FACT SHEET
Advanced Methods to Target and Eliminate Unlawful Robocalls
Notice of Proposed Rulemaking and Notice of Inquiry - CG Docket No. 17-59

Background: Robocalls and telemarketing calls are consistently the top source of consumer complaints received by the FCC. It is estimated that U.S. consumers received approximately 2.4 billion robocalls per month in 2016. Despite FCC and other protections to help consumers avoid unwanted robocalls, consumers still get an unacceptably high volume of calls that can annoy or defraud. One particularly pernicious category of robocalls is spoofed robocalls—i.e., robocalls where the caller ID is faked, hiding the caller’s true identity. Fraudsters bombard consumers’ phones at all hours of the day with spoofed robocalls, which in some cases lure consumers into scams (e.g., when a caller claims to be collecting money owed to the Internal Revenue Service) or lead to identity theft.

Consumer groups, industry, and government are unified in their desire to stop robocalls. To help fulfill that goal, the Chairman has proposed a Notice of Proposed Rulemaking (NPRM) and Notice of Inquiry (NOI) to make it permissible to block spoofed robocalls.

What the NPRM Would Do:

- Proposes to adopt rules that providers may block spoofed robocalls when the subscriber to a particular telephone number requests that calls originating from that number be blocked (sometimes called “Do-Not-Originate”). This proposal builds on a clarification made by the Consumer and Governmental Affairs Bureau in 2016 at the request of the industry’s Robocall Strike Force.
- Proposes to adopt rules that providers may block spoofed robocalls when the spoofed Caller ID can’t possibly be valid, including numbers that haven’t been assigned to anyone yet.
- Seeks special comment on how to address spoofing from internationally-originated numbers, where scammers often hide to avoid U.S. legal processes.

What the NOI Would Do:

- Seeks comment on whether and how to create a safe harbor for providers from their FCC-imposed call completion obligations when they rely on objective criteria to prevent fraudulent, illegal, or spoofed robocalls from reaching consumers.
- Seeks comment on safeguards the Commission should put in place to minimize blocking of lawful calls.

* 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 its staff, including by email, must be filed in CG Docket No. 17-59, which may be accessed via the Electronic Comment Filing System (https://www.fcc.gov/ecfs/).
Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
Advanced Methods to Target and Eliminate
Unauthorized Robocalls

CG Docket No. 17-59

NOTICE OF PROPOSED RULEMAKING AND NOTICE OF INQUIRY*

Adopted: [] Released: []

Comment Date: (45 days after date of publication in the Federal Register)
Reply Comment Date: (75 days after date of publication in the Federal Register)

By the Commission:

I. INTRODUCTION

1. With this Notice of Proposed Rulemaking and Notice of Inquiry, we begin a process to facilitate voice service providers’ blocking of illegal and fraudulent robocalls, which represent an annoyance—and often worse—for consumers. 1 Specifically, we propose rules that would allow providers to—on their customers’ behalf—block the illegal robocalls that can bombard their phones at all hours of the day, in some cases luring consumers into scams (e.g., when a caller claims to be collecting money owed to the Internal Revenue Service (IRS))2 or leading to identity theft. We also inquire about further steps the Commission could take to protect consumers and empower voice service providers to block illegal and fraudulent robocalls. Providers have been active in identifying such robocalls, and consumer groups and others have asked the Commission to encourage better call blocking. Today, we begin to make that a reality.

* This document has been circulated for tentative consideration by the Commission at its March 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 by the Commission, 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.

1 47 U.S.C. § 403 (“The Commission shall have full authority and power at any time to institute an inquiry, on its own motion, in any case and as to any matter or thing . . . concerning which any question may arise under any of the provisions of this chapter . . . .”). The term voice service providers includes both carriers and VoIP providers that provide telephony voice services.

2 FCC and TIGTA Warn Consumers of IRS Impersonation Phone Scam: Scam Has Cost Victims Tens of Millions of Dollars, DA 16-1392, Enforcement Advisory, 31 FCC Rcd 13184 (EB 2016) (FCC/TIGTA Enforcement Advisory) (warning consumers of a scam in which callers seek to obtain money by claiming to be from the Internal Revenue Service and in which Caller ID often falsely displays an IRS telephone number or “IRS”).

(continued….)
II. BACKGROUND

A. The Illegal and Fraudulent Robocalls Problem

2. Robocalls and telemarketing calls are consistently a top source of consumer complaints received by the Commission. It is estimated that U.S. consumers received approximately 2.4 billion robocalls per month in 2016. To take just one example of how illegal and fraudulent robocalls can hurt consumers, the IRS reports that there have been over 10,000 victims of a scam in which callers pretend to be representing the IRS and claim the called party owes back taxes. These calls often threaten the victim with arrest or deportation. Victims have collectively paid over $54 million as a result of these scams, despite concerted efforts by the IRS to educate consumers.

3. More recently, there are reports of a scam where fraudsters already have personal information about the targeted consumers or businesses, and simply trick them into saying “yes” to an innocuous question in order to claim later that there was authorization for charges to the consumer or business being scammed. The Federal Trade Commission (FTC) routinely provides consumer information about scams and periodically issues scam alerts describing the most recent schemes to defraud consumers. These examples illustrate why stopping illegal and fraudulent robocalls and the problems they cause has been a focus across industry, government, and consumer groups. Few other communications issues have unified disparate interests the way illegal and fraudulent robocalls have.

B. Robocall and Caller ID Laws

4. The 1991 Telephone Consumer Protection Act (TCPA) addresses robocalls and their threat to consumer privacy and public safety. The TCPA and the Commission’s implementing rules prohibit certain calling practices without the prior express consent of the called party. If an autodialed or prerecorded call to a wireless number is not for such purposes, consent may be oral or

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5 Id.; see also FCC/TIGTA Enforcement Advisory, 31 FCC Rcd 13184.


9 Id. Prohibited practices include: (1) making telemarketing calls using an artificial or prerecorded voice to residential telephones without prior express consent, id. § 227(a)(1); and (2) making any non-emergency call using an automatic telephone dialing system (“autodialer”), as defined in section 227(a)(1), or an artificial or prerecorded voice to a wireless telephone number without prior express consent, id. § 227(b)(1)(A). Certain calls, such as those by or on behalf of a tax-exempt nonprofit organization or calls subject to the Health Insurance Portability and Accountability Act of 1996 (HIPAA), may be made without the prior express written consent of the called party. 47 CFR § 64.1200(a)(3).

10 See 47 CFR § 64.1200(a)(3).

11 We use “prerecorded” to refer to both prerecorded- and artificial-voice calls.

(continued….)
In 2015, as part of a larger TCPA order, the Commission made clear that nothing in the Communications Act prohibits voice service providers from offering their customers call blocking tools when the customer requests them. The Commission stated that it hoped this clarification would encourage the development of better call blocking tools, while acknowledging that Caller ID spoofing can undermine the effectiveness of such tools.

5. Congress enacted the Truth in Caller ID Act in 2009 to “address the growing problem of Caller ID spoofing done for fraudulent or harmful purposes.” Generally, Caller ID services permit the recipient of an incoming call to know the telephone number of the calling party and, in some cases, a name associated with the number before the recipient answers the call. But Caller ID information can be altered or manipulated, i.e. spoofed, so that the name or number displayed to the called party no longer matches that of the actual subscriber or the actual originating number. Though spoofing can be used to mislead, or even defraud, the called party, there are legitimate uses for spoofing, such as a domestic violence shelter seeking to protect victims who make calls, doctors wanting to display their main office number, or call centers calling on behalf of a business displaying that business’ main customer service number or a toll-free number for return calls instead of the number for the originating line used by the call center. Recognizing this, in enacting the Truth in Caller ID Act, Congress limited the statutory prohibition of spoofing to the knowing transmission of misleading or inaccurate Caller ID information “with the intent to defraud, cause harm, or wrongfully obtain anything of value,” except where such transmission is determined to be exempt by the Commission.

C. Industry Efforts

6. Despite the TCPA and the Truth in Caller ID Act protections, consumers still receive an unacceptably high volume of unwanted robocalls, and we see illegitimate callers using evolving methods to continue making illegal and fraudulent robocalls. It is clear that the specter of enforcement action under the TCPA and Truth in Caller ID Act does not deter the worst robocallers, often because such

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12 47 CFR § 64.1200(a).


14 Id. at 8033, para. 152.

15 Id. at 8038, para. 163.

16 Id. at 8038, para 160.

17 See Rules and Regulations Implementing the Truth in Caller ID Act of 2009, WC Docket No. 11-39, 26 FCC Rcd 9114, 9119, para. 11 (2011); 47 U.S.C. § 227(e). Spoofing techniques fall into two categories: number spoofing and name spoofing. In number spoofing, the originating number is altered. In name spoofing, a true originating number may appear to the called party, but the name associated with that number is changed. Both number and name spoofing have been used by fraudulent callers to mislead and defraud consumers. The majority of the measures in this NPRM, however, address number spoofing, as they limit the potential universe of numbers that are available to spoof.


19 In passing the Truth in Caller ID Act, Congress noted some of the beneficial uses of Caller ID spoofing. For example, because many phones are set to refuse private or blocked calls, domestic violence shelters need another way to allow a call to go through those settings without violating the safety of domestic violence victims. To do so, it may be necessary to alter Caller ID information. S. Rept. 111-96.

callers operate from outside the United States. Industry responded in 2016 by establishing the Robocall Strike Force (Strike Force). The Strike Force includes representatives from across the industry, including providers of traditional landline, mobile, and VoIP services, handset manufacturers, operating system developers, and VoIP gateway providers.

7. The Strike Force made significant progress toward arming consumers with call blocking tools and identifying ways voice providers can proactively block illegal, fraudulent, or unwanted robocalls before they ever reach the consumer’s phone. On October 26, 2016, it submitted an action plan to the Commission describing a path forward for the industry to combat illegal, fraudulent, and unwanted calls in the Robocall Strike Force Report (Strike Force Report). The Strike Force Report included a request for the Commission to provide guidance on when it is permissible for a provider to block a call that the provider believes is illegal.

D. CGB Clarification

8. To aid the Strike Force and other providers’ call blocking efforts, the Consumer and Governmental Affairs Bureau (Bureau) released a Public Notice on September 30, 2016 clarifying that voice service providers may block calls using a spoofed Caller ID number if the number’s subscriber requests that they do so. The 2016 Guidance PN built on the Commission’s earlier clarification, which, among other things, clarified that nothing in the Communications Act prohibits voice service providers from offering call blocking tools to those consumers who request such services. Following from that initial guidance, the Strike Force Report sought additional clarification regarding the permissibility of certain provider-initiated call blocking. Specifically, it sought clarification that 1) providers may block calls where the Caller ID shows an unassigned number, and 2) providers may block calls that the provider has determined to be illegal robocalls, so long as the provider takes reasonable steps to confirm that the calls are illegal.

E. Call Completion Considerations

9. Because call blocking poses a threat to the ubiquity and seamlessness of the network, the Commission has long had a strong policy against allowing voice service providers to block calls. As a

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22 Id. at 2.
24 Strike Force Report.
28 2016 Guidance PN.
29 Strike Force Report Attach. 2 at 40.
30 Id.
31 The Commission has previously found call blocking, with limited exceptions, is an unjust and unreasonable practice under section 201(b) of the Act. See Blocking Interstate Traffic in Iowa, Memorandum Opinion and Order, 2 FCC Red 2692 (1987); Access Charge Reform, CC Docket No. 96-262, Seventh Report and Order and Further Notice of Proposed Rulemaking, 16 FCC Red 9923, 9932-33, para. 24 (2001); Connect America Fund, A National Broadband Plan for Our Future, Establishing Just and Reasonable Rates for Local Exchange Carriers, High-Cost Universal Service Support, Developing an Unified Intercarrier Compensation Regime, Federal-State Joint Board on (continued….)
result, the Commission has allowed call blocking only in “rare and limited circumstances.” 32 In the
USF/ICC Transformation Order, the Commission reemphasized its longstanding general prohibition on
call blocking and reiterated its position that call blocking has the potential to degrade the reliability of the
nation’s communications network and that call blocking harms consumers. 33 The Commission also made
clear that providers’ blocking of VoIP-PSTN traffic is prohibited; and clarified that interconnected and
one-way VoIP providers are prohibited from blocking voice traffic to or from the PSTN. 34 At the same
time, the Commission reiterated that the general policy opposing call blocking by providers has no effect
on the right of individual end users to choose to block incoming calls from unwanted callers. 35

III. NOTICE OF PROPOSED RULEMAKING

10. We believe the government must collaborate with industry to crack the problem of
unlawful robocalling—government can remove regulatory roadblocks and ensure that industry has the
flexibility to use robust tools to address illegal traffic. 36 It is also important for the Commission to protect
the reliability of the nation’s communications network and to protect consumers from provider-initiated
blocking that harms, rather than helps, consumers. The Commission therefore must balance competing
policy considerations—some favoring blocking and others disfavoring blocking—to arrive at an effective
solution that maximizes consumer protection and network reliability. We therefore seek comment on
several proposals that we believe strike the correct balance.

11. Specifically, we propose that voice service providers may block telephone calls in certain
circumstances to protect subscribers from fraudulent and illegal robocalls. First, we propose to codify the
clarification contained in the 2016 Guidance PN that providers may block calls when the subscriber to a
particular telephone number requests that calls originating from that number be blocked. Second, we seek
comment on proposed rules authorizing providers to block calls from three categories of numbers:
invalid numbers, valid numbers that are not allocated to a voice service provider, and valid numbers that
are allocated but not assigned to a subscriber.

12. Our legal authority for these rules stems from sections 201 and 202 of the
Communications Act, which prohibit unjust and unreasonable practices and unjust and unreasonable
discrimination 37—and thus have formed the basis for the Commission’s historic prohibitions on call
blocking. Here, we believe that blocking a call from a spoofed number is not, by definition, an unjust or
unreasonable practice or unjustly or unreasonably discriminatory practice, and we invoke our 201 and 202

Universal Service, Lifeline and Link-Up, Universal Service Reform-Mobility Fund, Report and Order and Further
Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17903, para. 734 (2011) (USF/ICC Transformation Order);
7-11 (2013); but see Total Communications Services, Inc., and Atlas Tel. co., Inc., v. AT&T; Memorandum Opinion
and Order, 16 FCC Rcd 5726 (2001) (finding that the Act did not prohibit carrier from blocking calls from its
customers to a sham entity designed to impose increased access charges).

Establishing Just and Reasonable Rates for Local Exchange Carriers, WC Docket No. 07-135, Declaratory

See Connect America Fund, A National Broadband Plan for Our Future, Establishing Just and Reasonable Rates
for Local Exchange Carriers, High-Cost Universal Service Support, Developing an Unified Intercarrier
Compensation Regime, Federal-State Joint Board on Universal Service, Lifeline and Link-Up, Universal Service
Reform-Mobility Fund, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17903,

Id. at 17903, 18028-29, paras. 734, 973-974.

Id. at 18029, n. 2038.


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authority in making that determination.\footnote{47 U.S.C. §§ 201(b) (stating the Commission “may prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of this Act.”).} The TCPA, as codified in section 227(b)(2) of the Act, also states that the Commission “shall prescribe regulations to implement” the TCPA’s restrictions on robocalls in subsection 227(b).\footnote{Id. § 227(b)(2).} As discussed below, our proposed rules are intended to facilitate blocking of illegal and fraudulent robocalls by voice service providers, with the ultimate goal of ensuring that consumers receive fewer robocalls that violate section 227(b) of the Act, while also preserving effective call completion obligations. In addition, the Commission is charged with prescribing regulations to implement the Truth in Caller ID Act, which made unlawful the spoofing of Caller IDs “in connection with any telecommunications service or IP-enabled voice service . . . with the intent to defraud, cause harm, or wrongfully obtain anything of value . . . “\footnote{47 U.S.C. § 227(e); 47 CFR § 64.1604.} Given the continuing and ever-evolving schemes by illegitimate callers to harm and defraud consumers using spoofed Caller IDs, these proposals are necessary to allow service providers to help prevent these unlawful acts and protect voice service subscribers. Finally, section 251(e) of the Act gives the Commission authority over the use and allocation of numbering resources in the United States, including the use of the unassigned numbers at issue in the proposed rules.\footnote{47 U.S.C. § 251(e).} We seek comment on the nature and scope of our authority to adopt rules as proposed herein.

A. Blocking at the Request of the Subscriber to the Originating Number

13. The 2016 Guidance PN made clear that voice service providers (whether providing such service through TDM, VoIP, or CMRS\footnote{“TDM” refers to time-division multiplexing. “CMRS” refers to commercial mobile radio service.}) may block calls\footnote{For our purposes here, call blocking includes instances where the provider takes affirmative action to prevent particular calls from reaching the subscriber.} from a number if the subscriber to that telephone number requests such blocking in order to prevent its telephone number from being spoofed.\footnote{2016 Guidance PN.} The Bureau concluded that, where the subscriber did not consent to the number being spoofed, the call was very likely made with the intent to defraud, and therefore that no reasonable consumer would wish to receive such a call.\footnote{Id.} Such calls are deemed to be presumptively spoofed and likely to violate the Commission’s anti-spoofing rules,\footnote{47 CFR § 64.1604.} and have the potential to cause harm both to the called party and to the subscriber who uses the number. We agree with the Bureau’s conclusions and propose to amend the Commission’s rules to codify them, so as to provide increased certainty to providers. We seek comment on this proposal.

14. The 2016 Guidance PN did not directly address issues related to providers sharing information about such subscriber requests. We seek comment on whether there are roadblocks to sharing information among providers necessary to effectuate subscriber requests for blocking and what, if any, rule changes or other measures are needed to ensure that such requests can be honored efficiently and effectively. Particularly, we seek comment on what measures, if any, the Commission should consider to facilitate the sharing of such requests among providers where, for example, the subscriber asks the provider that serves the number at issue to disseminate its request throughout the industry. We note that subscribers might not be readily able to identify each and every provider and to submit such a request to each provider individually. Although such information sharing at the subscriber’s request appears to be
consistent with the Commission’s Customer Proprietary Network Information (CPNI) rules, we seek comment on whether there are remaining concerns that have not already been adequately addressed. Would such concerns, if any, be resolved by further clarification about the lawfulness of disclosing information to protect consumers and the network, and to prevent fraud? Are subscribers who request such blocking, absent instructions to the contrary, inherently requesting that that information be shared among providers, and does such sharing occur routinely, or are subscribers making multiple individual requests to multiple providers? Are there any particular concerns regarding the entity through which sharing occurs? For example, are there any specific concerns regarding sharing through an industry information or an entity involved in administering telephone numbers? We note especially that by seeking comment on these issues, and during the pendency of this proceeding, we do not stall, interrupt, or prevent information sharing that is already occurring lawfully. Instead, we ask whether we can provide a better framework to facilitate and encourage sharing, and if so, how we might do so.

B. Calls Originating from Unassigned Numbers

15. In the Strike Force Report, the Strike Force asked the Commission to further clarify that provider-initiated blocking is permissible where the call purports to originate from a number that the provider knows to be unassigned.47 As discussed in more detail below, use of an unassigned number is a strong indication that the calling party is spoofing the Caller ID to potentially defraud and harm a voice service subscriber. We can readily identify three categories of unassigned numbers. Those categories are: 1) numbers that are invalid under the North American Numbering Plan (NANP), including numbers with unassigned area codes; 2) numbers that have not been allocated by the North American Numbering Plan Administrator (NANPA) or the National Number Pool Administrator (PA) to any provider; and 3) numbers that the NANPA or PA has allocated to a provider, but are not currently assigned to a subscriber. In this NPRM, we seek comment on rules to codify that providers may block numbers that fall into each of these three categories. We seek comment on how and when such blocking should be permitted and on whether there are other categories of numbers that should be considered to be unassigned.

1. Calls Originating from Invalid Numbers

16. We propose to adopt a rule allowing provider-initiated blocking of calls purportedly originating from numbers that are not valid under the NANP. Examples of such numbers include numbers that use an unassigned area code; that use an N11 code, such as 911 or 411, in place of an area code; that do not contain the requisite number of digits; and that are a single digit repeated, such as 000-000-0000. Because of providers’ intimate knowledge of the North American Numbering Plan, we believe that providers should be able to easily identify numbers that fall into this category. Further, because these numbers are not valid, there is no possibility that a subscriber legitimately could be originating calls from such numbers. Nor do we foresee any reasonable possibility that a caller would spoof such a number for any legitimate, lawful purpose; for example, unlike a business spoofing Caller ID on outgoing calls to show its main call-back number, invalid numbers cannot be called back. We therefore do not see a significant risk to network reliability in allowing providers to block this category of calls. We seek comment on this proposal.

17. More generally, we seek comment on whether, for purposes of this rule, to define invalid numbers more specifically than already described above. Further, we seek comment on what, if anything, the Commission can do to assist providers in correctly identifying invalid numbers. With regard to smaller providers, are there any particular measures we or the numbering administrators can implement to assist them in more readily identifying or blocking calls originating from invalid numbers? Finally, we seek comment on any additional issues concerning the blocking of calls purportedly originating from invalid numbers.

47 Strike Force Report, Attach. 2 at 40.
2. **Calls Originating From Numbers Not Allocated to Any Provider**

18. We also propose to allow provider-initiated blocking of calls from numbers that are valid but have not yet been allocated by NANPA or the PA to any provider. Though these numbers are valid under the North American Numbering Plan, we believe that they are similar to invalid numbers in that no subscriber can actually originate a call from any of them, and we can foresee no legitimate, lawful reason to spoof such a number because they cannot be called back. We seek comment on our proposal.

19. Unlike the category of calls described above, numbers in this category are not presumptively invalid. Instead, the provider must have knowledge that a certain block of numbers has not been allocated to any provider and therefore that the number being blocked could not have been assigned to a subscriber. We seek comment on whether providers can readily identify numbers that have yet to be allocated to any provider and, if not, whether the NANPA or PA could assist by providing this information in a timely, effective way. If there are difficulties in identifying unallocated numbers, we ask commenters to provide specific descriptions and/or examples of any of those difficulties, and to offer any proposed solutions to overcome these difficulties. Can providers identify a subset of such number blocks, e.g., those shown as “available” by the PA? If providers can identify these number blocks, is there any delay in that information being updated or other factors that likely would result in calls from allocated numbers being blocked? If so, we seek comment on what steps are necessary to mitigate or eliminate the possibility of such calls being blocked. We seek comment on what further steps the Commission can take to assist providers, especially small providers, in identifying and blocking calls originating from numbers that have not been allocated to any provider and on any other relevant issues.

3. **Calls Originating From Numbers That Are Allocated to a Provider, But Not Assigned to a Subscriber**

20. We propose to allow provider-initiated blocking of calls from numbers that have been allocated to a provider but are not assigned to a subscriber at the time of the call. Like the two categories of unassigned numbers discussed above, a subscriber cannot originate a call from such a number, and we foresee no legitimate, lawful purpose for intentionally spoofing a number that is not assigned to a subscriber and thus cannot be called back. We seek comment on this proposal.

21. Specifically, we seek comment on the ability of providers to accurately and timely identify numbers that fall within this category. We believe that the provider to which a telephone number is allocated will know whether that telephone number is currently assigned to a subscriber. We seek comment on whether other providers can also determine, in a timely way, whether a specific telephone number is assigned to a subscriber at the time a specific call is made. Do providers currently share information about which numbers are assigned to a subscriber, and, if so, is such information shared in close to real time? Can the number portability database administered by the Number Portability Administration Center (NPAC) provide such information for a subset of numbers? Are there ways the Commission can facilitate or improve the sharing of information about numbers in this category? Should the Commission mandate the sharing of information about unassigned numbers to facilitate appropriate robocall blocking? If so, what is the most appropriate means to facilitate such information sharing?

22. If there are reasons that information about such numbers cannot be shared in an accurate and timely way, we also seek comment on whether a rule explicitly authorizing provider-initiated blocking of calls purportedly from numbers that are allocated to a provider but not assigned to a subscriber should apply only to the provider to which the number is allocated. Are there other factors that support or disfavor explicitly authorizing all providers to block calls purporting to originate from numbers in this category? Are there concerns for small providers, which presumably have a smaller set of allocated numbers than the larger providers? Finally, we seek comment on any issues not already raised that may arise by allowing providers to block allocated, but unassigned, telephone numbers.

C. **Related Issues**

23. *Internationally Originated Calls.* We note that internationally originated calls may
require special treatment. We seek comment on whether an internationally originated call purportedly originated from a NANP number should be subject to these rules, whereas an internationally originated call showing an international number would be beyond the scope of this rule. Are there any other special rules we should consider with respect to internationally originated calls?

24. **Subscriber Consent.** The Commission believes that no reasonable consumer would want to receive these calls. As a result, we propose not to require providers to obtain an opt-in from subscribers in order to block calls as described above. Obtaining opt-in consent from subscribers would add unnecessary burdens and complexity, and may not be technically feasible for some providers. We seek comment on this issue.

25. **Call Completion Rates.** The Strike Force specifically requested that the Commission amend its rules to ensure that providers can block illegal and fraudulent calls without violating the call completion rules. Specifically, the Strike Force asked that these blocked calls not be counted for purposes of calculating a providers’ call completion rate.\(^{48}\) We propose to exclude calls blocked in accordance with the rules we adopt in this proceeding from calculation of providers’ call completion rates and seek comment on that proposal.

IV. **NOTICE OF INQUIRY**

26. In the Strike Force Report, the Strike Force asked the Commission to clarify that providers are permitted to block “presumptively illegal” calls.\(^{49}\) Although we agree that no reasonable consumer would want to receive calls that are illegal or fraudulent, our call completion policies demand care in identifying such calls. We believe that the criteria used to identify such calls must be objective, minimally intrusive on the legitimate privacy interests of the calling party, and must indicate with a reasonably high degree of certainty that a particular call is illegal or fraudulent. We therefore seek information on explicitly authorizing providers to block calls that are reasonably likely to be illegal or fraudulent based upon objective criteria in addition to the categories of unassigned numbers discussed above.

27. We believe that the categories of unassigned numbers discussed above exemplify objective standards for determining whether a specific call is illegal or fraudulent to a reasonably high degree of certainty. We are aware, however, that there could be a variety of other objective standards that could indicate to a reasonably high degree of certainty that a call is illegal or fraudulent. We also are aware that makers of illegal and fraudulent robocalls can adapt their methods to avoid detection based on objective standards, especially if the standards are known to them. Consequently, we seek comment on objective standards that would indicate to a reasonably high degree of certainty that a call is illegal or fraudulent, whether to adopt a safe harbor to give providers certainty that they will not be found in violation of the call completion and other Commission rules when they block calls based upon an application of objective standards, and whether a confidential review process or other procedures would ensure that providers utilize appropriate objective standards while also reducing the likelihood that callers can circumvent those standards. We also seek comment on ways that callers who make legitimate calls can guard against being blocked and to ensure that legitimate callers whose calls are blocked by mistake can prevent further blocking.

A. **Objective Standards to Identify Illegal and Fraudulent Calls**

28. We seek comment on provider-initiated blocking based on objective criteria. We seek comment on what methods providers and third-party call blocking service providers employ in order to determine that a certain call is illegal or fraudulent. The Strike Force Report states that “[e]xamples of reasonable efforts include but are not limited to, soliciting and reviewing information from other carriers,

\(^{48}\) Strike Force Report, Attach. 2 at 40; 47 CFR § 64.2105.

\(^{49}\) Id.
performing historical and real time call analytics, making test calls, contacting the subscriber of the spoofed number, inspecting the media for a call (audio play back of the Real Time Protocol stream to understand the context of the call), and checking customer complaint sites.  

We seek more specific information regarding these and other methods or standards that can be used to identify illegal and fraudulent calls to a reasonably high degree of certainty.

29. What other methods can be or are used? In particular, we seek comment on the extent to which information obtained through traceback efforts is, can, and should be used to identify future calls that are illegal or fraudulent to a reasonably high degree of certainty? We ask commenters to submit information on whether some methods more accurately identify illegal and fraudulent calls in comparison to other methods, and whether some methods can identify unwanted calls but are less accurate in identifying illegal or fraudulent calls. Do certain methods work best in combination? Are some methods acceptable when used in the context of an informed consumer choosing to implement call blocking with knowledge of the risks of false positives, but might be less acceptable when used in the context of provider-initiated blocking? What can the Commission do to help providers minimize the possibility for false positives when blocking calls based on such methods?

30. Does provider size, geographic location, or other factors have an impact on which methods provide the most accurate results or which methods are feasible? What can the Commission do to provide support for smaller providers that wish to adopt these methods? Are some methods more likely to result in providers blocking legitimate calls in a manner that might violate the Act or the Commission’s rules or polices related to call completion or that are more likely to contravene the policy goals underlying those rules? Calls that originate domestically may have differences from those which originate internationally, thus requiring consideration of different objective criteria. Are there any differences in how providers do, or should, handle calls originating outside of the United States in comparison to those originating domestically? If so, are there any limitations to a provider’s ability to accurately identify the true origination point of a call?

31. The Commission recognizes that standards bodies have made significant progress on Caller ID Authentication Standards. We applaud this progress, and encourage the industry to implement these standards as soon as they are capable of doing so. We seek comment on whether, once there is wide adoption of the protocols and specifications established by the Internet Engineering Task Force’s (IETF) Secure Telephony Identity Revisited (STIR) working group and the Signature-based Handling of Asserted information using toKENs (SHAKEN) framework established in the joint Alliance for Telecommunications and Industry Solutions (ATIS) and Session Initiation Protocol (SIP) forum Network-to-Network Interconnection (NNI) Task Force, providers should then be permitted to block calls for which the Caller ID has not been authenticated. Should unauthenticated Caller ID alone be sufficient grounds for a provider to block a call, or should it be used only in combination with other methods? To what extent can these standards be implemented on networks using various types of technology? For example, will these standards work on VoIP calls and traditional wireline calls equally well? If not, how does that impact the propriety of blocking calls based on whether the Caller ID has been authenticated in accordance with these standards? Would it be possible to consider the lack of authenticated Caller ID only for those calls to which these industry standards can be applied? Are there special considerations related to implementing these standards on networks operated by small providers or in rural areas? What other factors should the Commission consider with regard to blocking calls based upon whether Caller ID has been authenticated in accordance with these standards?

32. We seek comment on whether sharing of information among providers can increase the effectiveness of call blocking methodologies and could enable small providers to benefit from the greater resources of larger providers that might be better able to create and implement more sophisticated methods of identifying illegal and fraudulent calls. We seek comment on these and any other impacts, positive and negative, of such information sharing and on what the Commission can do to encourage and

50 Id.
facilitate such sharing of information in a manner most likely to result in accurate and timely identification of illegal and fraudulent calls. Again, we note that by seeking comment on these issues, we do not stall, interrupt, or prevent information sharing that is already occurring lawfully. We note that section 222(d)(2) of the Act makes clear that CPNI may be shared “to protect users of those services and other carriers from fraudulent, abusive, or unlawful use of . . . such services.”\textsuperscript{51} We seek comment on what other clarifications or rules changes, if any, would help to improve industry efforts to combat fraudulent and illegal robocalls and improve traceback efforts.

\textbf{B. Safe Harbor for the Blocking of Calls Identified Using Objective Standards}

33. We also seek comment on a broader safe harbor to provide certainty to providers that blocking calls in accordance with the rules we adopt in this proceeding will not be deemed a violation of the Commission’s rules and the Act, or counted for purposes of evaluating a provider’s call completion rates. We seek comment on the appropriate scope of such a safe harbor.

34. We seek comment on what blocking practices and objective standards should be covered by any safe harbor. Are there any methods, practices, or objective standards that should expressly be excluded from the safe harbor? Are there methods, practices, or objective standards that warrant some protection, such as a rebuttable presumption that their use does not violate the call completion rules, but do not warrant the full protection of a safe harbor? What are they?

35. We further seek comment on how to formulate a safe harbor that avoids providing a roadmap enabling makers of illegal and fraudulent robocalls to circumvent call blocking by providers. Are there ways to provide both certainty to providers without providing a level of detail that would enable makers of illegal and fraudulent robocalls to circumvent blocking efforts? Should we distinguish between standards that are general, e.g., regarding the presence or absence of Caller ID signatures, versus standards that involve patterns and statistics? Would it be workable to provide a safe harbor covering specific objective standards or specific objective standards implemented at some high threshold level but only a rebuttable presumption covering other objective standards or objective standards implemented at some low threshold? For example, what if the safe harbor applied when a provider blocks calls originating from a single number when the calls originating from that number per minute exceed a fairly high threshold, while a provider that applies a lower, non-public threshold would qualify only for a rebuttable presumption? Finally, should the safe harbor be the same for both large and small providers, and are there any considerations specific to small providers?

\textbf{C. Confidential Commission Review of Proposed Blocking Practices}

36. Fraudulent callers are often sophisticated. In describing approved call blocking practices with sufficient specificity to offer providers certainty, it is possible that we would be providing a roadmap for makers of illegal and fraudulent calls to circumvent blocking. Would a confidential review process address both of these concerns? Such a confidential review process could, for example, enable providers to qualify for a rebuttable presumption if they submit their objective standards for review by Commission staff and staff does not object to those standards within a specific timeframe. We seek comment on such a process.

37. Specifically, we seek comment on a process through which Commission staff can review a provider’s objective standards on a confidential basis. Under this scenario, Commission staff approval would create a rebuttable presumption that a provider’s blocking practices are not in violation of the Act or Commission rules or policies related to call completion. Should providers submit documentation to Commission staff, allowing staff a time window simply to approve or disapprove, or should staff be able to condition its approval only if certain changes are made? What is a reasonable time for Commission staff to complete review? Alternatively, should staff review be conducted \textit{in camera}? Are there other processes that might allow for review? Why might one review method be preferable to the others? Could

\textsuperscript{51} 47 U.S.C. § 222(d)(2).
outside parties nonetheless review such practices if they are willing to accept conditions on review and disclosure similar to how the Commission treats other confidential or highly confidential submissions?

38. If the Commission were to establish a confidential review process, how could it ensure the confidentiality of the information submitted by providers? For example, would the Freedom of Information Act prevent the Commission from keeping this information confidential? Are there other legal or policy considerations that favor or disfavor such a review process? Would the information submitted for staff review be competitively or commercially sensitive? Would disclosure of such information present risks to network security?

39. Are there alternatives to a confidential review process? Could processes used elsewhere in the Commission’s rules be adapted to this situation?

D. Protections for Legitimate Callers

40. Even if providers use objective standards, there might be some situations in which legitimate calls would be blocked. For example, high-volume callers that properly obtain prior express consent might run afoul of call-per-minute restrictions even though all calls made are legal. This might occur if a call center lawfully spoofs the Caller ID on outgoing calls to utilize the business’s toll-free number that consumers can use to call back or that might be familiar to consumers in a way that helps to identify the caller. We seek to avoid the blocking of such legitimate calls and, instead, seek to ensure that legitimate calls are completed. We thus seek comment on protections for legitimate callers. Specifically, should we require providers to “white list”52 legitimate callers who give them advance notice? Should we establish a challenge mechanism for callers who may have been blocked in error?

41. First, we seek comment on establishing a mechanism, such as a white list, to enable legitimate callers to proactively avoid having their calls blocked. Should we specify the mechanism or mechanisms to be used or administrative details, such as the type of evidence providers might require of such legitimate callers? If so, what should we require? Should we specify a timeframe within which providers must add a legitimate caller to its white list? Should we require providers to submit their procedures for staff review along with their objective standards? How should white list information be shared by providers? Is there anything the Commission can do to ensure that white list information is shared in a timely fashion such that legitimate callers need not contact each and every provider separately? Is Commission action needed to guard against white lists being accessed or obtained by makers of illegal or fraudulent robocalls? What is the risk that a caller could circumvent efforts to block illegal and fraudulent robocalls by spoofing numbers on the white list? Is this risk mitigated by the SHAKEN and STIR standards for authenticating Caller ID if, for example, the white list requires that all calls from the white listed telephone number be signed—once those standards have been implemented? Finally, we seek comment on any other relevant issues.

42. Second, we seek comment on implementing a process to allow legitimate callers to notify providers when their calls are blocked and to require providers immediately to cease blocking calls when they learn that the calls are legitimate. How rapidly must a provider respond to a request to cease blocking, and should we specify the information that providers must accept as proof that a caller is legitimate? Should we require specific procedures, or allow providers discretion in how to develop processes, including processes for sharing and safeguarding this information? If provider discretion is allowed, should the Commission require providers to submit their procedures for staff review along with their objective standards? Are there procedures that would reduce any potentially undue burdens on smaller providers? We believe most callers will contact their own provider first when their calls are being blocked. That provider, however, may not be the provider that is actually blocking the calls. We seek comment on how to facilitate information sharing so that the challenge reaches the provider actually blocking the calls. Finally, we seek comment on any other relevant issues.

52 A white list is a list of numbers that will not be blocked.
Lastly, we seek comment on whether providers should designate an officer or other authorized point of contact for legitimate callers seeking to proactively avoid having their calls blocked or to stop blocking of their calls. Would such a requirement represent an undue burden on smaller providers and, if so, what alternative should be available to legitimate callers?

V. PROCEDURAL MATTERS

A. Ex Parte Rules

This proceeding shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s ex parte rules. 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 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.

B. Filing Requirements

45. Comments and Replies. 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. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS). See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998).

- 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

53 47 CFR § 1.1200 et seq.
disposed of before entering the building.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

46. Comments Containing Proprietary Information. Commenters that file what they consider to be proprietary information may request confidential treatment pursuant to section 0.459 of the Commission’s rules. Commenters should file both their original comments for which they request confidentiality and redacted comments, along with their request for confidential treatment. Commenters should not file proprietary information electronically. See Examination of Current Policy Concerning the Treatment of Confidential Information Submitted to the Commission, Report and Order, 13 FCC Rcd 24816 (1998), Order on Reconsideration, 14 FCC Rcd 20128 (1999). Even if the Commission grants confidential treatment, information that does not fall within a specific exemption pursuant to the Freedom of Information Act (FOIA) must be publicly disclosed pursuant to an appropriate request. See 47 CFR § 0.461; 5 U.S.C. § 552. We note that the Commission may grant requests for confidential treatment either conditionally or unconditionally. As such, we note that the Commission has the discretion to release information on public interest grounds that falls within the scope of a FOIA exemption.

47. People with Disabilities. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

48. Availability of Documents. Comments, reply comments, and ex parte submissions will be available for public inspection during regular business hours in the FCC Reference Center, Federal Communications Commission, 445 12th Street, S.W., CY-A257, Washington, D.C., 20554. These documents will also be available via ECFS. Documents will be available electronically in ASCII, Microsoft Word, and/or Adobe Acrobat.

49. Additional Information. For additional information on this proceeding, contact Jerusha Burnett, Jerusha.Burnett@fcc.gov or (202) 418-0526, of the Consumer and Governmental Affairs Bureau, Consumer Policy Division.

C. Initial Regulatory Flexibility Analysis

50. As required by the Regulatory Flexibility Act of 1980 (RFA), the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules proposed in this Notice of Proposed Rulemaking. The IRFA is set forth in Appendix B. We request written public comment on this IRFA. Comments must be filed by the deadlines for comments on the Notice of Proposed Rulemaking indicated on the first page of this document and must have a separate and distinct heading designating them as responses to the IRFA. 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).

D. Paperwork Reduction Act

51. The NPRM may contain new information collection requirements subject to the


Paperwork Reduction Act of 1995 (PRA).\textsuperscript{56} If the Commission adopts any modified information collection requirements, it will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other federal agencies are invited to comment on the new or modified information collection requirements contained in this proceeding. In addition, pursuant to the Small Business Paperwork Relief Act of 2002,\textsuperscript{57} we seek specific comment on how we might “further reduce the information collection burden for small business concerns with fewer than 25 employees.”\textsuperscript{58}

VI. ORDERING CLAUSES

52. \textbf{IT IS ORDERED} that, pursuant to sections 201, 202, 227, 251(e), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 201, 202, 227, 251(e), and 403, this Notice of Proposed Rulemaking and Notice of Inquiry IS ADOPTED.

53. \textbf{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 and Notice of Inquiry, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

\begin{thebibliography}{99}
\footnotesize
\bibitem{footnote57} Pub. L. No. 107-198.
\bibitem{footnote58} 44 U.S.C. § 3506(c)(4).
\end{thebibliography}
APPENDIX A

Draft Proposed Rules for Public Comment

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

Subpart L—Restrictions on Telemarketing, Telephone Solicitation, and Facsimile Advertising

1. Amend § 64.1200 by adding paragraph (k) to read:

§ 64.1200 Delivery restrictions.

(k) Voice service providers may block calls so that they do not reach a called party as follows:

(1) Providers may block calls when the subscriber to which the originating number is assigned has requested that calls originating from that number be blocked. Calls may be blocked based upon the originating number shown in the Caller ID without regard to whether the calls in fact originate from that number.

(2) Providers may block calls originating from the following numbers:

(i) a number that is not a valid North American Numbering Plan number;

(ii) a valid North American Numbering Plan number that is not allocated to a provider by the North American Numbering Plan Administrator or the Pooling Administrator; and

(iii) a valid North American Numbering Plan number that is allocated to a provider by the North American Numbering Plan Administrator or Pooling Administrator, but is not assigned to a subscriber.

(3) For purposes of blocking calls based upon the originating number under this paragraph (k), a provider may rely on Caller ID information to determine the originating number.

Subpart V—Recording, Retention and Reporting of Data on Long-Distance Telephone Calls to Rural Areas and Reporting of Data on Long-Distance Telephone Calls to Nonrural Areas

1. Amend § 64.2103 by revising paragraph (e) to read:

(e) The following calls are excluded from these requirements:

(i) intraLATA toll calls carried entirely over the covered provider’s network or handed off by the covered provider directly to the terminating local exchange carrier or directly to the tandem switch that the terminating local exchange carrier’s end office subtends (terminating tandem); and

(ii) calls blocked pursuant to section 64.1200(k).

2. Amend § 64.2105 by revising paragraph (e) to read:
(e) The following calls are excluded from these requirements:

(i) intraLATA toll calls carried entirely over the covered provider’s network or handed off by the covered provider directly to the terminating local exchange carrier or directly to the tandem switch that the terminating local exchange carrier's end office subtends (terminating tandem); and

(ii) calls blocked pursuant to section 64.1200(k).
APPENDIX B

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended, (RFA) the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this Notice of Proposed Rulemaking and Notice of Inquiry (NPRM/NOI). 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 comments on the NPRM/NOI provided on the first page of this document. The Commission will send a copy of the NPRM/NOI, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration. In addition, the NPRM/NOI and IRFA (or summaries thereof) will be published in the Federal Register.

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

2. Robocalls and telemarketing calls are consistently a top source of consumer complaints received by the Commission. The NPRM/NOI begins a process to facilitate voice service providers’ blocking of illegal and fraudulent robocalls, which represent an annoyance—and often worse—for consumers. The NPRM/NOI proposes rules that would allow providers to—on their customers’ behalf—block the illegal or fraudulent robocalls that can bombard their phones at all hours of the day. Providers have been active in identifying such robocalls, and consumer groups and others have asked the Commission to encourage better call blocking. The NPRM/NOI suggests it is in the public’s best interest for government must collaborate with industry to crack the problem of unlawful robocalling—government can remove regulatory roadblocks and ensure that industry has the flexibility to use robust tools to address illegal traffic. It is also important for the Commission to protect the reliability of the nation’s communications network and to protect consumers from provider-initiated blocking that harms, rather than helps, consumers. The Commission therefore must balance competing policy considerations—some favoring blocking and others disfavoring blocking—to arrive at an effective solution that maximizes consumer protection and network reliability. The NPRM/NOI seeks comment on several proposals that we believe strike the correct balance.

3. The NPRM/NOI seeks comment on proposed rules to codify that voice service providers may block telephone calls in certain circumstances to protect subscribers from fraudulent and illegal robocalls. First, the NPRM/NOI proposes to codify the clarification contained in the 2016 Guidance PN that providers may block calls when the subscriber to a particular telephone number requests that calls originating from that number be blocked. Second, the NPRM/NOI seeks comment on proposed rules authorizing providers to block calls from three categories of numbers: invalid numbers, valid numbers that are not allocated, and valid numbers that are allocated but not assigned. Third, the NPRM/NOI seeks comment on related issues, such as the treatment of internationally originated calls, subscriber consent to call blocking, and the impact on call completion rate rules. The NPRM/NOI also includes a Notice of Inquiry that seeks comments on further actions that may be taken in the future, including

3 Id.
4 Notice of Proposed Rulemaking and Notice of Inquiry, paras. 12-13 (NPRM).
5 Id. at paras. 14-21.
6 Id. at paras. 22-24.
establishment of objective standards to indicate that a call is likely to be fraudulent or illegal, creation of a safe harbor for providers, and creation of safeguards to minimize blocking of lawful calls.\textsuperscript{7}

B. Legal Basis


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 will be affected by the proposed rules, if adopted.\textsuperscript{8} The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”\textsuperscript{9} In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.\textsuperscript{10} Under the Small Business Act, a “small business concern” is one that: 1) is independently owned and operated; 2) is not dominant in its field of operation; and 3) meets any additional criteria established by the Small Business Administration (SBA).\textsuperscript{11} Nationwide, there are a total of approximately 28.8 million small businesses, according to the SBA.\textsuperscript{12}

1. Wireline Carriers

6. \textit{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.”\textsuperscript{13} 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.\textsuperscript{14} Census data for 2012 shows that there were 3,117 firms that operated

\textsuperscript{7} Id. at paras. 25-42.
\textsuperscript{8} 5 U.S.C. § 603(b)(3).
\textsuperscript{9} 5 U.S.C. § 601(6).
\textsuperscript{10} 5 U.S.C. § 601(3) (incorporating by reference the definition of “small business concern” in the Small Business Act, 5 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.”
\textsuperscript{13} U.S. Census Bureau, 2012 NAICS Definitions, “517110 Wired Telecommunications Categories”; http://www.census.gov/cgi-bin/sssd/naics/naicsrch.
\textsuperscript{14} See 13 CFR § 120.201, NAICS Code 517110.
that year. Of this total, 3,083 operated with fewer than 1,000 employees. Thus, under this size standard, the majority of firms in this industry can be considered small.

7. **Local Exchange Carriers (LECs).** Neither the Commission nor the SBA has developed a small business size standard specifically for local exchange services. The closest applicable size standard under SBA rules is for the category 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.” Under that size standard, such a business is small if it has 1,500 or fewer employees. Census data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees. Consequently, the Commission estimates that most providers of local exchange service are small businesses.

8. **Incumbent Local Exchange Carriers (Incumbent LECs).** Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The closest applicable size standard under SBA rules is for the category 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.” Under that size standard, such a business is small if it has 1,500 or fewer employees. Census data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses.

17 13 CFR § 121.201, NAICS code 517110.
20 13 CFR § 121.201, NAICS code 517110.

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

Under that size standard, such a business is small if it has 1,500 or fewer employees. Census data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees. Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, Shared-Tenant Service Providers, and other local service providers are small entities.

10. **Interexchange Carriers.** Neither the Commission nor the SBA has developed a small business size standard specifically for providers of interexchange services. The appropriate size standard under SBA rules is for the category 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.”

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.

11. **Interexchange Carriers.** Neither the Commission nor the SBA has developed a small business size standard specifically for providers of interexchange services. The appropriate size standard under SBA rules is for the category 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.”

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23 13 CFR § 121.201, NAICS code 517110.


(continued….)
services using facilities and infrastructure that they operate are included in this industry.”27 Under that size standard, such a business is small if it has 1,500 or fewer employees.28 Census data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees.29 Consequently, the Commission estimates that the majority of IXCs are small entities.

12. **Cable System Operators (Telecom Act Standard).** The Communications Act 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 1 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.”30 There are approximately 52,403,705 cable video subscribers in the United States today.31 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.32 Based on available data, we find that all but nine incumbent cable operators are small entities under this size standard.33 We note that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed $250 million.34 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.

13. **Other Toll Carriers.** Neither the Commission nor the SBA has developed a size standard 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 size standard under SBA rules is for 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.”35 Under that size standard, such a

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28 13 CFR § 121.201, NAICS code 517110.


30 47 CFR § 76.901 (f) and notes ff. 1, 2, and 3.


32 47 CFR § 76.901(f) and notes ff. 1, 2, and 3.

33 See SNL KAGAN at https://www.snl.com/Interactivex/TopCableMSOs.aspx.

34 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).


(continued....)
business is small if it has 1,500 or fewer employees. Census data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees. Thus, under this category and the associated small business size standard, the majority of Other Toll Carriers can be considered small.

2. **Wireless Carriers**

14. **Wireless Telecommunications Carriers (except Satellite).** Since 2007, the Census Bureau has placed wireless firms within this new, broad, economic census category. Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees. For the category of Wireless Telecommunications Carriers (except Satellite), Census data for 2012 show that there were 967 firms that operated for the entire year. Of this total, 955 firms had fewer than 1,000 employees. Thus under this category and the associated size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small 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 (PCS), and Specialized Mobile Radio (SMR) services. Of this total, an estimated 261 have 1,500 or fewer employees. Thus, using available data, we estimate that the majority of wireless firms can be considered small.

15. **Satellite Telecommunications Providers.** The category of Satellite Telecommunications “comprises establishments primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications.” This category has a small business size standard of $32.5 million or less in average annual receipts, under SBA rules. For this category, Census Bureau data for 2012 show that there were a total of 333 firms that operated for the entire year. Of this total, 299 firms had annual receipts of under $25 million. Consequently, we estimate that the majority of Satellite Telecommunications firms are small entities.

16. **All Other Telecommunications.** All Other Telecommunications comprises, *inter alia*,

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36 13 CFR § 121.201, NAICS code 517110.


39 13 CFR § 121.201, NAICS code 517210 (2012 NAICS). The now-superseded, pre-2007 CFR citations were 13 CFR § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).


41 *Trends in Telephone Service*, tbl. 5.3.

42 Id.


44 13 CFR § 121.201, NAICS Code 517410.


46 Id.
“establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry.”

For this category, Census Bureau data for 2012 show that there were a total of 1,442 firms that operated for the entire year. Of this total, 1,400 had annual receipts below $25 million per year. Consequently, we estimate that the majority of All Other Telecommunications firms are small entities.

3. Resellers

17. 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 network operators (MVNOs) are included in this industry. The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees. 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. 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. Of this total, an estimated 857 have 1,500 or fewer employees. Consequently, the Commission estimates that the majority of toll resellers are small entities.

18. Local Resellers. The SBA has developed a small business size standard for the category of 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 network operators (MVNOs) are included in this industry.

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49 Id.
51 13 CFR § 121.201, NAICS code 517911.
54 Trends in Telephone Service, at tbl. 5.3.
55 Id.
industry. Under that size standard, such a business is small if it has 1,500 or fewer employees. Census data for 2012 show that 1,341 firms provided resale services during that year. Of that number, all operated with fewer than 1,000 employees. Thus, under this category and the associated small business size standard, the majority of these prepaid calling card providers can be considered small entities.

19. **Prepaid Calling Card Providers.** The SBA has developed a small business size standard for the category of 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 network operators (MVNOs) are included in this industry. Under that size standard, such a business is small if it has 1,500 or fewer employees. Census data for 2012 show that 1,341 firms provided resale services during that year. Of that number, all operated with fewer than 1,000 employees. Thus, under this category and the associated small business size standard, the majority of these prepaid calling card providers can be considered small entities.

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

20. As indicated above, the NPRM/NOI seeks comment on proposed rules to codify that voice service providers may block telephone calls in certain circumstances to protect subscribers from fraudulent and illegal robocalls. Until these requirements are defined in full, it is not possible to predict with certainty whether the costs of compliance will be proportionate between small and large providers. We seek to minimize the burden associated with reporting, recordkeeping, and other compliance requirements for the proposed rules, such as modifying software, developing procedures, and training staff.

21. Under the proposed rules, providers may need to record requests from subscribers to block certain numbers, as well as identify invalid numbers, valid numbers that are not allocated, and valid numbers that are allocated but not assigned. In addition, they may need to set up communication with other providers to share information about numbers to be blocked. Finally, providers may need to exclude calls that are blocked pursuant to the proposed rules when calculating their call completion rates.

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

22. 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 or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small

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57 13 CFR § 121.201, NAICS code 517911.
60 13 CFR § 121.201, NAICS code 517911.
entities.\footnote{5 U.S.C. § 603(c).}

23. It should be noted that these proposed rules to codify that voice service providers may block telephone calls in certain circumstances to protect subscribers from fraudulent and illegal robocalls are permissive and not mandatory. Small businesses may avoid compliance costs entirely by declining to block robocalls, or may delay their implementation of robocall blocking to allow for more time to come into compliance with the rules. However, we intend to craft rules that encourage all carriers, including small businesses, to block illegal and fraudulent robocalls and we therefore seek comment from small businesses on how to minimize costs associated with implementing the proposed rules. The NPRM/NOI poses specific requests for comment from small businesses regarding how the proposed rules affect them and what could be done to minimize any disproportionate impact on small businesses.

24. The Commission has proposed rules regarding blocking calls at the request of the subscriber to the originating number and blocking calls originating from unassigned numbers. We have requested feedback from small businesses in the NPRM and seek comment on ways to make the proposed rules less costly. We have proposed not to require providers to obtain an opt-in from subscribers in order to block calls as a way of reducing costs to all providers, including small businesses. We seek comment on how to minimize the economic impact of our proposals.

25. The Commission has also initiated a Notice of Inquiry to consider a range of alternatives to expand the proposed rules, including establishment of objective standards to indicate that a call is likely to be fraudulent or illegal, creation of a safe harbor for providers, and creation of safeguards to minimize blocking of lawful calls. These are not yet proposed rules. They show the Commission is proceeding with caution and seeking comment from small businesses and others before developing rules in this complex area. The Commission will assess how to proceed in light of the record in response to the NPRM/NOI, including any comments from small businesses.

26. The Commission expects to consider the economic impact on small entities, as identified in comments filed in response to the NPRM/NOI and this IRFA, in reaching its final conclusions and taking action in this proceeding.

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

27. None.