

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

In the Matter of
Advanced Methods to Target and Eliminate
Unlawful Robocalls
CG Docket No. 17-59

EIGHTH REPORT AND ORDER

Adopted: February 27, 2025

Released: February 28, 2025

By the Commission: Chairman Carr and Commissioner Starks issuing separate statements.

TABLE OF CONTENTS

I. INTRODUCTION 1
II. BACKGROUND 2
A. The Problem of Illegal Calls 2
B. An Incremental Approach to Protect Consumers from Illegal Calls 4
C. DNO Blocking 5
D. Protections for Lawful Calls 6
III. DISCUSSION 8
A. Requiring All Providers to Block Using a Reasonable Do-Not-Originate List 9
B. SIP Code for Immediate Notification of Analytics-Based Blocking 15
C. Status of Rich Call Data or Other Caller Name Tools 26
D. Legal Authority 28
E. Cost-Benefit Analysis 31
IV. PROCEDURAL MATTERS 36
V. ORDERING CLAUSES 42
APPENDIX A – FINAL RULES
APPENDIX B – FINAL REGULATORY FLEXIBILITY ANALYSIS

I. INTRODUCTION

1. In this Report and Order, we strengthen the Commission’s call blocking and robocall mitigation rules in key areas. First, we expand our requirement to block calls based on a reasonable do-not-originate (DNO) list to include all U.S.-based providers¹ in the call path. We next establish Session Initiation Protocol (SIP) code 603+ as the exclusive code to notify callers when calls on Internet Protocol (IP) networks are blocked based on reasonable analytics to better correct erroneous blocking.

¹ In this Order, when referring to calls, we use “provider” to mean any provider in the call path, including originating, intermediate, and terminating providers; this is consistent with our use of “voice service provider” in our existing call blocking rules. See 47 CFR § 64.1200.

II. BACKGROUND

A. The Problem of Illegal Calls

2. Consumers continue to receive an unacceptably high number of illegal calls. These illegal calls are not just annoying and disruptive; they also cause consumers to lose significant amounts of money. The Federal Trade Commission (FTC) reports a median loss of \$1,480 for fraud by phone call,² or \$850 million total each year.³

3. Industry data also bears out the problem. One industry estimate indicates that the average U.S. consumer receives 13 spam or fraud calls per month and that, on average, those who are scammed by phone calls lose \$865.⁴ These numbers indicate that, despite industry, Commission, and law enforcement efforts, significant room remains for additional measures to combat illegal calls.

B. An Incremental Approach to Protect Consumers from Illegal Calls

4. The Commission has taken an incremental, multi-pronged approach to protecting consumers from illegal calls. This work has focused on a few key areas, including: blocking; traceback and authentication; and additional mitigation strategies such as the Robocall Mitigation Database (RMD) and know-your-customer-style rules, including requirements under 47 CFR § 64.1200(n)(4)-(5). A silver bullet to solve this problem does not exist, which is why our work in each area has been essential to combat these calls.⁵

C. DNO Blocking

5. Blocking illegal calls ensures they never reach consumers. The Commission has authorized, and in certain instances, mandated, blocking within certain restrictions to ensure that consumers are protected from illegal calls and have the option to avoid unwanted calls. The Commission first authorized DNO blocking in 2017.⁶ In the *First Call Blocking Order*, the Commission clarified that voice service providers can block calls purporting to originate from certain categories of problematic numbers, including invalid, unused, and unallocated numbers, as well as numbers for which the subscriber to the number has requested blocking.⁷ The Commission explained that, because there is no legitimate reason for a caller to use such a number, these calls are highly likely to be illegal and no reasonable consumer would wish to receive them.⁸ In 2022, the Commission required gateway providers to block calls using a reasonable DNO list.⁹ In 2023, the Commission sought comment on extending this requirement to all providers in the call path.¹⁰

² This is based on complaint data from 2023. FTC, Consumer Sentinel Network Data Book 2023 at 12 (2024), https://www.ftc.gov/system/files/ftc_gov/pdf/CSN-Annual-Data-Book-2023.pdf.

³ The FTC reports a total of \$850 million lost to fraud by phone call. *Id.*

⁴ Hiya, State of the Call 2024 at 21 (2024), <https://www.hiya.com/state-of-the-call>.

⁵ When such calls do get through, consumers may have additional protections, including a private right of action, under the Telephone Consumer Protection Act (TCPA). 47 U.S.C. § 227(b)(3).

⁶ *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, 9710-21, paras. 10-40 (2017) (*First Call Blocking Order*); see 47 CFR § 64.1200(k)(1), (2)(i)-(iii).

⁷ *First Call Blocking Order*, 32 FCC Rcd at 9719-21, paras. 10-40.

⁸ *Id.* at 9713, 9715, paras. 10, 18, 23.

⁹ Although the Commission clarified in 2022 that a “reasonable DNO list” may include numbers in any of the categories covered in the 2017 *Call Blocking Order* authorization, it also stated that such a list need not include all numbers in those categories. *Advanced Methods to Target and Eliminate Unlawful Robocalls, Call Authentication Trust Anchor*, CG Docket No. 17-59, WC Docket No. 17-97, Sixth Report and Order in CG Docket No. 17-59, Fifth Report and Order in WC Docket No. 17-97, Order on Reconsideration in WC Docket No. 17-97, Seventh Further

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D. Protections for Lawful Calls

6. Alongside its work to protect consumers from illegal calls, the Commission has provided for transparency and redress to callers that find their calls are blocked in error, and information for consumers to determine whether they are missing wanted calls. These protections include requiring a point of contact for blocking disputes, requiring a status update on said disputes within 24 hours,¹¹ protections for calls to 911¹² and other emergency calls,¹³ and requiring providers to produce a list of calls blocked on an opt-in or opt-out basis to the subscriber on request.¹⁴

7. Notably, our rules also require providers that block calls based on reasonable analytics to provide immediate notification to callers using an appropriate SIP or ISDN User Part (ISUP) code.¹⁵ The Commission adopted this requirement in 2020 and initially required the use of SIP codes 607 or 608 and ISUP code 21.¹⁶ Following a Petition for Reconsideration,¹⁷ the Commission revised this requirement to temporarily allow the use of SIP code 603 as well.¹⁸ The Commission found that this modification struck a reasonable balance between the technical concerns of providers and the needs of callers.¹⁹ In the intervening time, industry developed an alternative code for this purpose: SIP code 603+.²⁰ In the *May 2023 Call Blocking Order and Further Notice*, the Commission sought comment on the most appropriate SIP code to use for immediate notification of analytics-based blocking, specifically seeking comment on each of the potential codes.²¹

III. DISCUSSION

8. Combatting illegal calls has long been one of the Commission's top consumer protection priorities. Today, we enhance our existing rule requiring gateway providers to block based on a reasonable DNO list. We also ensure callers and providers can identify and correct erroneous blocking by adopting SIP code 603+ as the exclusive SIP code for immediate notification to callers when providers

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Notice of Proposed Rulemaking in CG Docket No. 17-59, and Fifth Further Notice of Proposed Rulemaking in WC Docket No. 17-97, 37 FCC Rcd 6865, 6901-02, para. 87-91 (2022) (*Gateway Provider Order and Further Notice*); see 47 CFR § 64.1200(o).

¹⁰ *Advanced Methods to Target and Eliminate Unlawful Robocalls, Call Authentication Trust Anchor*, CG Docket No. 17-59, WC Docket No. 17-97, Seventh Report and Order in CG Docket No. 17-59 and WC Docket No. 17-97, Eighth Further Notice of Proposed Rulemaking in CG Docket No. 17-59, and Third Notice of Inquiry in CG Docket No. 17-59, 38 FCC Rcd 5404, 5429-30, paras. 76-79 (2023) (*May 2023 Call Blocking Order and Further Notice*).

¹¹ 47 CFR § 64.1200(k)(8).

¹² 47 CFR § 64.1200(k)(5).

¹³ 47 CFR § 64.1200(k)(6).

¹⁴ 47 CFR § 64.1200(k)(10).

¹⁵ 47 CFR § 64.1200(k)(9).

¹⁶ *December 2020 Call Blocking Order*, 35 FCC Rcd at 15239-42, paras. 52-61.

¹⁷ Petition for Reconsideration and Request for Clarification of USTelecom - The Broadband Association, CG Docket No. 17-59 (filed May 6, 2021) <https://www.fcc.gov/ecfs/document/10506243707563/1>.

¹⁸ *Advanced Methods to Target and Eliminate Unlawful Robocalls*, CG Docket No. 17-59, Order on Reconsideration, Sixth Further Notice of Proposed Rulemaking, and Waiver Order, 36 FCC Rcd 17962, 17967-73, paras. 13-22 (2021) (*Transparency and Redress Reconsideration Order*).

¹⁹ *Id.* at 17967, para. 13.

²⁰ ATIS, SIP Forum, ATIS-1000099, ATIS Standard on Robocall Blocking Notification (Aug. 2022) <https://access.atis.org/higherlogic/ws/public/download/67424> (603+ Specification).

²¹ *May 2023 Call Blocking Order and Further Notice*, 38 FCC Rcd at 5433-35, paras. 90-94.

block a call based on analytics. Additionally, we address open questions regarding the display of caller name information, but do not require providers to display caller name at this time. Finally, we decline to address certain issues raised in the *May 2023 Call Blocking Order and Further Notice* at this time, including expansions to our rules requiring blocking following Commission notification, a reasonable analytics blocking mandate, or establishing a base forfeiture.

A. Requiring All Providers to Block Using a Reasonable Do-Not-Originate List

9. We adopt our proposal to require all providers in the call path to block calls that are highly likely to be illegal based on a reasonable DNO list.²² Requiring all providers to block using a reasonable DNO list ensures that this type of blocking protects all voice customers.²³ Even if some providers use more limited lists that are nonetheless reasonable, either out of concern that lawful calls may be blocked or because of technical limitations, consumers will be better protected because other providers in the call path may use more extensive lists, or even slightly different lists.²⁴ We therefore agree with commenters that broadly support extension of the DNO blocking requirement to all voice service providers.²⁵ We make this requirement effective 90 days after publication of a notice of Office of Management and Budget (OMB) approval in the Federal Register.²⁶

²² We clarify that this requirement is consistent with the requirement that TRS providers not refuse single or sequential calls. See 47 CFR § 64.604(a)(3)(i). In implementing that requirement, the Commission found that Congress, in adopting 47 U.S.C. § 225(d)(1)(E), intended TRS providers “to have the same service obligations as common carriers generally” and “that the common carrier obligation to provide service upon request set forth in Section 201(a) of the Act is not absolute and does not necessarily apply to service for an illegal purpose.” See *Telecommunications Services for Individuals with Hearing and Speech Disabilities, the American with Disabilities Act of 1990*, CG Docket No. 90-571, 6 FCC Rcd 4657, 4660, para. 15 (1991). As such, TRS providers in the call path, like all other providers, must block calls that are highly likely to be illegal based on a reasonable DNO list.

²³ NCTA Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 5 (rec. Aug. 9, 2023) (NCTA Comments).

²⁴ See Somos Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 6 (rec. Aug. 9, 2023) (Somos Comments) at 6. There are many reasons why different providers may maintain different lists. For example, while some providers may block all unused numbers that are allocated to them, others may be unable to update a block list in real time to ensure that recently assigned numbers are not blocked. Similarly, while some providers may be able to obtain and use real-time information regarding unallocated numbers or those allocated to other providers, others may be unable to reliably do so. Because a call will transit multiple networks, the variations in these lists can potentially benefit customers of providers that implement more narrow lists.

²⁵ See, e.g., ABA *et al.* Comments, CG Docket 17-59, WC Docket 17-97, at 6 (rec. Aug. 9, 2023) (ABA *et al.* Call Blocking Comments); Ad Hoc Telecom Users Committee Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 2-3 (rec. Aug. 9, 2023) (Ad Hoc Call Blocking Comments); Cloud Communications Alliance Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 2, 10-11 (rec. Aug. 9, 2023) (Cloud Communications Alliance Call Blocking Comments); Insights Association *et al.* Comments, CG Docket No. 17-59, at 7 (rec. Aug. 9, 2023) (Joint Caller Comments); NCTA Comments at 2, 5; Electronic Privacy Information Center *et al.* Reply Comments, CG Docket No. 17-50, WC Docket No. 17-97, at 6-7 (rec. Sept. 8, 2023) (Joint Consumer Reply Comments); Letter from Jonathan Thessin, Vice President/Senior Counsel, Consumer & Regulatory Compliance, Regulatory Compliance and Policy, American Bankers Association, to Marlene H. Dortch, Secretary, FCC, CG Docket No. 17-59, at 1-2 (filed Feb. 12, 2025); see also Somos Comments at 6 (supporting a broad DNO list requirement but urging the Commission to expand the scope of the list).

²⁶ Competitive Carriers Association asked us to allow 90-120 days to implement this requirement. Letter from Angela Simpson, General Counsel & SVP, Legal and Regulatory Affairs, Competitive Carriers Association, to Marlene H. Dortch, Secretary, FCC, CG Docket Nos. 17-59, 21-402, at 2 (filed Sep. 19, 2024) (CCA Sep. 19 *Ex Parte*). We agree that additional time is appropriate, particularly for smaller providers, and find that 90 days after OMB approval strikes the most appropriate balance between the desire for quick implementation and the needs of these providers.

10. While we agree with USTelecom that many providers already block based on such lists, we disagree with it that this makes a mandate unnecessary.²⁷ Requiring more providers to block based on a DNO list will ensure that more consumers are protected from illegal calls. Further, we are unpersuaded that any potential inefficiencies that stem from requiring all providers to block based on a reasonable DNO list outweigh the potential benefits.²⁸ A provider may implement this requirement in whatever method makes sense for its network, so long as the list is applied to all calls that transit the provider's network. We also decline to adopt a safe harbor for blocking based on a reasonable DNO list, as Cloud Communications Alliance suggests, because it is unclear what liability a provider would face for blocking based on a such a list and we are unaware of any provider facing such liability since the Commission first authorized this blocking in 2017.²⁹

11. *Scope of the List.* Consistent with our rule for gateway providers and messaging providers, we do not mandate the use of a specific list, but allow providers to use any DNO list so long as the list is reasonable.³⁰ We similarly do not change the scope of numbers that may be included on a reasonable DNO list. This ensures that our rule for gateway providers is consistent with our rule for all other providers and ensures that the categories of numbers from which there is no valid reason for calls to originate can be included on the list. Such a list may³¹ include only invalid, unallocated, and unused³² numbers, as well as numbers for which the subscriber has requested blocking. We clarify that, to be considered reasonable, a list may include only the above-referenced categories of numbers and need not

²⁷ USTelecom Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 8 (rec. Aug. 9, 2023) (USTelecom Comments); *see also* Competitive Carriers Association Reply Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 2 (rec. Sept. 8, 2023) (CCA Call Blocking Reply Comments) (opposing new blocking mandates as a general matter).

²⁸ USTelecom Comments at 8; *see also* Letter from Joshua M. Bercu, Vice President, Policy & Advocacy, USTelecom, to Marlene H. Dortch, Secretary, FCC, CG Docket No. 17-59 (filed Mar. 19, 2024) (USTelecom March 19 *ex parte*).

²⁹ Cloud Communications Alliance Call Blocking Comments at 10-11.

³⁰ 47 CFR § 64.1200(o); 47 CFR § 64.1200(p); *Gateway Provider Order and Further Notice*, 37 FCC Rcd at 6901-02, paras. 87-91; *Text Blocking Order and Further Notice*, 38 FCC Rcd at 2751-55, paras. 16-26.

³¹ We disagree with Somos' request to change "may" to "must" and suggestion that this should be a "both the ceiling and the floor." Letter from Joel Bernstein, Vice President, Head of US Public Policy and Government Affairs, Somos, Inc., to Marlene H. Dortch, Secretary, FCC, CG Docket Nos. 17-59, 21-402, at 2, Attach. 1 at 1 (filed Sep. 18, 2024) (Somos Sep. 18 *Ex Parte*). Somos' own evidence that "about 70% of 10-digit number combinations should not be originating any calls because numbers are not assigned to a carrier" ultimately underscores the problem. *Id.* at 2, Attach. 2. There is record evidence that there are providers that could not reasonably include such a high volume of numbers on a blocking list. *See, e.g.*, Neustar Comments, CG Docket No. 17-59, at 3 (rec. Aug. 9, 2023) (Neustar Comments); Letter from Joshua M. Bercu, Vice President, Policy & Advocacy, USTelecom, to Marlene H. Dortch, Secretary, FCC, CG Docket Nos 17-59, 21-402 (filed Sep. 19, 2024) (USTelecom Sep. 19 *Ex Parte*). Of particular concern when considering a more aggressive approach across all providers, USTelecom points to the fact that troubleshooting is already needed to ensure that public safety calls complete in certain instances. USTelecom Sep. 19 *Ex Parte* at 2. It is unclear that all providers with similar limitations would be the "smaller local carriers" that Somos suggests could be allowed additional time. Somos Sep. 18 *Ex Parte* at 3. For these reasons we decline to accept the change.

³² We disagree with Somos' suggestion that unused numbers should be defined as "the numbers contained in the 10,000 and 1,000 blocks of numbers that are in an area code (NPA) that is in service, but the block is not currently assigned to a carrier." Somos Sep. 18 *Ex Parte* at 2. This suggestion appears to completely overlap with the inclusion of "unallocated" numbers, and would be inconsistent with our existing use of the term. Therefore, we decline to change our definition at this time, and believe that allowing providers that can to include unused numbers, even if doing so is currently aspirational rather than practical, has value.

include all possible covered numbers.³³ This is particularly true for unused numbers, which may be difficult for some providers to identify in some cases. The Commission may, however, deem unreasonable a list so limited in scope that it leaves out obvious numbers that could be included with little effort. We find that the current categories of numbers appropriately balance the certainty that calls are highly likely to be illegal with the need to protect consumers from those calls. We therefore agree with commenters that ask us not to change the scope of numbers that may be included on a reasonable DNO list.³⁴

12. Consistent with our rule, we do not adopt a single uniform list or establish a minimum list. Providers must constantly update DNO lists, especially if they include unused numbers that could go into use at any time, and there is not currently a standardized way to ensure that these updates would happen in real time for all providers. While this is true of either a centralized list or a provider-maintained list, a provider-maintained list may, for example, include only unused numbers assigned to that provider and automate number drop-off upon putting the number into use—or simply leave off these numbers if they cannot reasonably do so. Additionally, as Neustar notes, some voice service providers may have “limitations in the number of DNO numbers that they can use” due to “older or less capable networking equipment.”³⁵ A provider-selected list better accounts for this issue than a uniform list, and technical limitations provide a valid reason for some numbers to be excluded. We also recognize that providers know their own networks and may be better positioned to determine what types of numbers should be prioritized. By contrast, a central list would need to include rules prioritizing particular numbers across the U.S. network, which may not be the best approach in all cases. We therefore agree with Neustar that granting flexibility to providers allows them “to adapt or customize their DNO list based on their customer base, traffic profile, and other reasonable considerations. This will help those voice service providers maximize protections for their customers.”³⁶

³³ We find that this limitation addresses Cloud Communication Alliance’s request for protection from liability in cases where a reasonable list does not include some particular number that could have been blocked. Cloud Communications Alliance Call Blocking Comments at 10-11. Because our rules expressly do not require all numbers to be included, incidental exclusion of a number would not generally support liability barring particular facts to the contrary. Blanket protection from liability for failure to include a number, however, would render this requirement toothless.

³⁴ See, e.g., ABA *et al.* Call Blocking Comments at 6; Ad Hoc Call Blocking Comments at 2-3; Cloud Communications Alliance Call Blocking Comments at 2. We also decline to designate the Industry Traceback Group’s list as presumptively reasonable, as some commenters ask us to do. See, e.g., NCTA Comments at 2, 5-6; USTelecom Comments at 9; Verizon Call Blocking Comments, CG Docket No. 17-59, WC Docket 17-97, at 3-4 (rec. Aug. 9, 2023) (Verizon Call Blocking Comments); ACA Connects Reply Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 4 (rec. Sept. 8, 2023) (ACA Connects Reply Comments); USTelecom Reply Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 12 (rec. Sept. 8, 2023) (USTelecom Reply Comments). As we did in the *Gateway Provider Order*, we agree that the list as currently formulated would be reasonable. *Gateway Provider Order and Further Notice*, 37 FCC Rcd at 6902, n. 254. However, we decline to deem it “presumptively reasonable” on an ongoing basis, as the list is “not under Commission control and could be modified, or no longer updated, at any time without Commission input” and such changes could render the list not reasonable under our rules. *Id.* We therefore disagree with Somos’ suggestion that we remove our statement that the Industry Traceback Group’s list, as currently formulated, is reasonable. See Somos Sep. 18 *Ex Parte* at 2-3, Attach. 1 at 1. Somos’ contentions that providers “simply defaulted to the ITG list” and that the Commission’s statement that the Industry Traceback Group’s list is currently reasonable “contradict[s]” the statement that we may deem a list unreasonable if it leaves out obvious numbers that could be included with little effort and therefore has “sown confusion in the market” are unsupported. Somos Sep. 18 *Ex Parte* at 3. Somos has not provided any evidence that the Industry Traceback Group’s list does not currently meet the Commission’s standards, or evidence that providers are confused by the Commission’s previous statements.

³⁵ Neustar Comments at 3.

³⁶ *Id.* at 3.

13. We therefore disagree with commenters who argue that we should adopt a uniform list or establish a minimum list,³⁷ require a more comprehensive list,³⁸ or “set the criteria for inbound-only numbers to be the same as for government inbound-only numbers.”³⁹ Because of the potential technological limitations discussed above, we decline to mandate a more extensive list at this time. We also maintain our previous approach, which allows providers to exercise discretion as to what numbers they include on their lists, so long as the list includes, at a minimum: 1) “any inbound-only government numbers where the government entity has requested the number be included;” and 2) “private inbound-only numbers that have been used in imposter scams, when a request is made by the private entity assigned such a number.”⁴⁰ Providers may, of course, include inbound-only numbers that have not been used in imposter scams if they are capable of doing so.

14. Moreover, while Somos correctly notes that “the more comprehensive the DNO list . . . the more spoofed calls that will be blocked before reaching the intended victim,”⁴¹ we find that the burden of requiring all providers, including smaller providers, to use an expansive DNO list is unnecessary at this time. This is particularly true when all other providers in the call path must block. Some providers will use or already use these more expansive lists, and a single call will often pass through several networks on its path to the recipient. As a result, many consumers will be protected by these more comprehensive lists even when one provider in the call path uses a more restricted list. We recommend that providers, when technically feasible, use a more comprehensive list to safeguard even more consumers.

B. SIP Code for Immediate Notification of Analytics-Based Blocking

15. We modify our requirement for terminating providers to provide immediate notification to callers when calls are blocked based on reasonable analytics.⁴² We now require the exclusive use of SIP code 603+ for this purpose on IP networks.⁴³ We direct providers that block based on reasonable analytics to return SIP code 603+.⁴⁴ This will ensure that callers learn when and why their calls are blocked based on reasonable analytics, which in turn will allow these callers to access redress when blocking errors occur. We clarify that this requirement only applies when providers block calls based on analytics; we do not require providers to provide immediate notification when blocking based on a DNO list, pursuant to Commission notification if not based on analytics, or at the request of a customer without the use of analytics. As required by our rules, we direct all providers to perform necessary software upgrades to ensure the codes we require for such notification are appropriately mapped. Providers must ensure that calls that transit over Time Division Multiplexing (TDM) and IP networks return an

³⁷ See, e.g., Ad Hoc Call Blocking Comments at 4; YouMail Comments, CG Docket No. 17-59, at 15 (rec. Aug. 9, 2023) (YouMail Comments).

³⁸ Somos Comments at 2.

³⁹ Neustar Comments at 2-3.

⁴⁰ *Gateway Provider Order and Further Notice*, 37 FCC Rcd at 6901-02, para. 89. For either category, the provider “may impose reasonable requirements on including the numbers, such as requiring that the number is currently being spoofed at a substantial volume.” *Id.* at 6902, para. 89.

⁴¹ Somos Comments at 4-5.

⁴² See *May 2023 Call Blocking Order and Further Notice*, 38 FCC Rcd at 5433-35, paras. 90-94.

⁴³ SIP Codes (used for calls carried over IP) and ISUP codes (used for calls carried over traditional TDM network technology) allow a terminating provider to send a response code when a call cannot be completed. These codes tell the caller or the originating provider why the call attempt failed. Internet Engineering Task Force, *Integrated Service Digital Network (ISDN) User Part (ISUP) to Session Initiation Protocol (SIP) Mapping* (Dec. 2002), <https://tools.ietf.org/html/rfc3398> (*ISUP and SIP Code Mapping Specification*).

⁴⁴ SIP code 603+ is defined at ATIS-1000099, which was adopted by ATIS on August 16, 2022. We require all providers to return SIP code 603+ consistent with this version of the specification. 603+ Specification.

appropriate code when calls are blocked based on an analytics program,⁴⁵ and the correct ISUP code for this purpose remains 21.⁴⁶ We further direct voice service providers to cease using the standard version of SIP code 603, or SIP codes 607 or 608, for this purpose.

16. *Adopting 603+ for Immediate Notification on IP Networks.* The Commission previously indicated that the existing rule allowing providers to use one of several codes for immediate notification of blocking based on an analytics program—*i.e.*, SIP code 603, 607, or 608— was a temporary measure.⁴⁷ The TRACED Act requires the Commission to ensure that callers receive “transparency and effective redress” when their calls are blocked by analytics,⁴⁸ and a single uniform code is the best way to achieve this transparency. We therefore agree with commenters such as INCOMPAS and Cloud Communications Alliance that urge us to adopt a single, uniform code.⁴⁹ We similarly agree that providers should adopt and implement a code quickly.⁵⁰ The implementation of a single code has already been delayed⁵¹ and should not be delayed for longer than is absolutely necessary for implementation.

17. The record demonstrates that SIP code 603+ will provide more information to providers more quickly than SIP code 608,⁵² and likely at lower cost to providers.⁵³ While both SIP codes 603+ and 608 could ultimately provide the information callers need, commenters disagree as to whether SIP code 603+⁵⁴ or 608⁵⁵ is the best code for this purpose. Despite the contention by some commenters that some

⁴⁵ 47 CFR § 64.1200(k)(9).

⁴⁶ 47 CFR § 64.1200(k)(9)(ii).

⁴⁷ 47 CFR § 64.1200(k)(9)(i); *Transparency and Redress Reconsideration Order*, 36 FCC Rcd at 17969-70, para. 17 (“We, therefore, find SIP Code 603 to be a natural and useful interim measure as industry moves to full implementation of SIP Codes 607 and 608.”); *see also* TCN Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 3-4 (rec. Aug. 9, 2023) (TCN Comments).

⁴⁸ TRACED Act § 10(b) (codified at 47 U.S.C. § 227(j)).

⁴⁹ *See, e.g.*, Ad Hoc Call Blocking Comments at 4-5; Cloud Communications Alliance Call Blocking Comments at 2; INCOMPAS Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 11-12 (rec. Aug. 9, 2023) (INCOMPAS Call Blocking Comments); Joint Callers Comments at 7; TCN Comments at 2; Cloud Communications Alliance Reply Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 1, 6-8 (rec. Sept. 7, 2023) (Cloud Communications Alliance Call Blocking Reply Comments); INCOMPAS Reply Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 5 (rec. Sept. 8, 2023) (INCOMPAS Call Blocking Reply Comments); National Opinion Research Center Reply Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 6 (rec. Sept. 8, 2023) (NORC Call Blocking Reply Comments); Twilio Reply Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 2, 8-9 (rec. Sept. 8, 2023) (Twilio Call Blocking Reply Comments). The cited commenters all ask us to adopt a single code; arguably, all comments that urge us to adopt either SIP code 603+ or 608 also urge us to do so.

⁵⁰ *See, e.g.*, INCOMPAS Call Blocking Reply Comments at 5; Joint Callers Comments at 7; NORC Call Blocking Reply Comments at 6; Twilio Call Blocking Reply Comments at 8-9.

⁵¹ *See generally Transparency and Redress Reconsideration Order*, 36 FCC Rcd 17962.

⁵² *See, e.g.*, ABA *et al.* Call Blocking Comments at 13-14; NCTA Comments at 2, 7-8; NTCA Comments at 1, 4, 6-7; Transaction Network Services Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 2-5 (rec. Aug. 9, 2023) (TNS Call Blocking Comments); TransNexus Comments at 1-2; USTelecom Comments at 15-16; Verizon Call Blocking Comments at 4; NCTA Reply Comments at 5-6; USTelecom Reply Comments at 3, 15-18; Verizon Call Blocking Reply Comments at 3.

⁵³ *See, e.g.*, NTCA Comments at 1, 4; USTelecom Call Blocking Comments at 16. TNS also argued that use of SIP code 607, rather than 608 or 603+ “could have the opposite of the Commission’s intended effect, by increasing call queries and imposing more costs on terminating carriers and analytics engines.” TNS Call Blocking Comments at 4.

⁵⁴ *See, e.g.*, ABA *et al.* Call Blocking Comments at 13-14; NCTA Comments at 2, 7-8; NTCA – The Rural Broadband Association Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 1, 4, 6-7 (rec. Aug. 9, 2023) (NTCA Comments); TNS Call Blocking Comments at 2-5; TransNexus Comments, CG Docket No. 17-59, at 1-2 (rec. Aug. 9, 2023) (TransNexus Comments); USTelecom Comments at 15; Verizon Call Blocking Comments at 4;

(continued...)

providers currently use SIP code 608,⁵⁶ it appears a limited number of providers use it for a limited number of calls and without the jCard.⁵⁷ In the SIP code 608 specification, the jCard is an optional feature but it is necessary to provide information such as the identity of the blocking provider and redress information.⁵⁸ As a result, current uses of SIP code 608 tell a caller that a call was blocked based on analytics but not which provider blocked the call or how to file a dispute.⁵⁹ Therefore, while SIP code 608 provides callers with the basic information that a call is blocked, it provides minimal actionable information. USTelecom notes that currently very few providers have implemented SIP code 608, which means that, when a caller receives a 608, there is a limited list of providers that may have blocked the call; it further notes that broader deployment will make identifying the blocking provider significantly more difficult, especially in cases where SIP Code 608 may be used by non-terminating providers.⁶⁰ Some commenters argue that implementing the jCard would take a significant amount of time—even years.⁶¹ By contrast, SIP code 603+ is not currently in use, but can provide the same information without the complexity of the jCard; furthermore, since it builds on an existing code, it appears to be substantially less technically complex to implement.⁶²

18. SIP code 603+ builds on SIP code 603, which is already in use in the network and is different from it in a few key ways.⁶³ First, instead of the status line reading “Decline” as in the standard SIP code 603, 603+ will read “Network Blocked.”⁶⁴ This provides immediate, standardized information

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NCTA Reply Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 5-6 (rec. Sept. 5, 2023) (NCTA Reply Comments); USTelecom Reply Comments at 3, 15-18; Verizon Reply Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 3 (rec. Sept. 8, 2023) (Verizon Call Blocking Reply Comments).

⁵⁵ See, e.g., Cloud Communications Alliance Call Blocking Comments at 13-15; INCOMPAS Call Blocking Comments at 10-11; Joint Callers Comments at 7; TCN Comments at 1, 3-5; VON Call Blocking Comments at 2; Cloud Communications Alliance Call Blocking Reply Comments at 6-7; INCOMPAS Call Blocking Reply Comments at 4; NORC Call Blocking Reply Comments at 7.

⁵⁶ See, e.g., VON Call Blocking Comments at 2; Cloud Communications Call Blocking Reply Comments at 7.

⁵⁷ See, e.g., TNS Call Blocking Comments at 4-5 (noting that SIP code 608 without use of the jCard provides limited value and stating that implementation of the jCard “parameter presents multiple technical complexities and would require significant network upgrades”); USTelecom Reply Comments at 17-18 (noting that implementation of SIP code 608 with the jCard could impose significant costs both in time and money and that only a small number of providers currently use SIP code 608 at all).

⁵⁸ See, e.g., TNS Call Blocking Comments at 4 (“Regarding SIP Code 608, without the accompanying jCard, information will be limited, making it [a] less[]-viable option than SIP Code 603+. Specifically, failing to include the jCard will mean callers only receive notice that the call was blocked based on analytics.”); USTelecom Reply Comments at 15-16 (describing the limited information available without the jCard).

⁵⁹ USTelecom Reply Comments at 15-16.

⁶⁰ *Id.* at 15-18. One commenter does argue that, if SIP code 603+ can include redress information in an unencrypted manner, then SIP code 608 should be able to as well. Cloud Communications Alliance Call Blocking Reply Comments at 6-7. While this is true, there is no current standardized way to accomplish this and additional standards work would likely be necessary to ensure that all providers use the code in a uniform manner. Standardization is important to ensure that all providers can actually receive and transmit the included information.

⁶¹ See, e.g., TNS Call Blocking Comments at 5; USTelecom Comments at 16.

⁶² See, e.g., NTCA Comments at 1, 4; TNS Call Blocking Comments at 2-3; TransNexus Comments at 1-2; USTelecom Comments at 14-16; Verizon Call Blocking Comments at 4; USTelecom Reply Comments at 15; Verizon Call Blocking Reply Comments at 3; Letter from Elizabeth Gray Nunez, Government Affairs Counsel, Federal Regulatory & Legal Affairs, Verizon, to Marlene H. Dortch, Secretary, FCC, CG Docket Nos. 17-59, 21-402 (filed Sep. 19, 2024).

⁶³ 603+ Specification.

to originating providers and callers that the code is being used to indicate analytics-based blocking. Additionally, ATIS has standardized the reason header to define and require text fields that indicate blocking is based on analytics, as well as contact information for redress.⁶⁵ This contains significantly more information than that provided by SIP code 608 without the use of the optional jCard, and at least comparable to what that code would provide if fully implemented with the jCard.

19. Commenters are correct that SIP code 603 was not originally intended for use as a notification for blocking.⁶⁶ Indeed, when it was originally established, analytics-based blocking as we currently know it did not exist. And we agree with commenters that the Commission has characterized the use of SIP code 603 as a temporary measure to satisfy the TRACED Act requirement to provide transparency and effective redress for erroneous analytics-based blocking.⁶⁷ However, except where ISUP code 21 is translated into a standard SIP code 603 and therefore cannot be distinguished as a 603+,⁶⁸ SIP code 603+ is substantially different both in the status line and in mandatory text fields. These significant modifications, which make SIP code 603+ distinct from a standard SIP code 603, ensure that 603+ is appropriate for this use, even though the standard SIP code 603 would be inappropriate for long term use to indicate analytics-based blocking.

20. We disagree with commenters who argue that SIP code 608 is the more appropriate code because it is more readily accessible and easier for callers to analyze.⁶⁹ We understand that caller equipment may need to be modified to look for the text in the status line, rather than simply the number of the code, and that system changes may need to be done to read the text fields that include redress information. We are not convinced that this is a particularly challenging hurdle for callers to overcome, however. The status line that includes the numerical code, whether 603 or 608, also includes the reason phrase (in the case of 603+, “Network Blocked”). While software may not currently be configured to read this reason phrase, commenters do not make a clear case that this software cannot be reconfigured. Indeed, at least one group of caller commenters appears to believe that such reconfiguration is possible and specifically supports the use of SIP code 603+, citing the “Network Blocked” portion of the status line, among other factors, as evidence it will work for their needs.⁷⁰ Additionally, implementation of SIP code 603+ will make specific redress information available to callers, which should significantly reduce, if not eliminate, the current need for callers to invest significant time into investigation and outreach in order to initiate redress with the correct provider.⁷¹ Moreover, if SIP code 608 were implemented with the jCard to provide this information, callers would presumably also need to make modifications to read the information provided by the jCard. Therefore, use of either code would appear to require some investment by callers. We therefore expect that most high-volume callers will choose to modify their

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⁶⁴ 603+ Specification at 1-2.

⁶⁵ *Id.* at 3-4.

⁶⁶ *See, e.g.*, Cloud Communications Alliance Call Blocking Comments at 13-14; TCN Comments at 3-5.

⁶⁷ TCN Comments at 3-4; *Transparency and Redress Reconsideration Order*, 36 FCC Rcd at 17970, para. 17 (referring to SIP Code 603 as an “interim measure”).

⁶⁸ This issue would also exist if we were to adopt SIP code 608 as the appropriate code, due to potential issues in determining whether 603 or 608 is the correct SIP code when an ISUP code 21 is transmitted. We are aware that some commenters have asked us to take action to address IP interconnection agreements and non-IP authentication. *See, e.g.*, NTCA Comments at 5-6. However, these matters are outside of the scope of the current proceeding.

⁶⁹ *See, e.g.*, Cloud Communications Alliance Call Blocking Comments at 13-14; INCOMPAS Call Blocking Comments at 11; TCN Comments at 5; NORC Call Blocking Reply Comments at 7.

⁷⁰ ABA *et al.* Call Blocking Comments at 13-14.

⁷¹ TCN Comments at 5 (stating that TCN, and companies like them, must “invest 10-20 hours of investigation and outreach to voice service providers to diagnose a single erroneous blocking issue and open a ticket with the relevant voice service provider.”).

equipment to recognize SIP code 603+ and have sufficient incentive to do so.

21. As part of our requirement for voice service providers to return SIP code 603+, we clarify that all providers in the call path must transmit the appropriate code to the origination point of the call, including ensuring that SIP code 603+ maps appropriately to ISUP code 21.⁷² Similarly, any IP provider that receives SIP code 603+ must ensure it transmits the full header, including all mandatory text fields established in the standard.⁷³

22. *Implementation Deadline and Sunsetting SIP codes 603, 607, and 608.* We require providers to implement SIP code 603+ no later than 12 months from publication of this Order in the Federal Register. We find that a one-year implementation period appropriately balances the need for callers to receive greater transparency and the need for interoperability testing and other finalizing work by providers.⁷⁴ Providers should have long been aware that the Commission would want them to quickly implement such a change, as the TRACED Act requires transparency and effective redress and the Commission has described the current option to use the standard version of SIP code 603 as a temporary measure.⁷⁵

23. We also direct providers to cease using SIP codes 603, 607, and 608 when calls are blocked using analytics once they have implemented 603+ and in no instance later than 12 months from publication of this Order in the Federal Register. We therefore disagree with Cloud Communications Alliance and INCOMPAS, which urge us to continue to allow the use of 608 and to require implementation of the requirements in six months.⁷⁶ First, continuing to allow SIP code 608 would cause further confusion and uncertainty by reducing incentives for both providers and callers to update their systems appropriately which undermines the Commission's goal of mandating a single code. Second, while AT&T may already have effectively implemented 603+ in much of its network,⁷⁷ AT&T is a single large provider and other providers, such as those with different network architecture, may need additional time. Similarly, AT&T's ability to implement 608 without the jCard within 12 months⁷⁸ does not indicate that other providers will not reasonably require additional time. Additionally, SIP code 608 without the jCard offers much less information compared to SIP code 603+. However, when SIP code 608 includes the jCard, it provides benefits similar to 603+, though it takes more time to implement.⁷⁹ Therefore, it is more appropriate to use SIP code 608 with the jCard for comparison. While we agree that

⁷² SIP code 603 should already map to ISUP code 21 under our existing rules and standard practice. If for any reason this is not currently the case, providers must ensure that ISUP code 21 maps to SIP code 603 or 603+. We encourage providers to use any methods reasonably available to indicate that a particular ISUP code 21 relates to analytics-based blocking, and thus should be mapped to SIP code 603+ rather than to SIP code 603, and we encourage industry to determine a standardized way to do so.

⁷³ 603+ Specification.

⁷⁴ NCTA asks that the Commission “ensure that providers have sufficient time—at least 12 months after Federal Register publication.” NCTA Reply Comments at 5. Because providers have had significant notice that the Commission will adopt a standard, we find that 12 months is sufficient.

⁷⁵ See generally *Transparency and Redress Reconsideration Order*, 36 FCC Rcd 17962.

⁷⁶ Letter from Michael H. Pryor, Shareholder, Brownstein Hyatt Farber Schreck, LLP, and Christopher L. Shipley, Exc. Dir. Of Public Policy, INCOMPAS, to Marlene H. Dortch, Secretary, FCC, CG Docket Nos. 17-59, 21-402, at 2-4 (filed Sep. 19, 2024) (Cloud Communications and INCOMPAS Sep. 19 *Ex Parte*). ABA *et al.* also advocate for shortening the implementation time to six months. Letter from Jonathan Thessin, Vice President/Senior Counsel, American Bankers Association, to Marlene H. Dortch, Secretary, FCC, CG Docket Nos. 17-59, 21-402 (filed Sep. 19, 2024) (ABA *et al.* Sep. 19 *Ex Parte*).

⁷⁷ Cloud Communications and INCOMPAS Sep. 19 *Ex Parte* at 3-4.

⁷⁸ *Id.* at 4.

⁷⁹ See *supra* para. 17.

quicker implementation would be ideal and provide benefit to callers,⁸⁰ we are concerned that doing so will be technically infeasible for quite a few providers, and therefore continue the cycle of delays and uncertainty.

24. Providers may continue to use SIP code 603 where otherwise appropriate, but not for analytics-based blocking except when an intermediate or terminating providers receive ISUP code 21 and cannot reasonably determine whether SIP code 603 or 603+ is appropriate. SIP code 607 may be used for its intended purpose: to indicate that a call was blocked at the subscriber's direction without the use of analytics.⁸¹ Because we require immediate notification only when providers block based on reasonable analytics, we decline to mandate the use of SIP code 607.⁸² We therefore disagree with the commenter that urges us to require use of SIP code 607.⁸³ While this information may be valuable to some callers, comments in previous proceedings indicate that there may be privacy concerns with its use.⁸⁴ At this time, we find that these concerns outweigh the potential benefits and therefore decline to mandate the use of SIP code 607.

25. *Additional Protections for Lawful Callers.* Because we do not adopt any requirements for blocking based on reasonable analytics and the blocking notification rules we adopt today are expansions of our existing rules, rather than wholly new requirements, we decline to adopt any additional protections for lawful callers at this time. The record does not suggest that our current protections will be insufficient to protect lawful callers after these particular incremental expansions take effect. Moreover, and as discussed previously, we believe that the deployment of SIP code 603+ will provide significant benefit to callers that, when paired with our existing protections, are sufficient to protect the interests of callers.

C. Status of Rich Call Data or Other Caller Name Tools

26. We decline to require the display of caller name information when a provider chooses to display an indication that caller ID has been authenticated.⁸⁵ Although we do not adopt such a mandate, we urge providers to continue to develop next-generation tools, such as Rich Call Data (RCD) and branded calling solutions,⁸⁶ to ensure that consumers receive this information and welcome any updates industry has on its progress. We note that we may consider a mandate in the future, particularly if the timely deployment of such valuable tools does not occur without Commission intervention.⁸⁷ The record

⁸⁰ ABA *et al.* Sep. 19 *Ex Parte* at 2-3.

⁸¹ Internet Engineering Task Force, *A SIP Code for Unwanted Calls* (July 2017), <https://tools.ietf.org/html/rfc8197>

⁸² *Transparency and Redress Reconsideration Order*, 36 FCC Rcd at 17973-75, paras. 23-30.

⁸³ NORC Call Blocking Reply Comments at 7-8; *see also* Letter from Laura H. Phillips, Counsel to the National Opinion Research Center, to Marlene H. Dortch, Secretary, FCC, CG Docket No. 17-59, at 2-3 (filed Sept. 8, 2023).

⁸⁴ Letter from Joshua M. Bercu, Vice President, Policy & Advocacy, USTelecom – The Broadband Association, to Marlene H. Dortch, Secretary, FCC, CG Docket No. 17-59, at 3, 10-15 (filed Jun. 14, 2021).

⁸⁵ *May 2023 Call Blocking Order and Further Notice*, 38 FCC Rcd at 5435-36, paras. 95-100.

⁸⁶ Letter from Steven A Augustino, Counsel to Transaction Network Services, to Marlene H. Dortch, Secretary, FCC, CG Docket No. 17-59, at 3 (filed Feb. 20, 2025) (TNS Feb. 20 *Ex Parte*).

⁸⁷ We decline to address Unified Office's arguments that caller name, rather than the phone number, "is the 'de facto' trusted standard of Caller ID," that the Commission should not permit a provider to alter CNAM information, and that this information should be displayed to consumers without charge. *See* Letter from Glenn S. Richards, Counsel to Unified Office, Inc., to Marlene H. Dortch, Secretary, FCC, CG Docket Nos. 17-59. 21-402 (filed Sep. 19, 2024). These points are beyond the scope of the rules we sought comment on in the *May 2023 Call Blocking Order and Further Notice*, and do not address record concerns regarding current CNAM databases. We therefore decline to take further action at this time.

indicates both that CNAM databases are insufficient to provide a consumer with reliable information,⁸⁸ and that a mandate requiring the use of other, newer, technologies is premature.⁸⁹ Furthermore, we agree with consumer groups that the “use of rented [Direct Inward Dialing numbers] just for the purpose of allowing callers to pretend to be someone other than themselves for the express purpose of evading blocking and labeling efforts” is a concern that merits caution.⁹⁰ Solutions that can provide secure end-to-end authentication and verification information can help restore trust in the ecosystem and enhance consumer welfare.⁹¹

27. Though we decline to adopt a mandate at this time, we nonetheless believe that displaying caller name or other enhanced call information, once a reliable solution is available, will provide significant benefit to consumers, particularly when combined with an indication that caller ID has been authenticated.⁹² We therefore strongly encourage industry to develop and standardize tools to ensure that this information is provided to consumers without additional charge to the call recipient. We are concerned that, absent this information, an indication that caller ID has been authenticated provides little actionable information to consumers and may provide consumers with a false sense of security.⁹³ We intend to continue monitoring developments in this area in order to take action as appropriate in the future.

D. Legal Authority

28. Our legal authority for the rules we adopt today stems from sections 201(b), 202(a), and 251(e) of the Communications Act of 1934, as amended (the Act), as well as from the Truth in Caller ID Act, and the TRACED Act. These sections have formed the basis for much of our work to combat illegal calls. In particular, sections 201(b) and 202(a) grant us broad authority to adopt rules governing just and reasonable practices of common carriers.⁹⁴

29. Our authority under section 251(e)(1) provides independent jurisdiction to prevent abuse of U.S. North American Numbering Plan (NANP) resources.⁹⁵ This is particularly relevant to the rules we adopt today that require blocking based on a reasonable DNO list, where there is no legitimate reason for the caller to use the number. Similarly, the Truth in Caller ID Act grants us authority to prescribe

⁸⁸ See, e.g., CTIA Comments, CG Docket No. 17-59, WC Docket No. 17-97, at 7 (rec. Aug. 9, 2023) (CTIA Call Blocking Comments); Numeracle Call Blocking Comments at 28-30; TNS Call Blocking Comments at 6-7; USTelecom Comments at 10-12; VON Call Blocking Comments at 3-4; YouMail Comments at 26-27; Twilio Call Blocking Reply Comments at 7-8.

⁸⁹ See, e.g., CTIA Call Blocking Comments at 4, 10-11; NCTA Comments at 2, 10-11; TNS Call Blocking Comments at i; USTelecom Comments at 12; Verizon Call Blocking Comments at 1, 8; VON Call Blocking Comments at 2-3; YouMail Comments at 28; CTIA Reply Comments CG Docket No. 17-59, WC Docket No. 17-97, at 8-10 (rec. Sept. 8, 2023) (CTIA Call Blocking Reply Comments), NCTA Reply Comments at 3-4; Twilio Call Blocking Reply Comments at 6-7; USTelecom Reply Comments at 2, 10-11; Verizon Call Blocking Reply Comments at 4-5.

⁹⁰ Joint Consumer Reply Comments at 8-9.

⁹¹ TNS Feb. 20 *Ex Parte* at 3.

⁹² Several commenters also expressed this opinion. See, e.g., Ad Hoc Call Blocking Comments at 5-6; Clinic to End Tech Abuse (CETA) Comments, CG Docket 17-59, at 2 (CETA Comments); INCOMPAS Call Blocking Comments at 13; TNS Call Blocking Comments at 6; TransNexus Comments at 2; Numeracle Call Blocking Reply Comments; VON Call Blocking Reply Comment at 5.

⁹³ STIR/SHAKEN caller ID authentication information has proven valuable in many ways. For example, it is an essential input into analytics. Our concern is limited to its specific value as an isolated piece of data for consumers when determining whether to answer or trust a particular call.

⁹⁴ 47 U.S.C. §§ 201(b), 202(a).

⁹⁵ 47 U.S.C. § 251(e)(1).

rules to make unlawful the spoofing of caller ID information with the intent to defraud, cause harm, or wrongfully obtain something of value,⁹⁶ and provides us authority to require blocking based on a reasonable DNO list where the number has clearly been spoofed.

30. Section 10(b) of the TRACED Act directs us to ensure that providers are transparent about blocking and give both consumers and callers effective redress for erroneous blocking. It provides authority for our designation of SIP code 603+ as the appropriate code for immediate notification of callers when calls are blocked based on reasonable analytics.⁹⁷ We adopted our original immediate notification requirement based on the authority of that section.⁹⁸ We now simply modify that requirement to ensure that callers receive greater transparency.

E. Cost-Benefit Analysis

31. The record supports our conclusion that the actions we take now to strengthen our rules will yield benefits to consumers that exceed the costs of their implementation. We previously estimated that illegal and unwanted calls cost consumers \$13.5 billion annually.⁹⁹ Even if the actions we take now to strengthen our rules eliminate only a small fraction of these unwanted and fraudulent calls, the benefits will be substantial and will outweigh the costs.

32. *Benefits.* Extending blocking to all voice service providers in the call path based on a reasonable DNO list will increase the proportion of unwanted and illegal calls that are successfully blocked. The collective effect of each provider in the call path using its own risk-based DNO list will be to better filter illegal and unwanted calls by blocking illegal calls that elude one provider's different DNO list. If the effect is to eliminate a small share of unwanted and illegal calls, consumers would save millions annually in avoided fraud, aggravation, inconvenience, and mistrust.

33. *Costs.* While the record lacks specific cost data and related analysis, we believe that the increase in providers' costs to avoid the risk of originating illegal calls will be modest.¹⁰⁰ First, the DNO list blocking requirement of this Report and Order merely extends the existing requirement of previous orders. In the *May 2023 Call Blocking Order and Further Notice*, we reaffirmed that "voice service providers are responsible for the calls they originate, carry, or transmit."¹⁰¹ In this Report and Order, we require all voice service providers to block calls based upon a reasonable DNO list which is a modest extension of the responsibility for all calls on a network.

34. Additionally, requiring providers to use SIP code 603+ for immediate notification to callers of analytics-based blocking is less technically complex than other potential solutions, and thus likely minimizes the costs of implementation for providers. SIP code 603+ builds on an existing code and thus requires less development than adoption of a new release code.¹⁰² In addition, voice service providers have 12 months after the publication of this Report and Order in the Federal Register to implement this change.¹⁰³ Further, implementation of SIP code 603+ will make specific redress information available to callers, which should significantly reduce, if not eliminate, the current need for

⁹⁶ 47 U.S.C. § 227(e)(1).

⁹⁷ TRACED Act § 10(b) (codified at 47 U.S.C. § 227(j)).

⁹⁸ *December 2020 Call Blocking Order*, 35 FCC Rcd at 15239-42, 15249, paras. 52-61, 82.

⁹⁹ *Second Text Blocking Order and Further Notice* at 24, para. 56.

¹⁰⁰ The record reveals that many service providers already have extensive systems in place to block unwanted calls and therefore the proposed extension of the Commission's rules will be unlikely to impose significant costs to implement. See, e.g., CTIA Text Blocking Comments at 5, 13.

¹⁰¹ *May 2023 Call Blocking Order and Further Notice*, 38 FCC Rcd at 5406, para. 3.

¹⁰² *Supra* para. 17.

¹⁰³ *Supra* para. 22.

callers to invest significant time into investigation and outreach to initiate redress with the correct provider.¹⁰⁴

35. Although the record is sparse, the new requirements in this Report and Order to reduce illegal calls can likely be implemented at a relatively modest cost. Given that unwanted and illegal calls reduce public welfare by billions of dollars annually, even a small percentage reduction in those will generate benefits that exceed the costs of the new rules.

IV. PROCEDURAL MATTERS

36. *Regulatory Flexibility Act.* The Regulatory Flexibility Act of 1980, as amended (RFA),¹⁰⁵ requires that an agency prepare a regulatory flexibility analysis for notice and comment rulemakings, unless the agency certifies that “the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities.”¹⁰⁶ Accordingly, we have prepared a Final Regulatory Flexibility Analysis (FRFA) concerning the impact of the rule and policy changes contained in the Report and Order on small entities. The FRFA is set forth in Appendix B.

37. *Paperwork Reduction Act Analysis.* The Report and Order contains new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA).¹⁰⁷ It will be submitted to the OMB for review under section 3507(d) of the PRA.¹⁰⁸ 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, we note that pursuant to the Small Business Paperwork Relief Act of 2002,¹⁰⁹ we previously sought specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees.¹¹⁰

38. In this document, we have assessed the effects of requiring all voice service providers to block based on a reasonable DNO list. We ensure that small providers can comply with our rules without an undue burden by not requiring providers to include every possible number that could be blocked on a reasonable list. We find that small providers have sufficient time and flexibility to comply with this requirement.

39. *Congressional Review Act.* The Commission will submit this draft Report and Order to the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget, for concurrence as to whether this rule is “major” under the Congressional Review Act, 5 U.S.C. § 804(2). The Commission will send a copy of this Report and Order to Congress and the Government Accountability Office pursuant to 5 U.S.C. § 801(a)(1)(A).

40. *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 and Governmental Affairs Bureau at 202-418-0530 (voice).

¹⁰⁴ *Supra* para. 20.

¹⁰⁵ See 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601, *et seq.*, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 847 (1996).

¹⁰⁶ 5 U.S.C. § 605(b).

¹⁰⁷ Pub. L. No. 104-13, 109 Stat 163 (1995) (codified at 44 U.S.C. §§ 3501-3520).

¹⁰⁸ 44 U.S.C. § 3507(d).

¹⁰⁹ Pub. L. No. 107-198, 116 Stat. 729 (2002); 44 U.S.C. § 3506(c)(4).

¹¹⁰ *May 2023 Call Blocking Order and Further Notice*, 38 FCC Rcd at 5463-76, Appx. D.

41. *Additional Information.* For additional information on this proceeding, contact Jerusha Burnett, jerusha.burnett@fcc.gov, 202 418-0526, Attorney Advisor in the Consumer and Governmental Affairs Bureau, Consumer Policy Division.

V. ORDERING CLAUSES

42. **IT IS ORDERED** that, pursuant to sections 4(i), 4(j), 201, 202, 217, 227, 251(e), 301, 303, 307, 316, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 201, 202, 217, 227, 251(e), 301, 303, 307, 316, and 403, this Report and **IS ADOPTED**.

43. **IT IS FURTHER ORDERED** that the revisions to section 64.1200(o) shall be effective 90 days after publication of a notice of Office of Management and Budget approval in the Federal Register of information collection requirements under the Paperwork Reduction Act, and the revisions to section 64.1200(k)(9) shall be effective 12 months after publication in the Federal Register.

44. **IS FURTHER ORDERED** that the Commission's Office of the Secretary SHALL SEND a copy of this Report and Order, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

45. **IT IS FURTHER ORDERED** that the Office of the Managing Director, Performance Program Management, SHALL SEND a copy of this Report and Order in a report to be sent to Congress and to the Government Accountability Office pursuant to the Congressional Review Act, 5 U.S.C. § 801(a)(1)(A).

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A**Final Rules**

The Federal Communications Commission amends 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. Effective [INSERT DATE 12 MONTHS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] amend section 64.1200 by revising paragraphs (k)(9)(i), (iii), and (iv) to read as follows:

(k)(9) * * *

(i) In the case of a call terminating on an IP network, the use of Session Initiation Protocol (SIP) code 603+, as defined in ATIS-1000099, adopted August 16, 2022;

(ii) * * *

(iii) In the case of a code transmitting from an IP network to a non-IP network, SIP code 603+ must map to ISUP code 21; and

(iv) In the case of a code transmitting from a non-IP network to an IP network, ISUP code 21 must map to SIP code 603 or 603+ where the cause location is “user.”

* * * * *

2. Delayed indefinitely, amend section 64.1200 by revising paragraph (o) to read as follows:

(o) A voice service provider must block any calls purporting to originate from a number on a reasonable do-not-originate list. A list so limited in scope that it leaves out obvious numbers that could be included with little effort may be deemed unreasonable. The do-not-originate list may include only:

(1) Numbers for which the subscriber to the number has requested that calls purporting to originate from that number be blocked because the number is used for inbound calls only;

(2) North American Numbering Plan numbers that are not valid;

(3) Valid North American Numbering Plan Numbers that are not allocated to a provider by the North American Numbering Plan Administrator; and

(4) Valid North American Numbering Plan numbers that are allocated to a provider by the North American Numbering Plan Administrator, but are unused, so long as the provider blocking the calls is the allocatee of the number and confirms that the number is unused or has obtained verification from the allocatee that the number is unused at the time of blocking.

APPENDIX B**Final Regulatory Flexibility Analysis**

1. As required by the Regulatory Flexibility Act of 1980 (RFA),¹ as amended, an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Advanced Methods to Target and Eliminate Unlawful Robocalls, Call Authentication Trust Anchor, Eighth Further Notice (Call Blocking FNPRM)* released in May 2023.² The Federal Communications Commission (Commission) sought written public comment on the proposals in the *Call Blocking FNPRM*, including comment on the IRFA. No comments were filed addressing the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

A. Need for, and Objectives of, the Report and Order

2. The *Report and Order* continues the Commission's ongoing efforts to stop the growing tide of illegal calls by building on its existing rules. The Commission has taken significant action to combat this problem, and this *Report and Order* adopts several rules to continue this work. First, the *Report and Order* expands the existing requirements to block calls based on a reasonable do-not-originate (DNO) list. Additionally, it increases transparency for callers by mandating a single Session Initiation Protocol (SIP) code be used when calls are blocked based on reasonable analytics.⁴ The Commission's adoption of these requirements in the *Report and Order* strengthens its call blocking and robocall mitigation rules to provide enhanced protection for consumers.

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

3. Although the Commission received no comments specifically addressing the IRFA in the *Call Blocking FNPRM*, the Commission did receive comments addressing the burdens on small providers. Commenters expressed concerns regarding burdens associated with additional blocking requirements.⁵ With regard to our proposed requirement for all providers in the call path to block calls that are highly likely to be illegal based on a reasonable DNO list, commenters advocated for call blocking on a reasonable DNO list,⁶ no change to the scope of numbers included on a reasonable DNO list,⁷ a safe harbor from liability for providers based on the use of a reasonable DNO list.⁸ Further, commenters opined on the appropriate SIP code for immediate notification requirements⁹ and mandatory

¹ 5 U.S.C. § 603. The RFA, 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).

² *Advanced Methods to Target and Eliminate Unlawful Robocalls, Call Authentication Trust Anchor*, CG Docket No. 17-59, WC Docket No. 17-97, Seventh Report and Order in CG Docket No. 17-59 and WC Docket No. 17-97, Eighth Further Notice of Proposed Rulemaking in CG Docket No. 17-59, and Third Notice of Inquiry in CG Docket No. 17-59, 38 FCC Rcd 5404, 5463, Appx. D (2023) (*Call Blocking FNPRM*).

³ See 5 U.S.C. § 604.

⁴ A SIP code is already required. However, the existing rule allowed the use of one of several codes, rather than a single, uniform code. 47 CFR § 64.1200(k)(9).

⁵ See, e.g., Cloud Communications Alliance Call Blocking Comments at 5; CCA Call Blocking Reply Comments at 4, 6-7.

⁶ Cloud Communications Alliance Call Blocking Comments at 2.

⁷ ACA Connects Reply Comments at 2.

⁸ Cloud Communications Alliance Call Blocking Comments at 10-11.

⁹ Cloud Communications Alliance Call Blocking Comments at 13-15; NTCA – The Rural Broadband Association Comments at 2-5.

call-blocking based on reasonable analytics.¹⁰ Additionally, commenters raised concerns about short implementation times, and asked for additional time for smaller providers.¹¹ We carefully considered these concerns, and discuss steps taken to address them in section F of this FRFA. The Commission further considered the potential impact of the rules proposed in the IRFA on small entities, and took steps where appropriate and feasible, to reduce the compliance and economic burden for small entities.

C. Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration

4. Pursuant to the Small Business Jobs Act of 2010, which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rules as a result of those comments.¹² The Chief Counsel did not file any comments in response to the proposed rules in this proceeding.

D. Description and Estimate of the Number of Small Entities to Which the 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 rules and policies adopted herein.¹³ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”¹⁴ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.¹⁵ 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.¹⁶

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, at the outset, three broad groups of small entities that could be directly affected herein.¹⁷ First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the Small Business Administration’s (SBA) Office of Advocacy, in general a small business is an independent business having fewer than 500 employees.¹⁸ These types of small businesses represent 99.9% of all businesses in the United States, which translates to 33.2 million

¹⁰ ACA Connects Reply Comments at 2-3; Cloud Communications Alliance Call Blocking Comments at 2, 3-5.

¹¹ See, e.g., NTCA Comments at 2, 6; ACA Connects Reply Comments at 2; CCA Call Blocking Reply Comments at 4-5.

¹² 5 U.S.C. § 604(a)(3).

¹³ *Id.* § 604 (a)(4).

¹⁴ 5 U.S.C. § 601(6).

¹⁵ 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.”

¹⁶ 15 U.S.C. § 632.

¹⁷ 5 U.S.C. § 601(3)-(6).

¹⁸ See SBA, Office of Advocacy, “What’s New With Small Business?,” <https://advocacy.sba.gov/wp-content/uploads/2023/03/Whats-New-Infographic-March-2023-508c.pdf> (Mar. 2023).

businesses.¹⁹

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.”²⁰ The Internal Revenue Service (IRS) uses a revenue benchmark of \$50,000 or less to delineate its annual electronic filing requirements for small exempt organizations.²¹ Nationwide, for tax year 2022, there were approximately 530,109 small exempt organizations in the U.S. reporting revenues of \$50,000 or less according to the registration and tax data for exempt organizations available from the IRS.²²

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.”²³ U.S. Census Bureau data from the 2022 Census of Governments²⁴ indicate there were 90,837 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States.²⁵ Of this number, there were 36,845 general purpose governments (county,²⁶ municipal, and town or township²⁷) with populations of

¹⁹ *Id.*

²⁰ 5 U.S.C. § 601(4).

²¹ The IRS benchmark is similar to the population of less than 50,000 benchmark in 5 U.S.C § 601(5) that is used to define a small governmental jurisdiction. Therefore, the IRS benchmark has been used to estimate the number of small organizations in this small entity description. See Annual Electronic Filing Requirement for Small Exempt Organizations – Form 990-N (e-Postcard), “Who must file,” <https://www.irs.gov/charities-non-profits/annual-electronic-filing-requirement-for-small-exempt-organizations-form-990-n-e-postcard>. We note that the IRS data does not provide information on whether a small exempt organization is independently owned and operated or dominant in its field.

²² See Exempt Organizations Business Master File Extract (EO BMF), “CSV Files by Region,” <https://www.irs.gov/charities-non-profits/exempt-organizations-business-master-file-extract-eo-bmf>. The IRS Exempt Organization Business Master File (EO BMF) Extract provides information on all registered tax-exempt/non-profit organizations. The data utilized for purposes of this description was extracted from the IRS EO BMF data for businesses for the tax year 2022 with revenue less than or equal to \$50,000 for Region 1-Northeast Area (71,897), Region 2-Mid-Atlantic and Great Lakes Areas (197,296), and Region 3-Gulf Coast and Pacific Coast Areas (260,447) that includes the continental U.S., Alaska, and Hawaii. This data includes information for Puerto Rico (469).

²³ 5 U.S.C. § 601(5).

²⁴ 13 U.S.C. § 161. The Census of Governments survey is conducted every five (5) years compiling data for years ending with “2” and “7”. See also Census of Governments, <https://www.census.gov/programs-surveys/economic-census/year/2022/about.html>.

²⁵ See U.S. Census Bureau, 2022 Census of Governments – Organization Table 2. Local Governments by Type and State: 2022 [CG2200ORG02], <https://www.census.gov/data/tables/2022/econ/gus/2022-governments.html>. Local governmental jurisdictions are made up of general purpose governments (county, municipal and town or township) and special purpose governments (special districts and independent school districts). See also tbl.2. CG2200ORG02 Table Notes_Local Governments by Type and State_2022.

²⁶ See *id.* at tbl.5. County Governments by Population-Size Group and State: 2022 [CG2200ORG05], <https://www.census.gov/data/tables/2022/econ/gus/2022-governments.html>. There were 2,097 county governments with populations less than 50,000. This category does not include subcounty (municipal and township) governments.

²⁷ See *id.* at tbl.6. Subcounty General-Purpose Governments by Population-Size Group and State: 2022 [CG2200ORG06], <https://www.census.gov/data/tables/2022/econ/gus/2022-governments.html>. There were 18,693 municipal and 16,055 town and township governments with populations less than 50,000.

less than 50,000 and 11,879 special purpose governments (independent school districts²⁸) with enrollment populations of less than 50,000.²⁹ Accordingly, based on the 2022 U.S. Census of Governments data, we estimate that at least 48,724 entities fall into the category of “small governmental jurisdictions.”³⁰

1. Wireline Carriers

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.³¹ 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.³² By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.³³ Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers.³⁴

10. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.³⁵ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.³⁶ Of this number, 2,964 firms operated with fewer than 250 employees.³⁷ Additionally, based on Commission data in the 2022 Universal Service

²⁸ See *id.* at tbl.10. Elementary and Secondary School Systems by Enrollment-Size Group and State: 2022 [CG2200ORG10], <https://www.census.gov/data/tables/2022/econ/gus/2022-governments.html>. There were 11,879 independent school districts with enrollment populations less than 50,000. See also tbl.4. Special-Purpose Local Governments by State Census Years 1942 to 2022 [CG2200ORG04], CG2200ORG04 Table Notes_Special Purpose Local Governments by State_Census Years 1942 to 2022.

²⁹ While the special purpose governments category also includes local special district governments, the 2022 Census of Governments data does not provide data aggregated based on population size for the special purpose governments category. Therefore, only data from independent school districts is included in the special purpose governments category.

³⁰ This total is derived from the sum of the number of general purpose governments (county, municipal and town or township) with populations of less than 50,000 (36,845) and the number of special purpose governments - independent school districts with enrollment populations of less than 50,000 (11,879), from the 2022 Census of Governments - Organizations tbls. 5, 6 & 10.

³¹ See U.S. Census Bureau, *2017 NAICS Definition, “517311 Wired Telecommunications Carriers,”* <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

³² *Id.*

³³ *Id.*

³⁴ Fixed Local Service Providers include the following types of providers: Incumbent Local Exchange Carriers (ILECs), Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, and Other Local Service Providers. Local Resellers fall into another U.S. Census Bureau industry group and therefore data for these providers is not included in this industry.

³⁵ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

³⁶ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

³⁷ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

Monitoring Report, as of December 31, 2021, there were 4,590 providers that reported they were engaged in the provision of fixed local services.³⁸ Of these providers, the Commission estimates that 4,146 providers have 1,500 or fewer employees.³⁹ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

11. *Local Exchange Carriers (LECs)*. Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. Providers of these services include both incumbent and competitive local exchange service providers. Wired Telecommunications Carriers⁴⁰ is the closest industry with an SBA small business size standard.⁴¹ Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers.⁴² The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁴³ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.⁴⁴ Of this number, 2,964 firms operated with fewer than 250 employees.⁴⁵ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 4,590 providers that reported they were fixed local exchange service providers.⁴⁶ Of these providers, the Commission estimates that 4,146 providers have 1,500 or fewer employees.⁴⁷ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

12. *Incumbent Local Exchange Carriers (Incumbent LECs)*. Neither the Commission nor the SBA have developed a small business size standard specifically for incumbent local exchange carriers. Wired Telecommunications Carriers⁴⁸ is the closest industry with an SBA small business size standard.⁴⁹ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having

³⁸ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), <https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf>. <https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf>

³⁹ *Id.*

⁴⁰ See U.S. Census Bureau, *2017 NAICS Definition, "517311 Wired Telecommunications Carriers,"* <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

⁴¹ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

⁴² Fixed Local Exchange Service Providers include the following types of providers: Incumbent Local Exchange Carriers (ILECs), Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, Local Resellers, and Other Local Service Providers.

⁴³ *Id.*

⁴⁴ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

⁴⁵ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁴⁶ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), <https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf>.

⁴⁷ *Id.*

⁴⁸ See U.S. Census Bureau, *2017 NAICS Definition, "517311 Wired Telecommunications Carriers,"* <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

⁴⁹ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

1,500 or fewer employees as small.⁵⁰ U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.⁵¹ Of this number, 2,964 firms operated with fewer than 250 employees.⁵² Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 1,212 providers that reported they were incumbent local exchange service providers.⁵³ Of these providers, the Commission estimates that 916 providers have 1,500 or fewer employees.⁵⁴ Consequently, using the SBA's small business size standard, the Commission estimates that the majority of incumbent local exchange carriers can be considered small entities.

13. *Competitive Local Exchange Carriers (LECs).* Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. Providers of these services include several types of competitive local exchange service providers.⁵⁵ Wired Telecommunications Carriers⁵⁶ is the closest industry with a SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁵⁷ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.⁵⁸ Of this number, 2,964 firms operated with fewer than 250 employees.⁵⁹ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 3,378 providers that reported they were competitive local service providers.⁶⁰ Of these providers, the Commission estimates that 3,230 providers have 1,500 or fewer employees.⁶¹ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

⁵⁰ *Id.*

⁵¹ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

⁵² *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁵³ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), <https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf>.

⁵⁴ *Id.*

⁵⁵ Competitive Local Exchange Service Providers include the following types of providers: Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, Local Resellers, and Other Local Service Providers.

⁵⁶ See U.S. Census Bureau, *2017 NAICS Definition, "517311 Wired Telecommunications Carriers,"* <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

⁵⁷ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

⁵⁸ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

⁵⁹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁶⁰ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), <https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf>.

⁶¹ *Id.*

14. *Interexchange Carriers (IXCs)*. Neither the Commission nor the SBA have developed a small business size standard specifically for Interexchange Carriers. Wired Telecommunications Carriers⁶² is the closest industry with a SBA small business size standard.⁶³ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁶⁴ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.⁶⁵ Of this number, 2,964 firms operated with fewer than 250 employees.⁶⁶ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 127 providers that reported they were engaged in the provision of interexchange services. Of these providers, the Commission estimates that 109 providers have 1,500 or fewer employees.⁶⁷ Consequently, using the SBA's small business size standard, the Commission estimates that the majority of providers in this industry can be considered small entities.

15. *Cable System Operators (Telecom Act Standard)*. The Communications Act of 1934, as amended, contains a size standard for a "small cable operator," 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."⁶⁸ For purposes of the Telecom Act Standard, the Commission determined that a cable system operator that serves fewer than 498,000 subscribers, either directly or through affiliates, will meet the definition of a small cable operator.⁶⁹ Based on industry data, only six cable system operators have more than 498,000 subscribers.⁷⁰ Accordingly, the Commission estimates that the majority of cable system operators are small under this size standard. We note however, that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million.⁷¹ Therefore, 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.

⁶² See U.S. Census Bureau, *2017 NAICS Definition, "517311 Wired Telecommunications Carriers,"* <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

⁶³ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

⁶⁴ *Id.*

⁶⁵ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFI, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFI&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

⁶⁶ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁶⁷ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), <https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf>.

⁶⁸ 47 U.S.C. § 543(m)(2).

⁶⁹ *FCC Announces Updated Subscriber Threshold for the Definition of Small Cable Operator*, Public Notice, DA 23-906 (MB 2023) (2023 Subscriber Threshold PN). In this Public Notice, the Commission determined that there were approximately 49.8 million cable subscribers in the United States at that time using the most reliable source publicly available. *Id.* This threshold will remain in effect until the Commission issues a superseding Public Notice. See 47 CFR § 76.901(e)(1).

⁷⁰ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 06/23Q* (last visited Sept. 27, 2023); S&P Global Market Intelligence, *Multichannel Video Subscriptions, Top 10* (April 2022).

⁷¹ 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 § 76.901(e) of the Commission's rules. See 47 CFR § 76.910(b).

16. *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. Wired Telecommunications Carriers⁷² is the closest industry with a SBA small business size standard.⁷³ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁷⁴ U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.⁷⁵ Of this number, 2,964 firms operated with fewer than 250 employees.⁷⁶ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 90 providers that reported they were engaged in the provision of other toll services.⁷⁷ Of these providers, the Commission estimates that 87 providers have 1,500 or fewer employees.⁷⁸ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

2. Wireless Carriers

17. *Wireless Telecommunications Carriers (except Satellite).* This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves.⁷⁹ 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.⁸⁰ The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees.⁸¹ U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year.⁸² Of that number, 2,837 firms employed fewer than 250 employees.⁸³ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 594 providers that reported they were engaged in the provision of

⁷² See U.S. Census Bureau, *2017 NAICS Definition, "517311 Wired Telecommunications Carriers,"* <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

⁷³ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

⁷⁴ *Id.*

⁷⁵ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPfirm, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPfirm&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

⁷⁶ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁷⁷ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), <https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf>. <https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf>

⁷⁸ *Id.*

⁷⁹ See U.S. Census Bureau, *2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite),"* <https://www.census.gov/naics/?input=517312&year=2017&details=517312>.

⁸⁰ *Id.*

⁸¹ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁸² See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPfirm, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPfirm&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

⁸³ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

wireless services.⁸⁴ Of these providers, the Commission estimates that 511 providers have 1,500 or fewer employees.⁸⁵ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

18. *Satellite Telecommunications.* This industry comprises firms “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.”⁸⁶ Satellite telecommunications service providers include satellite and earth station operators. The SBA small business size standard for this industry classifies a business with \$44 million or less in annual receipts as small.⁸⁷ U.S. Census Bureau data for 2017 show that 275 firms in this industry operated for the entire year.⁸⁸ Of this number, 242 firms had revenue of less than \$25 million.⁸⁹ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 65 providers that reported they were engaged in the provision of satellite telecommunications services.⁹⁰ Of these providers, the Commission estimates that approximately 42 providers have 1,500 or fewer employees.⁹¹ Consequently, using the SBA's small business size standard, a little more than half of these providers can be considered small entities.

3. Resellers

19. *Local Resellers.* Neither the Commission nor the SBA have developed a small business size standard specifically for Local Resellers. Telecommunications Resellers is the closest industry with a SBA small business size standard.⁹² 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.⁹³ Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure.⁹⁴ Mobile virtual network operators (MVNOs) are included in this industry.⁹⁵ The SBA small business size standard for Telecommunications Resellers

⁸⁴ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), <https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf>.

⁸⁵ *Id.*

⁸⁶ See U.S. Census Bureau, 2017 NAICS Definition, “517410 Satellite Telecommunications,” <https://www.census.gov/naics/?input=517410&year=2017&details=517410>.

⁸⁷ See 13 CFR § 121.201, NAICS Code 517410.

⁸⁸ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 517410, <https://data.census.gov/cedsci/table?y=2017&n=517410&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

⁸⁹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

⁹⁰ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), <https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf>.

⁹¹ *Id.*

⁹² See U.S. Census Bureau, 2017 NAICS Definition, “517911 Telecommunications Resellers,” <https://www.census.gov/naics/?input=517911&year=2017&details=517911>.

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ *Id.*

classifies a business as small if it has 1,500 or fewer employees.⁹⁶ U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale services for the entire year.⁹⁷ Of that number, 1,375 firms operated with fewer than 250 employees.⁹⁸ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 207 providers that reported they were engaged in the provision of local resale services.⁹⁹ Of these providers, the Commission estimates that 202 providers have 1,500 or fewer employees.¹⁰⁰ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

20. *Toll Resellers.* Neither the Commission nor the SBA have developed a small business size standard specifically for Toll Resellers. Telecommunications Resellers¹⁰¹ is the closest industry with a SBA small business size standard. 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.¹⁰² Mobile virtual network operators (MVNOs) are included in this industry.¹⁰³ The SBA small business size standard for Telecommunications Resellers classifies a business as small if it has 1,500 or fewer employees.¹⁰⁴ U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale services for the entire year.¹⁰⁵ Of that number, 1,375 firms operated with fewer than 250 employees.¹⁰⁶ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 457 providers that reported they were engaged in the provision of toll services.¹⁰⁷ Of these providers, the Commission estimates that 438 providers have 1,500 or fewer employees.¹⁰⁸ Consequently, using the SBA's small

⁹⁶ See 13 CFR § 121.201, NAICS Code 517911 (as of 10/1/22, NAICS Code 517121).

⁹⁷ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPfirm, NAICS Code 517911, <https://data.census.gov/cedsci/table?y=2017&n=517911&tid=ECNSIZE2017.EC1700SIZEEMPfirm&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

⁹⁸ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁹⁹ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), <https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf>.

¹⁰⁰ *Id.*

¹⁰¹ See U.S. Census Bureau, *2017 NAICS Definition*, "517911 Telecommunications Resellers," <https://www.census.gov/naics/?input=517911&year=2017&details=517911>.

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ See 13 CFR § 121.201, NAICS Code 517911 (as of 10/1/22, NAICS Code 517121).

¹⁰⁵ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPfirm, NAICS Code 517911, <https://data.census.gov/cedsci/table?y=2017&n=517911&tid=ECNSIZE2017.EC1700SIZEEMPfirm&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

¹⁰⁶ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

¹⁰⁷ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), <https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf>. <https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf>

¹⁰⁸ *Id.*

business size standard, most of these providers can be considered small entities.

21. *Prepaid Calling Card Providers.* Neither the Commission nor the SBA has developed a small business size standard specifically for prepaid calling card providers. Telecommunications Resellers¹⁰⁹ is the closest industry with a SBA small business size standard. 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.¹¹⁰ Mobile virtual network operators (MVNOs) are included in this industry.¹¹¹ The SBA small business size standard for Telecommunications Resellers classifies a business as small if it has 1,500 or fewer employees.¹¹² U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale services for the entire year.¹¹³ Of that number, 1,375 firms operated with fewer than 250 employees.¹¹⁴ Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 62 providers that reported they were engaged in the provision of prepaid card services.¹¹⁵ Of these providers, the Commission estimates that 61 providers have 1,500 or fewer employees.¹¹⁶ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

4. Other Entities

22. *All Other Telecommunications.* This industry is comprised of establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation.¹¹⁷ 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.¹¹⁸ Providers of Internet services (e.g. dial-up ISPs) or Voice over Internet Protocol (VoIP) services, via client-supplied telecommunications connections are also included in this industry.¹¹⁹ The SBA small business size standard for this industry classifies firms with annual receipts of \$40 million

¹⁰⁹ See U.S. Census Bureau, *2017 NAICS Definition*, “517911 Telecommunications Resellers,” <https://www.census.gov/naics/?input=517911&year=2017&details=517911>.

¹¹⁰ *Id.*

¹¹¹ *Id.*

¹¹² See 13 CFR § 121.201, NAICS Code 517911 (as of 10/1/22, NAICS Code 517121).

¹¹³ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFI, NAICS Code 517911, <https://data.census.gov/cedsci/table?y=2017&n=517911&tid=ECNSIZE2017.EC1700SIZEEMPFI&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

¹¹⁴ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

¹¹⁵ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2022), <https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf>, <https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf>

¹¹⁶ *Id.*

¹¹⁷ See U.S. Census Bureau, *2017 NAICS Definition*, “517919 All Other Telecommunications,” <https://www.census.gov/naics/?input=517919&year=2017&details=517919>.

¹¹⁸ *Id.*

¹¹⁹ *Id.*

or less as small.¹²⁰ U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year.¹²¹ Of those firms, 1,039 had revenue of less than \$25 million.¹²² Based on this data, the Commission estimates that the majority of “All Other Telecommunications” firms can be considered small.

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

23. The *Report and Order* does not impose new or additional reporting or recordkeeping on small or other impacted entities. The *Report and Order* does require voice providers to meet certain obligations. These changes affect small and large companies, and apply to all the classes of regulated entities identified above in section D. The Commission allows providers 12 months after publication of the *Report and Order* in the Federal Register to comply with these requirements. First, all voice service providers, rather than only originating and gateway providers, must block calls purporting to originate from numbers on a reasonable DNO list. Voice service providers are granted flexibility to determine the appropriate list, based on the needs and capabilities of their networks. Additionally, voice service providers must use SIP code 603+ to provide immediate notification to callers when calls are blocked based on reasonable analytics.

24. The rules adopted in the *Report and Order* will result in compliance costs for small and other entities, and may require small entities to hire professionals to comply. While the record does not contain specific cost data estimates or analysis, the Commission believes that the burdens associated with the rules it adopts today will be modest. The requirement to block based on a reasonable DNO list is a modest extension of an existing rule. Similarly, implementation of SIP code 603+ is unlikely to impose significant new costs as it can be implemented as part of routine maintenance.

25. Although small and other entities will incur costs to implement the requirements of the *Report and Order*, based on the record the benefit of these requirements will exceed their costs. The Commission notes in the *Report and Order* that the industry estimates that consumers receive 13 spam or fraud calls a month, and on average those scammed by phone lose \$865.¹²³ Moreover, based on complaint data from the Federal Trade Commission (FTC) the median loss for fraud by phone was \$1480.¹²⁴ Further, the FTC reports a total of \$850 million lost to fraud by phone call.¹²⁵

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

26. The RFA requires an agency to provide, “a description of the steps the agency has taken to minimize the significant economic impact on small entities . . . including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the

¹²⁰ See 13 CFR § 121.201, NAICS Code 517919 (as of 10/1/22, NAICS Code 517810).

¹²¹ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEREVFIRM, NAICS Code 517919, <https://data.census.gov/cedsci/table?y=2017&n=517919&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false>. At this time, the 2022 Economic Census data is not available.

¹²² *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

¹²³ Hiya, *State of the Call 2024* at 21 (2024), <https://www.hiya.com/state-of-the-call>.

¹²⁴ This is based on complaint data from 2023. FTC, *Consumer Sentinel Network Data Book 2023* at 12 (2024), https://www.ftc.gov/system/files/ftc_gov/pdf/CSN-Annual-Data-Book-2023.pdf.

¹²⁵ *Id.*

other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.”¹²⁶

27. In the *Report and Order*, the Commission considered various alternatives and took the steps we discuss below to minimize the economic impact for small entities, and address concerns small entities raised in comments. We declined to adopt additional protections for lawful callers. The Commission extended the existing rule requiring blocking of calls based on a reasonable DNO list to all voice providers, rather than only originating and gateway providers, consistent with small and other providers that broadly support this proposed extension.¹²⁷ We declined to expand the scope of the list, or to mandate the use of a single uniform list, in part to ensure that providers with more limited resources and older equipment, which would include many smaller providers, are able to adopt lists that are appropriate for their networks and should address the concerns raised by some small entity commenters.¹²⁸ We also considered but declined to adopt a safe harbor from liability for providers based on use of a reasonable DNO list requested by small entity advocates¹²⁹ since the Commission is not aware of what liability a provider would face for blocking based on a such a list, or of any provider encountering any such liability since the Commission authorized this type of blocking in 2017. The Commission likewise declined to adopt a reasonable analytics-based blocking mandate, reducing the burden on smaller providers which was a concern raised in comments.¹³⁰

28. In addition to the blocking requirements, the *Report and Order* adopted a single SIP code for notification to callers when calls are blocked based on reasonable analytics, SIP code 603+. This modifies the Commission’s existing rule allowing for use of one of a list of several codes,¹³¹ which has always been intended as a temporary measure.¹³² Support both for,¹³³ and against¹³⁴ the use of SIP code 603+ were in comments filed by small entities. Based on the record, SIP code 603+ which builds on the existing SIP code 603 will provide more information to providers more quickly than SIP code 608, builds on the existing SIP code 603, and appears to be substantially less technically complex to implement making it the more appropriate choice for the Commission. As we discuss in the *Report and Order*, whether the Commission chose SIP code 603+ or 608, small and other callers would be required to make modifications to comply. To ensure that small and other providers have adequate time to implement the *Report and Order* requirements, we modified and expanded the implementation deadline we proposed in the *Call Blocking NPRM*. All providers have 12 months from publication of the *Report and Order* in the Federal Register to make the transition, which addresses small provider concerns about the implementation timeframe and requests for additional time.¹³⁵ The *Report and Order* also allows for use of an ISDN User Part (ISUP) code where the network is non-IP.

¹²⁶ 5 U.S.C. § 604(a)(6).

¹²⁷ Cloud Communications Alliance Call Blocking Comments at 2, 10-11.

¹²⁸ Cloud Communications Alliance Call Blocking Comments at 2; ACA Connects Reply Comments at 2.

¹²⁹ Cloud Communications Alliance Call Blocking Comments at 10-11.

¹³⁰ ACA Connects Reply Comments at 2-3; Cloud Communications Alliance Call Blocking Comments at 2, 3-5.

¹³¹ 47 CFR § 64.1200(k)(9).

¹³² *Advanced Methods to Target and Eliminate Unlawful Robocalls*, CG Docket No. 17-59, Order on Reconsideration, Sixth Further Notice of Proposed Rulemaking, and Waiver Order, 36 FCC Rcd 17962, 17970, para. 18 (2021) (“We, therefore, find SIP Code 603 to be a natural and useful interim measure as industry moves to full implementation of SIP Codes 607 and 608.”).

¹³³ NTCA Comments at 2.

¹³⁴ Cloud Communications Alliance Call Blocking Comments at 13-15.

¹³⁵ ACA Connects Comments at 2; Cloud Communications Alliance Call Blocking Comments at 14-15; NTCA at 6; RWA at 3-4.

G. Report to Congress

29. The Commission will send a copy of the *Report and Order*, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act.¹³⁶ In addition, the Commission will send a copy of the *Report and Order*, including this FRFA, to the Chief Counsel for Advocacy of the SBA. The *Report and Order* and FRFA (or summaries thereof) will also be published in the Federal Register.¹³⁷

¹³⁶ 5 U.S.C. § 801(a)(1)(A).

¹³⁷ *Id.* § 604(b).

**STATEMENT OF
CHAIRMAN BRENDAN CARR**

Re: *Strengthening Call Blocking Rules Eighth Report And Order*, Report and Order, CG Docket No. 17-59 (Feb. 2025).

Illegal robocalls are a nuisance that annoy far too many Americans far too often. And the Commission is going to continue its work to accelerate our crackdown on the scourge of illegal robocalls. After all, Americans are just fed up. They're tired of unknown numbers calling at all hours or spoofed numbers that appear to come from a trusted source. And a lot of people are just giving up and never answering their phones.

While there is no silver bullet, the FCC needs to keep pushing forward on multiple fronts. We do so today by taking two important steps. Both of these actions are designed to stop illegal calls before they ever reach consumers.

First, the Order will ensure that reasonable Do-Not-Originate lists are being used by all U.S. providers in the call path. Before today, the Commission only required gateway voice providers to block calls using a Do-Not-Originate list. After this item, all providers in the call path will be required to block using a reasonable list. Second, the item designates an exclusive code to notify callers when their calls are blocked, so they are empowered to address erroneous call blocking. These actions expand the reach of Do-Not-Originate lists and strengthen our call blocking rules.

I'd like to thank Eduard Bartholme, Jerusha Burnett, Zac Champ, Aaron Garza, Wes Platt, and Mark Stone for their work on this item as well as staff from the Enforcement Bureau, Wireline Competition Bureau, Office of Economics and Analytics, and the Office of General Counsel.

**STATEMENT OF
COMMISSIONER GEOFFREY STARKS**

Re: *Strengthening Call Blocking Rules Eighth Report And Order*, Report and Order, CG Docket No. 17-59 (Feb. 2025).

Every day, millions of Americans are subject to unwanted or illegal calls and texts. Many of these are not just bothersome, they're fraudulent. Based on consumer reports, the FTC found that in 2023, individuals were scammed out of a median of \$1,480 per call from a fraudster, and \$1,000 per text.¹ All told, Americans lose over a billion dollars a year to these deceptive communications.

This is why the FCC needs to do everything in its power to close the vectors for fraud in our networks. On that account, I would have hoped that this item would address robotexts, and go further to block robocalls. In fact, I approved an earlier version of this item set forth by Chairwoman Rosenworcel that would have done both of these critical things. Then-Commissioner Carr and Commissioner Simington opposed the item late last year, and it was ultimately scrapped – until today.

Because I supported a more robust version, I approve this order as well. But I believe the Commission has additional power it does not use today to stem the tide of robocalls and robotexts. I am hopeful that we will resume using all of the tools in our legal toolbox to combat this scourge.

¹ FTC, Consumer Sentinel Network Data Book 2023 at 12 (2024), https://www.ftc.gov/system/files/ftc_gov/pdf/CSN-Annual-Data-Book-2023.pdf.