecommunications Resellers," <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=517911&search=2017+NAICS+Search&search=2017>.

¹³⁸ *Id.*

¹³⁹ 13 CFR § 121.201, NAICS code 517911.

¹⁴⁰ See U.S. Census Bureau, *2012 Economic Census of the United States*, Table No. EC1251SSSZ5, *Information: Subject Series - Estab & Firm Size: Employment Size of Firms: 2012* (517911 Telecommunications Resellers), https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517911.

¹⁴¹ *Id.*

¹⁴² See *Trends in Telephone Service*, Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division at Table 5.3 (Sept. 2010) (*Trends in Telephone Service*).

¹⁴³ *Id.*

network operators (MVNOs) are included in this industry.¹⁴⁴ The SBA has developed a small business size standard for the category of Telecommunications Resellers.¹⁴⁵ Under that size standard, such a business is small if it has 1,500 or fewer employees.¹⁴⁶ Census data for 2012 show that 1,341 firms provided resale services during that year. Of that number, 1,341 operated with fewer than 1,000 employees.¹⁴⁷ Thus, under this category and the associated small business size standard, the majority of these resellers can be considered small entities. According to Commission data, 881 carriers have reported that they are engaged in the provision of toll resale services.¹⁴⁸ Of this total, an estimated 857 have 1,500 or fewer employees.¹⁴⁹ Consequently, the Commission estimates that the majority of toll resellers are small entities.

17. *Other Toll Carriers.* Neither the Commission nor the SBA has developed a definition for small businesses specifically applicable to Other Toll Carriers. This category includes toll carriers that do not fall within the categories of interexchange carriers, operator service providers, prepaid calling card providers, satellite service carriers, or toll resellers. The closest applicable NAICS Code category is for Wired Telecommunications Carriers as defined above. Under the applicable SBA size standard, such a business is small if it has 1,500 or fewer employees.¹⁵⁰ Census data for 2012 shows that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees.¹⁵¹ Thus, under this category and the associated small business size standard, the majority of Other Toll Carriers can be considered small. According to internally developed Commission data, 284 companies reported that their primary telecommunications service activity was the provision of other toll carriage.¹⁵² Of these, an estimated 279 have 1,500 or fewer employees.¹⁵³ Consequently, the Commission estimates that most Other Toll Carriers are small entities.

18. *Prepaid Calling Card Providers.* The SBA has developed a definition for small businesses within the category of Telecommunications Resellers. Under that SBA definition, such a business is small if it has 1,500 or fewer employees.¹⁵⁴ According to the Commission's Form 499 Filer

¹⁴⁴ U.S. Census Bureau, *2012 NAICS Definition*, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=517911&search=2012+NAICS+Search&search=2012> (last visited June 20, 2017) (NAICS 517911 Telecommunications Resellers).

¹⁴⁵ 13 CFR § 121.201 (NAICS code 517911).

¹⁴⁶ See U.S. Census Bureau, *American Fact Finder* (Jan. 08, 2016), http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table.

¹⁴⁷ U.S. Census Bureau, *American Fact Finder* (Jan. 08, 2016), http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table.

¹⁴⁸ Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

¹⁴⁹ Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

¹⁵⁰ 13 CFR § 121.201 (NAICS code 517110).

¹⁵¹ See U.S. Census Bureau, *American Fact Finder* (Jan. 08, 2016), http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table.

¹⁵² Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

¹⁵³ Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

¹⁵⁴ 13 CFR § 121.201 (NAICS code 517110).

Database, 500 companies reported that they were engaged in the provision of prepaid calling cards.¹⁵⁵ The Commission does not have data regarding how many of these 500 companies have 1,500 or fewer employees. Consequently, the Commission estimates that there are 500 or fewer prepaid calling card providers that may be affected by the proposed rules.

19. *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 services, paging services, wireless internet access, and wireless video services.¹⁵⁶ The appropriate size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees.¹⁵⁷ For this industry, U.S. Census data for 2012 show that there were 967 firms that operated for the entire year.¹⁵⁸ Of this total, 955 firms had employment of 999 or fewer employees and 12 had employment of 1000 employees or more.¹⁵⁹ Thus under this category and the associated size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities.

20. The Commission's own data—available in its Universal Licensing System—indicate that, as of October 25, 2016, there are 280 Cellular licensees that will be affected by our actions today.¹⁶⁰ The Commission does not know how many of these licensees are small, as the Commission does not collect that information for these types of entities. Similarly, according to internally developed Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service, and Specialized Mobile Radio Telephony services.¹⁶¹ Of this total, an estimated 261 have 1,500 or fewer employees, and 152 have more than 1,500 employees.¹⁶² Thus, using available data, we estimate that the majority of wireless firms can be considered small.

21. *Wireless Communications Services*. This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. 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

¹⁵⁵ See Fed. Commc'ns Comm'n, *FCC Form 499 Filer Database*, <http://apps.fcc.gov/cgb/form499/499a.cfm> (last visited June 20, 2017).

¹⁵⁶ See U.S. Census Bureau, *American Fact Finder—About the Data*, <https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=ib&id=ib.en./ECN.NAICS2012.517210> (NAICS Code 517210).

¹⁵⁷ 13 CFR § 121.201 (NAICS code 517210).

¹⁵⁸ U.S. Census Bureau, *American Fact Finder* (Jan 08, 2016), https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table (NAICS 51720, “Subject Series - Estab & Firm Size: Employment Size of Establishments for the U.S.: 2012”).

¹⁵⁹ U.S. Census Bureau, *American Fact Finder* (Jan 08, 2016), https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table (NAICS 51720, “Subject Series - Estab & Firm Size: Employment Size of Establishments for the U.S.: 2012”). Available census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

¹⁶⁰ See Fed. Commc'ns Comm'n, *Universal Licensing System*, <http://wireless.fcc.gov/uls> (last visited June 20, 2017). For the purposes of this FRFA, consistent with Commission practice for wireless services, the Commission estimates the number of licensees based on the number of unique FCC Registration Numbers.

¹⁶¹ See Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

¹⁶² See Fed. Commc'ns Comm'n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

revenues of \$15 million for each of the three preceding years.¹⁶³ The SBA has approved these small business size standards.¹⁶⁴ *Wireless Telephony*. Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. The closest applicable SBA category is Wireless Telecommunications Carriers (except Satellite)¹⁶⁵ and the appropriate size standard for this category under the SBA rules is that such a business is small if it has 1,500 or fewer employees.¹⁶⁶ For this industry, U.S. Census Bureau data for 2012 show that there were 967 firms that operated for the entire year.¹⁶⁷ Of this total, 955 firms had fewer than 1,000 employees and 12 firms had 1000 employees or more.¹⁶⁸ Thus under this category and the associated size standard, the Commission estimates that a majority of these entities can be considered small. According to Commission data, 413 carriers reported that they were engaged in wireless telephony.¹⁶⁹ Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.¹⁷⁰ Therefore, more than half of these entities can be considered small.

22. *Cable and Other Subscription Programming*. This industry comprises establishments primarily engaged in operating studios and facilities for the broadcasting of programs on a subscription or fee basis. The broadcast programming is typically narrowcast in nature (e.g. limited format, such as news, sports, education, or youth-oriented). These establishments produce programming in their own facilities or acquire programming from external sources. The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers.¹⁷¹ The SBA size standard for this industry establishes as small, any company in this category which has annual receipts of \$38.5 million or less.¹⁷² According to 2012 U.S. Census Bureau data, 367 firms operated for the entire year.¹⁷³ Of that number, 319 operated with annual receipts of less than \$25 million a year and 48 firms operated with annual receipts of \$25 million or more.¹⁷⁴ Based on this data, the Commission estimates that the majority of firms operating in this industry are small.

¹⁶³ *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).

¹⁶⁴ See Letter from Aida Alvarez, Administrator, SBA, to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC (filed Dec. 2, 1998) (*Alvarez Letter 1998*).

¹⁶⁵ 13 CFR § 121.201, NAICS code 517210.

¹⁶⁶ *Id.*

¹⁶⁷ U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1251SSSZ5, Information: Subject Series: Estab and Firm Size: Employment Size of Firms for the U.S.: 2012 NAICS Code 517210 (rel. Jan. 8, 2016). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517210.

¹⁶⁸ *Id.* Available census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

¹⁶⁹ See Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division, Trends in Telephone Service at Table 5.3 (Sept. 2010) (*Trends in Telephone Service*), https://apps.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

¹⁷⁰ *Id.*

¹⁷¹ See U.S. Census Bureau, 2012 NAIC Definition, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=515210&search=2012+NAICS+Search&search=2012> (last visited June 20, 2017) (2012 NAICS code, “515210 Cable and Other Subscription Programming”).

¹⁷² See 13 C.F.R. 121.201, NAICS Code 515210.

¹⁷³ See U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1251SSSZ4, Information: Subject Series - Estab & Firm Size: Receipts Size of Firms for the U.S.: 2012, NAICS Code 515210, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ4//naics~515210.

¹⁷⁴ *Id.* Available census data does not provide a more precise estimate of the number of firms that have receipts of \$38.5 million or less.

23. *Cable Companies and Systems (Rate Regulation)*. The Commission has developed its own small business size standards for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide.¹⁷⁵ Industry data indicate that there are currently 4,600 active cable systems in the United States.¹⁷⁶ Of this total, all but eleven cable operators nationwide are small under the 400,000-subscriber size standard.¹⁷⁷ In addition, under the Commission's rate regulation rules, a "small system" is a cable system serving 15,000 or fewer subscribers.¹⁷⁸ Current Commission records show 4,600 cable systems nationwide. Of this total, 3,900 cable systems have fewer than 15,000 subscribers, and 700 systems have 15,000 or more subscribers, based on the same records.¹⁷⁹ Thus, under this standard as well, we estimate that most cable systems are small entities.

24. *Cable System Operators (Telecom Act Standard)*. The Communications Act, as amended, also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than one percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000."¹⁸⁰ There are approximately 52,403,705 cable video subscribers in the United States today.¹⁸¹ Accordingly, an operator serving fewer than 524,037 subscribers shall be deemed a small operator if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed \$250 million in the aggregate.¹⁸² Based on available data, we find that all but nine incumbent cable operators are small entities under this size standard.¹⁸³ The Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million.¹⁸⁴ Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

25. *All Other Telecommunications*. The "All Other Telecommunications" category is comprised of establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation.¹⁸⁵ 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

¹⁷⁵ 47 CFR § 76.901(e).

¹⁷⁶This figure was derived from an August 15, 2015 report from the FCC Media Bureau, based on data contained in the Commission's Cable Operations and Licensing System (COALS). See <http://www.fcc.gov/coals>.

¹⁷⁷ Data obtained from SNL Kagan database on April 19, 2017.

¹⁷⁸ 47 CFR § 76.901(c).

¹⁷⁹ August 5, 2015 report from the FCC Media Bureau based on its research in COALS. See <http://www.fcc.gov/coals>.

¹⁸⁰ 47 CFR § 76.901(f) & nn.1-3.

¹⁸¹ See SNL Kagan at <http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx> (subscription required).

¹⁸² 47 CFR § 76.901(f) & nn.1-3.

¹⁸³ See SNL Kagan at http://www.snl.com/interactivex/TopCable_MSOs.aspx (subscription required).

¹⁸⁴ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to section 76.901(f) of the Commission's rules. See 47 CFR § 76.901(f).

¹⁸⁵ See U.S. Census Bureau, 2017 NAICS Definitions, NAICS Code "517919 All Other Telecommunications," <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=517919&search=2017+NAICS+Search&search=2017>.

receiving telecommunications from, satellite systems.¹⁸⁶ Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry.¹⁸⁷ The SBA has developed a small business size standard for All Other Telecommunications, which consists of all such firms with annual receipts of \$ 32.5 million or less.¹⁸⁸ For this category, U.S. Census Bureau data for 2012 shows that there were 1,442 firms that operated for the entire year.¹⁸⁹ Of those firms, a total of 1,400 had annual receipts less than \$25 million and 42 firms had annual receipts of \$25 million to \$49, 999,999.¹⁹⁰ Thus, the Commission estimates that the majority of “All Other Telecommunications” firms potentially affected by our action can be considered small.

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

26. This Notice proposes changes to, and seeks comment on, the Commission’s Truth in Caller ID rules.¹⁹¹ The proposed rules do not contain reporting or recordkeeping requirements, and the proposals adopt no new reporting or recordkeeping requirements.

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

27. The RFA requires an agency to describe any significant 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 and reporting requirements under the rules for such 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 such small entities.¹⁹²

28. RAY BAUM’S Act does not distinguish between small entities and other entities and individuals. In the Notice, the Commission seeks comment on alternatives to the proposed, rules, and on alternative ways of implementing the proposed rules. The revisions proposed to the Commission’s rules are not expected to result in significant economic impact to small entities.¹⁹³

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

29. None.

Section 503 of the RAY BAUM’S Act defines “voice service” as “any service that is interconnected with the public switched telephone network and that furnishes voice communications to an end user using resources from the North American Numbering Plan or any successor to the North American Numbering Plan adopted by the Commission . . . includ[ing] transmissions from a telephone facsimile machine,

¹⁸⁶ *Id.*

¹⁸⁷ *Id.*

¹⁸⁸ See 13 CFR § 121.201, NAICS code 517919.

¹⁸⁹ U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1251SSSZ4, Information: Subject Series - Estab and Firm Size: Receipts Size of Firms for the United States: 2012, NAICS code 517919, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ4//naics~517919.

¹⁹⁰ *Id.*

¹⁹¹ 47 CFR §§ 64.1600 et seq.

¹⁹² 5 U.S.C. § 603(c)(1)-(c)(4).

¹⁹³ See *supra* para. 33.

computer, or other device to a telephone facsimile machine.”¹⁹⁴ It defines “text message” as “a message consisting of text, images, sounds, or other information that is transmitted to or from a device that is identified as the receiving or transmitting device by means of a 10-digit telephone number or N11 service code.”¹⁹⁵ It defines “text messaging service” as “a service that enables the transmission or receipt of a text message, including a service provided as part of or in connection with a voice service.”¹⁹⁶

¹⁹⁴ RAY BAUM’S Act § 503(a)(2)(E), 132 Stat. at 1092.

¹⁹⁵ RAY BAUM’S Act § 503(a)(2)(C), 132 Stat. at 1091-92. The new statutory definition also identifies specific inclusions and exclusions which we address in paragraphs 15-20, *infra*.

¹⁹⁶ RAY BAUM’S Act § 503(a)(2)(D), 132 Stat. at 1092.