

Report on Robocalls
CG Docket No. 17-59

A Report of the Consumer and Governmental Affairs Bureau
Federal Communications Commission
February 2019

I. EXECUTIVE SUMMARY

1. The Consumer and Governmental Affairs Bureau (Bureau) of the Federal Communications Commission (Commission) has prepared this *Staff Report (Report)* on illegal robocalls in consultation with the Federal Trade Commission's (FTC's) Bureau of Consumer Protection. This *Report* fulfills a Commission directive to describe "both the progress made by industry, government, and consumers in combatting illegal robocalls, and the remaining challenges to continuing these important efforts."¹ The Bureau released a *Public Notice* requesting data and information on call volumes and trends in robocalls, on enforcement and remaining challenges, and on the progress and effect of robocall initiatives among government, industry, and consumers.² We received more than 40 comments from voice service providers, trade associations, analytics companies, and consumers.

2. Until recently, there were limited effective ways to stem the tide of unwanted robocalls. Over the last two years, the Commission has taken a new approach to the problem: stopping unwanted calls before they even reach consumers' phones. Since 2017, the Commission has enabled voice service providers to block certain obviously-spoofed calls, authorized the creation of a reassigned numbers database so consumers do not get calls intended for others, and pushed the industry to implement Caller ID authentication, a key to stopping spoofing. The Commission has also taken aggressive enforcement action against pernicious robocallers.

3. The *Report* describes those initiatives and progress toward protecting consumers from illegal robocalls by industry, government, and others. It also examines the state of robocalling in the United States by providing an overview of robocall regulations and types of robocalls, data on robocalls, and trends in call volume and consumer complaints. Finally, the *Report* discusses the challenges that remain.

II. TYPES OF ROBOCALLS AND ROBOCALLERS

4. Consumers frequently associate "robocalls" with annoying calls and, indeed, unwanted calls are a perennial top consumer complaint. Accordingly, fighting illegal robocalls is a priority for both the Commission and the FTC. And yet the term "robocall" covers a wide array of calls, many of which are legal, such as school closing announcements and prescription or medical appointment reminders.³ We thus caution that reports about and data related to robocalls, without detailed analysis, can blur the lines between legal robocalls, both welcome and unwelcome, and illegal robocalls.

A. Robocall Regulations

5. The Commission and the FTC implement and enforce federal rules related to Caller ID spoofing (which often accompanies and facilitates illegal robocalling), telemarketing practices, and calls made with an autodialer or an artificial or prerecorded voice.⁴ We summarize these rules in the table

¹*Advanced Methods to Target and Eliminate Unlawful Robocalls*, Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd 9706, 9727, para. 63 (2017) (*Call Blocking Order*). The Commission directed staff to submit this report to the Commission one year from the order's publication. *Id.* That date, January 12, fell during the partial government shutdown, which affected both the Commission and the FTC. Staff submitted this report as soon as practicable after the agencies resumed their operations.

² *Advanced Methods to Target and Eliminate Unlawful Robocalls*, Public Notice, DA 18-638 (CGB June 20, 2018).

³ The term "robocall" may have a different meaning in different contexts. *See, e.g.*, Noble System Comments at 1-3; ACA International Reply Comments at 3-4.

⁴ Spoofing occurs when the caller alters or manipulates the Caller ID information so that the name or number displayed to the called party does not match that of the actual subscriber or the actual originating number. We do not address state laws herein.

below. Beyond these, industry-specific laws can apply to specific calls, such as the Fair Debt Collection Practices Act.⁵

Selected Federal Robocalls Laws and Rules

Law/Rules	Enforcing Agency	Types of Calls Covered
Telephone Consumer Protection Act (TCPA) and FCC Rules ⁶	FCC	Restricts certain calls made using an artificial or prerecorded voice to residential lines; certain calls made using an artificial or prerecorded voice or an automatic telephone dialing system to wireless telephone numbers; and certain telemarketing calls. ⁷
2009 Truth in Caller ID Act (TICIDA) ⁸	FCC	Prohibition on the knowing transmission of misleading or inaccurate Caller ID information “with the intent to defraud, cause harm, or wrongfully obtain anything of value.”
Do Not Call Implementation Act (DNCIA) ⁹	FTC, FCC	Authorizes the FTC to collect fees for the implementation and enforcement of a Do Not Call Registry. Telemarketers must consult the National Do Not Call Registry before calling. ¹⁰ Requires that “the Federal Communications Commission shall consult and coordinate with the Federal Trade Commission to maximize consistency with the rule promulgated by the Federal Trade Commission.” ¹¹
Telemarketing Consumer Fraud and Abuse Prevention Act (Telemarketing Act) and Telemarketing Sales Rule ¹²	FTC	Prohibits deceptive and abusive telemarketing acts or practices.

B. Robocallers

6. Many legitimate businesses and institutions use robocalls to convey information their customers want in a cost-effective manner. Robocalls can reach large numbers of people quickly, making them particularly appealing for conveying time-sensitive information to large groups. For example, pharmacies notify patients when their medications need to be refilled; schools notify parents of delays or closings; utility companies notify customers of service interruptions; and banks notify customers of possible fraudulent activity on their accounts. The same characteristics that make robocalls appealing to businesses also make them appealing to scammers. Those seeking to defraud consumers can do so

⁵ 15 U.S.C. §§ 1692-1692p.

⁶ The TCPA is codified at 47 U.S.C. § 227. The Commission’s implementing rules are codified at 47 CFR § 64.1200.

⁷ 47 U.S.C. § 227(b)(1)(A)-(B), (c); 47 CFR § 64.1200 (a)(1)-(3), (c)(2), (d).

⁸ The Truth in Caller ID Act is codified at 47 U.S.C. § 227(e).

⁹ The Do Not Call Implementation Act is codified at 15 U.S.C. § 6101.

¹⁰ Consumers may add their residential or personal wireless phone numbers to the National Do Not Call Registry to opt out of telemarketing calls. As of October 1, 2003, it became illegal for most telemarketers or sellers to call a number listed on the National Do Not Call Registry. Federal Trade Commission, National Do Not Call Registry, <https://www.donotcall.gov/faq/faqbusiness.aspx> (last visited Feb. 5, 2019).

¹¹ Do Not Call Implementation Act, 117 Stat. 557 § 3.

¹² The Telemarketing Act is codified at 15 U.S.C. §§ 6101-6108. The body of regulations adopted by the FTC to implement the Telemarketing Act is known as the Telemarketing Sales Rule. 16 CFR § 310.

efficiently and cost-effectively using robocalls, maximizing their ill-gotten gains.¹³ Unlike legitimate callers that wish to adhere to the TCPA and other robocalls laws, these callers may not be deterred by the prospect of enforcement and may be especially difficult to locate. As a result, part of the Commission's recent work has focused on stopping illegal robocalls before they reach consumers' phones.

III. STATE OF ROBOCALLING

7. Available data indicate that robocall volume remains high and may be increasing. The data generally combine all types of robocalls—illegal and legal, unwanted and wanted. Further complicating any analysis is that various entities track information differently, yielding results that are not directly comparable.¹⁴ The complaint data the Commission and the FTC gather, however, provide valuable indicators of trends in illegal calls.

8. *FCC.* The Commission receives thousands of informal consumer complaints regarding various telecommunications issues each week and makes portions of that data available online at the Consumer Complaint Data Center and on the unwanted calls data page.¹⁵ The Commission uses complaint data to inform policy and enforcement while also making it available for third parties to improve call blocking and filtering tools.¹⁶

9. Our data show that the number of complaints about unwanted calls, including robocalls and telemarketing calls, has fluctuated somewhat over the past few years, with 172,000 complaints in calendar year 2015, 150,000 complaints in 2016, 185,000 complaints in 2017, and 232,000 complaints in 2018.¹⁷ While the volume of complaints may be influenced by the volume of robocalls, other factors may be at play. For example, complaints might increase following consumer outreach regarding how to file a complaint or after news media coverage of a particular scam. Additionally, the number of complaints received does not equal the number of illegal robocalls placed. Many illegal robocalls likely go unreported, while consumers may report calls and file complaints about calls that are lawful, but are simply unwanted.¹⁸

¹³ Callers can impersonate legitimate organizations such as the Internal Revenue Service, a local utility company, or the Chinese Embassy, and demand immediate payment of a fictitious debt. *See* IRS, IRS Repeats Warning about Phone Scams (Aug. 13, 2014), <https://www.irs.gov/newsroom/irs-repeats-warning-about-phone-scams>; Iowa Department of Justice Office of the Attorney General, Utility Phone Scams, <https://www.iowaattorneygeneral.gov/for-consumers/general-consumer-information/phone-scams/utility-phone-scams> (last visited Feb. 5, 2019); Hamza Shaban, Those Chinese-language robocalls are a scam to get your bank information, officials say (June 25, 2018), <https://www.sfgate.com/news/article/Those-Chinese-language-robocalls-are-a-scam-to-13024843.php>. Callers can also pretend to be relatives held in foreign prisons or involved in an accident, and demand money to help the relative. *See* Richard Stolley, AARP Bulletin, How to Beat the Grandparent Scam, <https://www.aarp.org/money/scams-fraud/info-2016/how-to-beat-grandparent-scam.html> (last visited Feb. 5, 2019).

¹⁴ CTIA Comments at 11; Sirius XM Reply Comments at 3-5.

¹⁵ FCC, Consumer Complaint Data Center, <https://www.fcc.gov/consumer-help-center-data> (last visited Feb. 5, 2019); FCC, Consumer Complaints Data - Unwanted Calls, <https://opendata.fcc.gov/Consumer/Consumer-Complaints-Data-Unwanted-Calls/vakf-fz8e> (last visited Feb. 5, 2019).

¹⁶ First Orion, Hiya, TNS, and others use the data from the FCC and the FTC in their call analytics. First Orion Comments at 3; TNS Comments at 4; Hiya Reply Comments at 4.

¹⁷ FCC, Consumer Complaint Data Center, <https://www.fcc.gov/consumer-help-center-data> (last visited Feb. 5, 2019).

¹⁸ CTIA Comments at 12.

10. *FTC.* The FTC also tracks consumer complaint data and makes the information available on its Do Not Call (DNC) Reported Calls Data page.¹⁹ Like the Commission data, the FTC data are based on consumer complaints, and the information is not verified. The FTC also provides Congress with a Biennial Report on the operation of the National Do Not Call Registry.²⁰ Further, the FTC administers the Consumer Sentinel Network (CSN), a secure online database of millions of consumer complaints available only to entities that enforce relevant laws, including the Commission and state agencies.²¹ Its scope is broad, and it includes all consumer fraud complaints, not just telephone-based fraud.²²

11. FTC data show the number of complaints increased through 2017 and decreased slightly in 2018. Do Not Call complaints increased from 3,578,710 in fiscal year 2015 (2,125,968 of which were classified as robocalls), to 5,340,234 in 2016 (3,401,614 of which were classified as robocalls), and 7,157,370 in 2017 (4,501,967 of which were classified as robocalls).²³ In fiscal year 2018, FTC data show a decrease to 5,780,172 Do Not Call complaints (3,790,614 of which were classified as robocalls).²⁴ The Consumer Sentinel Network data show an increase in consumer fraud complaints through 2016 and a decrease in 2017, for fraud conducted over the telephone, with 386,823 complaints in 2014, 485,570 in 2015, and 543,088 in 2016.²⁵ In 2017, Consumer Sentinel Network shows a slight decrease to 509,142 consumer fraud complaints where the fraud occurred over the telephone.²⁶

12. *Non-Government Sources.* Third parties also track and publish robocall data, including YouMail, Hiya, and First Orion.²⁷ They analyze the calls blocked by their tools and publish information

¹⁹ FTC, Do Not Call Reported Calls Data, <https://www.ftc.gov/site-information/open-government/data-sets/do-not-call-data> (last visited Feb. 5, 2019).

²⁰ Federal Trade Commission, Biennial Report to Congress Under the Do Not Call Registry Fee Extension Act of 2007 (2017), https://www.ftc.gov/system/files/documents/reports/biennial-report-congress-under-do-not-call-registry-fee-extension-act-2007-operation-national-do-not/biennial_do_not_call_report_fy_2016-2017_0.pdf.

²¹ FTC, Consumer Sentinel Network Reports, <https://www.ftc.gov/enforcement/consumer-sentinel-network/reports> (last visited Feb. 5, 2019).

²² Sentinel includes complaints about: identity theft; Do-Not-Call Registry violations; computers, the internet, and online auctions; telemarketing scams; advance-fee loans and credit scams; immigration services; sweepstakes, lotteries, and prizes; business opportunities and work-at-home schemes; health and weight loss products; and debt collection, credit reports, and financial matters. FTC, Consumer Sentinel Network, <https://www.ftc.gov/enforcement/consumer-sentinel-network> (last visited Feb. 5, 2019).

²³ FTC, Do Not Call Registry Data Book 2017: Complaint Figures for FY 2017, <https://www.ftc.gov/policy/reports/policy-reports/commission-staff-reports/national-do-not-call-registry-data-book-fy-1> (last visited Feb. 4, 2019).

²⁴ FTC, Do Not Call Registry Data Book 2017: Complaint Figures for FY 2018, <https://www.ftc.gov/policy/reports/policy-reports/commission-staff-reports/national-do-not-call-registry-data-book-fy-9> (last visited Feb. 4, 2019).

²⁵ FTC, Consumer Sentinel Network Reports, <https://www.ftc.gov/enforcement/consumer-sentinel-network/reports> (last visited Feb. 5, 2019). In addition to fraud conducted over the telephone, the Consumer Sentinel Network tracks fraud conducted by e-mail, website, consumer-initiated contact, mail, and other means.

²⁶ FTC, Consumer Sentinel Network Data Book 2017 at 12, https://www.ftc.gov/system/files/documents/reports/consumer-sentinel-network-data-book-2017/consumer_sentinel_data_book_2017.pdf (last visited Feb. 4, 2019).

²⁷ YouMail and the other companies extrapolate the data they collect from their user bases to estimate the entire volume of calls in the United States. YouMail, August 2018 Nationwide Robocall Data, <https://robocallindex.com/> (last visited Feb. 4, 2019); Hiya, Robocall Radar, <https://hiya.com/robocall-radar> (last visited Feb. 4, 2019); Press Release, First Orion, Nearly 50% of U.S. Mobile Traffic Will Be Scam Calls by 2019 (Sep. 12, 2018), <https://firstorion.com/nearly-50-of-u-s-mobile-traffic-will-be-scam-calls-by-2019/>.

about call volumes. YouMail estimates the monthly robocall volume in the U.S., as well as in various regions, and highlights the worst offenders. Hiya lists the top area codes that receive robocalls, the calling numbers making the most robocalls, the number of robocalls received in particular cities, and the top call categories of robocalls. First Orion published 2018 Scam Call Trends and Projections in September 2018, in which it combines call patterns and behaviors with other phone number attributes to predict the future volume of fraudulent calls.

13. YouMail shows the estimated national volume of robocalls increasing from 29,082,325,500 in 2016 to 30,507,422,900 in 2017, and to 47,839,232,200 in 2018.²⁸ Hiya estimates 26.3 billion robocalls were made to mobile phones in the United States in 2018, but does not provide trend analysis on its public website. YouMail further reports the number of calls per month, day, hour, second, and per person to illustrate how pervasive robocalls are. For example, in November 2018, YouMail identified 5.1 billion calls placed for the month, 169.6 million calls per day, 7.1 million calls per hour, 2,000 calls per second, and an average of 15.7 calls per person.²⁹

14. These sources do not generally differentiate between legal and illegal calls, wanted and unwanted, but they do offer some description of the calls. For example, over 30% of the calls reported by Hiya are classified as “general spam” and not fraud or other illegal activity, and approximately 20% are “telemarketing.” More than half of the top 20 spam callers identified by YouMail are categorized as debt collection callers. And First Orion projects that 44.6% of calls to mobile phones will be scam calls in 2019, and that neighbor spoofing will increase to the point where nine out of ten scam calls will be from a familiar area code in 2019.³⁰

IV. ROBOCALL INITIATIVES AND PROGRESS

15. When their phone rings, consumers may not have enough information to tell whether the call is wanted, unwanted, or illegal. The phone may display Caller ID and possibly a label from their voice service provider or a third-party application (app).³¹ But Caller ID may be spoofed or blocked, and labelers may not have complete information about the calling party.³² Currently, the only certain way to determine whether a call is wanted or unwanted is to answer it or let it go to voicemail, and hope the caller leaves a message.

²⁸ YouMail, Historical Robocalls By Time, <https://robocallindex.com/history/time> (last visited Feb. 4, 2019).

²⁹ YouMail, August 2018 Nationwide Robocall Data, <https://robocallindex.com/> (last visited Feb. 4, 2019).

³⁰ First Orion, Scam Call Trends and Projections Report (2018), [https://ecfsapi.fcc.gov/file/109272058817712/FirstOrion_Scam_Trends_Report_FINAL%20\(002\)%20\(002\).pdf](https://ecfsapi.fcc.gov/file/109272058817712/FirstOrion_Scam_Trends_Report_FINAL%20(002)%20(002).pdf).

³¹ Providers use calling patterns and analytics to identify calls that are likely to be unwanted. For example, AT&T offers an opt-in service “that automatically blocks fraud calls and labels calls from numbers identified with other suspect or potentially unwanted sources, including telemarketer, suspected spam, and other categories of calls.” AT&T Comments at 2-3. Verizon provides residential customers with a labeling service where “SPAM?” is displayed on the Caller ID “before a caller’s name if the calling number matches certain criteria designed to identify likely spam.” Verizon Comments at 3.

³² Caller ID information is “spoofed” when it is manipulated or altered to display anything other than the originating telephone number. *See Rules and Regulations Implementing the Truth in Caller ID Act of 2009*, Report and Order, 26 FCC Rcd 9114, 9115, para. 1 (2011). Caller ID spoofing is not *per se* unlawful. In fact, there are legitimate reasons for spoofing. For instance, “domestic violence shelters often need to” manipulate Caller ID information and have “important reasons for not revealing the actual number of the shelter.” *Id.* at 9117, para. 9. Doctors “may want to use their cell phones to return” calls to patients, “but choose to transmit their office number rather than their cell phone number as the calling number.” *Id.* at 9117-18, para. 9. However, spoofing with the intent to defraud, cause harm, or wrongfully obtain something of value is illegal.

16. Government, industry, and consumers have been working together to make progress in several areas. While government efforts are directed at stopping illegal calls, consumers may choose to use opt-in third-party apps that can address unwanted calls as well as illegal calls.

A. Blocking Initiatives

17. Historically, the Commission has allowed voice service providers to block calls only in rare circumstances.³³ In November 2017, however, the Commission identified certain, well-defined circumstances in which they may block calls.³⁴ In addition, the Commission has clarified that nothing in the Communications Act or our rules or orders prohibits consumers from using third-party blocking apps.³⁵

1. Voice Service Provider Blocking

18. In a November 2017 order, the Commission enabled voice service providers to block certain types of calls without violating call completion rules.³⁶ Specifically, the Commission authorized providers to block Do Not Originate (DNO) calls as well as calls where the number purporting to originate the call is invalid, unallocated, or unused.³⁷ Industry first tested the blocking of calls spoofing specific IRS numbers in a small Do Not Originate trial, which was followed by a significant drop in IRS scam calls.³⁸ Now the industry reports widespread implementation of Do Not Originate blocking, and several voice service providers have implemented or are implementing blocking of invalid, unallocated, and unused numbers.³⁹ In addition, in December 2018, the Commission adopted a *Declaratory Ruling* making it clear that wireless providers are authorized to take measures to stop unwanted text messaging through robotext-blocking, anti-spoofing measures, and other anti-spam features.⁴⁰

³³ The Commission has previously found call blocking, with limited exceptions, is an unjust and unreasonable practice under section 201(b) of the Act. *See Blocking Interstate Traffic in Iowa*, Memorandum Opinion and Order, 2 FCC Rcd 2692 (1987); *Access Charge Reform*, CC Docket No. 96-262, Seventh Report and Order and Further Notice of Proposed Rulemaking, 16 FCC Rcd 9923, 9932-33, para. 24 (2001); *Connect America Fund, A National Broadband Plan for Our Future, Establishing Just and Reasonable Rates for Local Exchange Carriers, High-Cost Universal Service Support, Developing a Unified Intercarrier Compensation Regime, Federal-State Joint Board on Universal Service, Lifeline and Link-Up, Universal Service Reform-Mobility Fund*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17903, para. 734 (2011); *Rural Call Completion*, WC Docket No. 13-39, Notice of Proposed Rulemaking, 28 FCC Rcd 1569, 1572-73, paras. 7-11 (2013); *but see Total Communications Services, Inc., and Atlas Tel. co., Inc., v. AT&T*, Memorandum Opinion and Order, 16 FCC Rcd 5726 (2001) (finding that the Act did not prohibit a carrier from blocking calls from its customers to a sham entity designed to impose increased access charges).

³⁴ *Call Blocking Order*, 32 FCC Rcd at 9706, para. 1.

³⁵ *Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991*, Declaratory Ruling and Order, 30 FCC Rcd 7961, 8033-38, paras. 152-63 (2015).

³⁶ *Call Blocking Order*, 32 FCC Rcd at 9706, para. 1.

³⁷ Do Not Originate calls are calls made from a number that the subscriber does not use to make outgoing calls and requests that calls purporting to originate from that number be blocked.

³⁸ “The IRS conveyed a 90% reduction in IRS scam call complaints in the last two months, with the largest drop off coinciding with the [Do Not Originate] trial, from a high of 43,000 complaints in late August to only 3,700 complaints in mid-October. . . . One [participant] noted a dramatic reduction in numbers associated with the IRS scam crossing their network from 8,000 per day to 1,000.” Robocall Strike Force, Robocall Strike Force Report at 1 (Oct. 26, 2016), <https://transition.fcc.gov/cgb/Robocall-Strike-Force-Final-Report.pdf>.

³⁹ *See, e.g.*, AT&T Comments at 9; Comcast Comments at 4; Sprint Comments at 5.

⁴⁰ *Regulatory Status of Wireless Messaging Service*, WT Docket No. 08-7, Declaratory Ruling, FCC 18-178 (Dec. 13, 2018).

2. Other Blocking Options

19. Consumers who want to receive fewer robocalls may opt to use third-party apps or other call-blocking tools. There are a variety of blocking tools for different platforms, and the number of available tools is growing.⁴¹ Hundreds of call-blocking apps have been developed for mobile telephones. A wide variety of blocking tools have also been developed for calls placed using Voice-over-Internet-Protocol (VoIP) services. There are options for traditional landline customers as well: AT&T offers branded phones with call-blocking capability at a cost of \$60 to \$120, and Verizon offers a free service that labels robocalls for traditional landline customers.⁴² Consumer groups have called for voice service providers to offer free call-blocking tools to their customers and providers and third-party apps are doing so.⁴³ For example, AT&T offers an app with basic call blocking for mobile phones, and USTelecom asserts that “there are now over 550 [call-blocking] applications available.”⁴⁴

B. Caller ID Authentication

20. One way to help consumers identify scams and verify who is calling is through Caller ID authentication. The benefits of authentication are substantial: consumers and voice service providers will know that callers are who they say they are, thereby reducing the risk of fraud and ensuring that callers can be held accountable for their calls. Authentication has the potential to alleviate harmful forms of spoofing, such as “neighbor spoofing,” where a caller spoofs a number that matches the first three or six digits of the called 10-digit number to suggest that a neighbor or local business is calling and thereby entice the consumer to answer the phone.⁴⁵

21. Industry is working on a system to authenticate Caller ID and eliminate unlawful spoofing by confirming that a call actually comes from the number displayed in the Caller ID.⁴⁶ The Internet Engineering Task Force (IETF), Alliance for Telecommunications Industry Solutions (ATIS), and SIP Forum are involved in the effort along with other industry stakeholders.⁴⁷ IETF’s Secure Telephony Identity Revisited (STIR) working group developed protocols for Caller ID authentication.⁴⁸ ATIS and the SIP Forum built on this work, developing a three-phase approach that includes the development of the Signature-based Handling of Asserted information using toKENs (SHAKEN) framework. SHAKEN and STIR make use of certificates to validate authentication services. The certificate states that the authentication service is who it claims to be, that it is authorized to sign for the

⁴¹ “App platforms have seen a 495% increase in the number of available call-blocking apps between October 2016 and March 2018.” CTIA, Consumer Resources, How to Stop Robocalls, <https://www.ctia.org/consumer-resources/how-to-stop-robocalls/> (last visited Feb. 5, 2019).

⁴² AT&T Comments at 4; Verizon Comments at 2-3.

⁴³ Consumers Union, National Consumer Law Center, and Consumer Federation of America Reply Comments at 4-5.

⁴⁴ See USTelecom Association Comments at 3-4; see also AT&T website, AT&T Mobile Security & Call Protect, <https://www.att.com/features/security-apps.html> (last visited Feb. 5, 2019).

⁴⁵ Hiya Reply Comments at 2.

⁴⁶ See *Call Authentication Trust Anchor*, WC Docket No. 17-97, Notice of Inquiry, 32 FCC Red 5988 (2017) (*Call Authentication Notice*).

⁴⁷ The SIP Forum is an industry association with the goal of advancing the adoption of the session initiation protocol (SIP). See SIP Forum, <https://www.sipforum.org/> (last visited Dec. 6, 2018).

⁴⁸ See generally Secure Telephone Identity Revisited (STIR), IETF, <https://datatracker.ietf.org/wg/stir/about/> (last visited Feb. 5, 2019).

number originating the call, and that its claims about the call it is authenticating can thus be trusted.⁴⁹ SHAKEN/STIR does not authenticate the content of the call, only the identity of the caller.

22. In July 2017, the Commission launched an inquiry on how to build upon and facilitate industry's work on Caller ID authentication.⁵⁰ More recently, in May 2018, the North American Numbering Council (NANC) Call Authentication Trust Anchor Working Group released a report on the selection of a governance authority and timely deployment of SHAKEN/STIR.⁵¹ The report anticipated that the Governance Authority and Policy Administrator would be operational in 2019.⁵² Chairman Pai accepted the recommendations of the Working Group on May 14, 2018, and ATIS announced the launch of the Governance Authority on September 13, 2018.⁵³

23. Chairman Pai sent letters to voice service providers in November 2018, demanding that the industry adopt a robust call authentication system and launch that system no later than 2019.⁵⁴ Specifically, he asked those providers who have not yet established concrete plans to protect their customers by using SHAKEN/STIR to do so without delay. He asked the providers about their specific implementation plans, while thanking those that have already committed to implementation.

24. In their responses to Chairman Pai's letter, voice service providers affirmed their commitment to implementing SHAKEN/STIR and to the Commission's goal of authenticating calls by the end of 2019. Providers state that implementation is complex and most plan to start by authenticating Caller ID within their own network before authenticating across networks.⁵⁵ Respondents also address how they will show the results of the Caller ID authentication to the called party. Some express concern

⁴⁹ When a caller places a call through a service provider under the SHAKEN/STIR model, the originating service provider contacts an authentication service to obtain a private key with which it can sign the call. The originating service provider then uses the key to sign the call with the subscriber's information and the authentication service's certificate. When the terminating service provider receives the call, it sends the identifying information and the certificate to a verification service. The verification service checks with a certificate repository to ensure that the authentication service is authorized and that its certificate is valid. It then uses the public key that corresponds uniquely to the sending authentication service's private key to verify the signed call. Information about whether the call has been verified or if some problem has occurred (*e.g.*, the call did not match the asserted caller's identity, certificates have expired, information was in an improper format, etc.) is then sent to the terminating service provider. *Call Authentication Notice*, 32 FCC Red. at 5991, paras. 7-8.

⁵⁰ See generally *Call Authentication Notice*.

⁵¹ NANC Call Authentication Trust Anchor Working Group, Report on Selection of Governance Authority and Timely Deployment of SHAKEN/STIR (2018), http://www.nanc-chair.org/docs/mtg_docs/May_18_Call_Authentication_Trust_Anchor_NANC_Final_Report.pdf (NANC Report).

⁵² *Id.* at 13.

⁵³ Press Release, Federal Communications Commission, Chairman Pai Welcomes Call Authentication Recommendation from North American Numbering Council (May 14, 2018), https://transition.fcc.gov/Daily_Releases/Daily_Business/2018/db0514/DOC-350690A1.pdf; Letter from Susan Miller, ATIS President and CEO, to Ajit Pai, Chairman, FCC, et al. (Sept. 13, 2018).

⁵⁴ Press Release, FCC, Chairman Pai Sent Letters To Voice Service Providers In November, Demanding That They Move Forward On Caller ID Authentication (Nov. 5, 2018), <https://www.fcc.gov/document/chairman-pai-demands-industry-adopt-protocols-end-illegal-spoofing>.

⁵⁵ See, *e.g.*, AT&T Comments, WC Docket No. 17-97 at 2; Bandwidth Comments, WC Docket No. 17-97, CG Docket No. 17-59 at 1; CenturyLink Comments, WC Docket No. 17-97 at 1-2; Comcast Comments, WC Docket No. 17-97, CG Docket No. 17-59 at 1-3; Cox Comments, WC Docket No. 17-97 at 1-2; Frontier Comments, WC Docket No. 17-97 at 1; Sprint Comments, WC Docket No. 17-97 at 1-3; T-Mobile Comments, WC Docket No. 17-97 at 1; Verizon Comments, WC Docket No. 17-97 at 1-2; Vonage Comments, WC Docket No. 17-97 at 1-3.

that the information might be misleading and that standards should be developed for consistency.⁵⁶ Several also discuss other tools and services they provide to their customers.⁵⁷

C. Enforcement Initiatives

25. Both the Commission and the FTC have taken many enforcement actions against illegal robocallers and illegal Caller ID spoofers over the past several years.

1. FCC Enforcement Actions

26. From 2010 through 2018, the Commission took enforcement actions involving proposed or imposed monetary forfeitures totaling \$245,923,500 against violators or apparent violators of either the Truth in Caller ID Act or the TCPA.⁵⁸ The table below shows more detail about some of the cases and actions taken.⁵⁹ In addition, the Commission's Enforcement Bureau has issued 38 warning citations to inform apparent violators that their prerecorded calls violate the TCPA and that future unlawful robocalling may result in substantial monetary forfeitures.⁶⁰

27. One of the forfeiture cases imposed monetary forfeitures against an individual who was responsible for making more than 96 million illegal spoofed robocalls over a three-month period. The calls falsely claimed to be from well-known travel or hospitality companies such as TripAdvisor, Expedia, Marriott, or Hilton.⁶¹ Another action involved an individual who conducted a large-scale spoofed robocalling campaign that marketed insurance to vulnerable populations.⁶² In both cases, the illegal calls not only disturbed call recipients, but also disrupted an emergency medical paging service. The Enforcement Bureau also imposed a forfeiture penalty against an individual who spoofed calls as part of a personal campaign of harassment and stalking.⁶³ Below is a list of selected Commission enforcement actions.

⁵⁶ See, e.g., AT&T Comments, WC Docket No. 17-97 at 2-3; Bandwidth Comments, WC Docket No. 17-97, CG Docket No. 17-59 at 1-2; Cox Comments, WC Docket No. 17-97 at 2.

⁵⁷ See, e.g., Bandwidth Comments, WC Docket No. 17-97, CG Docket No. 17-59 at 2-3; Comcast Comments, WC Docket No. 17-97, CG Docket No. 17-59 at 4; Frontier Comments, WC Docket No. 17-97 at 2; Google Comments, WC Docket No. 17-97 at 1-2; Sprint Comments, WC Docket No. 17-97 at 3; T-Mobile Comments, WC Docket No. 17-97 at 1-2; Vonage Comments, WC Docket No. 17-97 at 3.

⁵⁸ After November 30, 2018, the dollar amount will increase.

⁵⁹ The FCC provides information about enforcement actions on its website. FCC, *Enforcement Actions*, <https://www.fcc.gov/eb-enf-act#block-menu-block-4> (last visited Feb. 5, 2019).

⁶⁰ Under section 503(b)(5) of the Act, a person who does not hold a license, permit, certificate, or other authorization issued by the Commission, or is not an applicant for the same, may not be issued a Notice of Apparent Liability for Forfeiture unless: (1) that person is first sent a citation of the violation charged; (2) is given an opportunity for a personal interview with an official of the Commission; and (3) subsequently engages in conduct of the type described in such citation. 47 U.S.C. § 503(b)(5). In contrast to the TCPA, the Truth in Caller ID Act only requires that the Commission provide the notice required under section 503(b)(3) of the Act (notice and opportunity for a hearing before the Commission or an administrative law judge) or section 503(b)(4) of the Act (Notice of Apparent Liability for Forfeiture) before assessing a forfeiture for unlawful spoofing. 47 U.S.C. § 227(e)(5)(A).

⁶¹ *Adrian Abramovich, Marketing Strategy Leaders, Inc., and Marketing Leaders, Inc.*, Forfeiture Order, FCC 18-58 (May 10, 2018).

⁶² *Best Insurance Contracts, Inc., and Philip Roesel, dba Wilmington Insurance Quotes*, EB-TCD-16-00023195, Forfeiture Order, (Sep. 26, 2018).

⁶³ *Steven Blumenstock*, Forfeiture Order, 32 FCC Rcd 356 (EB 2017).

Selected FCC Enforcement Actions

Case	Date Released	Brief Description, Including Forfeiture Amount (if applicable)
<i>Adrian Abramovich, Marketing Strategy Leaders, Inc., and Marketing Leaders, Inc.</i> , Forfeiture Order	5/10/2018	Imposes a \$120,000,000 forfeiture penalty on Adrian Abramovich for spoofing Caller ID with illegal robocalls in violation of the Truth in Caller ID Act.
<i>Affordable Enterprises of Arizona, LLC</i> , EB-TCD-17-00024974, Notice of Apparent Liability for Forfeiture	9/26/2018	Proposes a \$37,525,000 forfeiture penalty against Affordable Enterprises of Arizona, LLC for spoofing Caller ID with illegal telemarketing calls in violation of the Truth in Caller ID Act.
<i>Best Insurance Contracts, Inc., and Philip Roesel, dba Wilmington Insurance Quotes</i> , EB-TCD-16-00023195, Forfeiture Order	9/26/2018	Imposes a \$82,106,000 forfeiture penalty against Best Insurance Contracts, Inc., and Philip Roesel for spoofing Caller ID with illegal robocalls in violation of the Truth in Caller ID Act.
<i>Dialing Services, LLC</i> , Forfeiture Order	7/26/2017	Imposes a \$2,880,000 forfeiture penalty against Dialing Services for making illegal prerecorded calls in violation of the TCPA.
<i>Steven Blumenstock</i> , Forfeiture Order	1/13/2017	Imposes a \$25,000 forfeiture penalty against Steven Blumenstock for spoofing Caller ID in violation of the Truth in Caller ID Act.
<i>Travel Club Marketing Inc.</i> , Forfeiture Order	8/11/2015	Imposes a \$2,960,000 forfeiture penalty against Travel Club Marketing for making illegal prerecorded telemarketing calls in violation of the TCPA.
<i>Security First of Alabama, LLC</i> , Forfeiture Order	2/18/2015	Imposes a \$342,000 forfeiture penalty on Security First of Alabama, LLC for making illegal prerecorded telemarketing calls in violation of the TCPA.

2. FTC Enforcement Actions

28. The FTC has brought 140 enforcement actions against companies and telemarketers for abandoned call, robocall and Do Not Call Registry violations. As of December 2018, 121 of these FTC enforcement actions have been resolved, and in those cases the agency has recovered over \$50 million in civil penalties and \$71 million in redress or disgorgement.⁶⁴ In 2017, a federal court found satellite television provider Dish Network liable for millions of calls that violated the FTC’s Telemarketing Sales Rule—including Do Not Call, entity-specific, and abandoned-call violations—the TCPA, and state law.⁶⁵ The \$168 million judgment is the largest civil penalty ever obtained for a violation of the FTC Act.⁶⁶ The FTC vigorously enforces the Telemarketing Sales Rule in federal court.

⁶⁴ FTC, Enforcement of the Do Not Call Registry, <https://www.ftc.gov/news-events/media-resources/do-not-call-registry/enforcement> (last visited Feb. 5, 2019).

⁶⁵ FTC, FTC and DOJ Case Results in Historic Decision Awarding \$280 Million in Civil Penalties against Dish Network and Strong Injunctive Relief for Do Not Call Violations (June 6, 2017), <https://www.ftc.gov/news-events/press-releases/2017/06/ftc-doj-case-results-historic-decision-awarding-280-million-civil>.

⁶⁶ *Id.* The FTC Act is codified at 15 U.S.C. §§ 41-58, as amended. It is the primary statute of the FTC. Under this Act, as amended, the FTC is empowered, among other things, to (a) prevent unfair methods of competition and unfair or deceptive acts or practices in or affecting commerce; (b) seek monetary redress and other relief for conduct injurious to consumers; (c) prescribe rules defining with specificity acts or practices that are unfair or deceptive, and

(continued....)

3. Call Traceback

29. As technology has advanced, the potentially dangerous combination of spoofing and illegal robocalls has become much more pervasive, making illegal robocall campaigns more deceptive, more disruptive, and harder to stop. Caller ID spoofing makes billing name and address searches of a suspected telephone number unusable: the queried information may, for example, identify the actual subscriber of the number—an innocent third party—rather than the person making the call with the spoofed number (*i.e.*, the actual originator).⁶⁷ The call traceback process allows government authorities to identify the origination of many telephone calls or text messages.

30. Call traceback involves using the specific identifying characteristics of a call—date, time, Caller ID number, dialed number—to track the routing of a call from carrier to carrier. Call traceback typically starts with a consumer complaint or a referral from another agency or industry stakeholder. The Bureau then sends a subpoena to the complainant’s carrier asking the carrier to locate the call within its records using the specific identifying characteristics and identify the upstream carrier responsible for sending the call at issue into its network. This process is then repeated with each upstream carrier until the originator is identified. The Commission commends the voice service providers that participate in call traceback, and strongly encourages all voice service providers to participate.⁶⁸

31. In November 2018, Commission staff sent letters to voice service providers calling on them to assist industry efforts to trace scam robocalls that originate on or pass through their networks. In response, many providers affirmed their commitment to participate in call traceback. Five providers that had been identified as uncooperative in traceback have taken steps to participate going forward.⁶⁹

D. Reassigned Numbers Initiatives

32. The Commission has taken steps to address the problem of unwanted calls to reassigned numbers. When a consumer cancels service with a voice provider, the provider may reassign the number to a new consumer. If callers are unaware of the reassignment, they can make calls unwanted by the new consumer and missed by the previous consumer, while wasting the time and effort of the caller. In July 2017, the Commission launched an inquiry into ways to reduce unwanted calls to reassigned numbers.⁷⁰ In March 2018, the Commission followed up with a *Notice of Proposed Rulemaking*, proposing to ensure that one or more databases are available to provide callers with the comprehensive and timely information they need to discover potential number reassignments before making a call.⁷¹ In December 2018, the Commission authorized the creation of a reassigned numbers database to enable callers to verify whether

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establishing requirements designed to prevent such acts or practices; (d) gather and compile information and conduct investigations relating to the organization, business, practices, and management of entities engaged in commerce; and (e) make reports and legislative recommendations to Congress and the public. *See* FTC, *Statutes Enforced or Administered by the Commission*, <https://www.ftc.gov/enforcement/statutes> (last visited Feb. 5, 2019).

⁶⁷ *Affordable Enterprises of Arizona, LLC*, EB-TCD-17-00024974, Notice of Apparent Liability for Forfeiture, FCC 18-135 (Sep. 26, 2018).

⁶⁸ Letter from Rosemary C. Harold, Chief, Enforcement Bureau and Eric Burger, Chief Technology Officer, to Jonathan Spalter, President & CEO, USTelecom - The Broadband Association (Nov. 6, 2018).

⁶⁹ *See, e.g.*, Letter from Pino Bio, President, TouchTone Communications, Inc., to Parul Desai, Federal Communications Commission (Nov. 20, 2018); Email from Andrew DeMattia, Talkie Communications, to Parul Desai, Federal Communications Commission (Nov. 13, 2018); Email from Jon Kaen, CEO, Global Voicecom, Inc., to Parul Desai, Federal Communications Commission (Nov. 16, 2018).

⁷⁰ *Advanced Methods to Target and Eliminate Unlawful Robocalls*, CG Docket No.17-59, Second Notice of Inquiry, 32 FCC Rcd 6007 (2017).

⁷¹ *Advanced Methods to Target and Eliminate Unlawful Robocalls*, CG Docket No. 17-59, Second Further Notice of Proposed Rulemaking, FCC 18-31 (Mar. 22, 2018).

a telephone number has been permanently disconnected, and is therefore eligible for reassignment, before calling that number, thereby helping to protect consumers with reassigned numbers from receiving unwanted robocalls.⁷²

E. Educational Initiatives/Government Outreach

33. The Commission has made combatting unlawful robocalls and malicious Caller ID spoofing its top consumer protection priority. The Commission's Push to Combat Robocalls & Spoofing website affirms its commitment to the issue, describes its actions, and lists consumer tips.⁷³ The Commission also publishes consumer guides on its Stop Unwanted Robocalls and Texts website and its Caller ID Spoofing website.⁷⁴ The websites feature consumer tips, FAQs about robocalls, robotexts, spoofing, political calls and texts, call-blocking resources, and Do Not Call List information. The Commission's Consumer Help Center has additional consumer guides, has a link for consumers to file complaints, and posts information about current scams.⁷⁵ Finally, the Commission Actions on Robocalls, Telemarketing site provides a list of major Commission actions on this topic.⁷⁶

34. Commission staff frequently participate in webinars, tele-town halls, and panel discussions to provide the public with information about illegal robocalling and other TCPA issues. For example, in September 2018, the Commission worked with AARP to educate older Americans about illegal robocalls through two Telephone Town Halls.⁷⁷ In public engagements, including a series of rural road trips, Commission representatives speak to consumers, consumer groups, local officials, and organizations such as senior centers and libraries, provide them with spoofing and robocall tip sheets, and answer their questions and concerns. In an effort to reach a wide variety of consumers, the Commission's robocall and spoofing tips are translated into several languages and are available in accessible formats.⁷⁸

35. The FTC reaches out to consumers as well. For example, the FTC Consumer Information on Robocalls website includes a series of competitions and challenges to the public sector to help fight robocalls.⁷⁹ The FTC's webpage on Robocalls and the Do Not Call Registry contains information about FTC actions against unlawful robocalling.⁸⁰

36. As part of their joint outreach, the Commission and the FTC hosted a joint policy forum in March 2018 highlighting actions the agencies and others have taken to fight the scourge of illegal

⁷² *Advanced Methods to Target and Eliminate Unlawful Robocalls*, CG Docket No. 17-59, Second Report and Order, FCC 18-177 (Dec. 13, 2018).

⁷³ FCC, The FCC's Push to Combat Robocalls & Spoofing, <https://www.fcc.gov/about-fcc/fcc-initiatives/fccs-push-combat-robocalls-spoofing> (last visited Feb. 5, 2019).

⁷⁴ FCC, Stop Unwanted Robocalls and Texts, <https://www.fcc.gov/consumers/guides/stop-unwanted-robocalls-and-texts> (last visited Feb. 5, 2019); FCC, Caller ID Spoofing, <https://www.fcc.gov/consumers/guides/spoofing-and-caller-id> (last visited Feb. 5, 2019).

⁷⁵ FCC, Consumer Help Center, <https://www.fcc.gov/consumers> (last visited Feb. 5, 2019).

⁷⁶ FCC, Actions on Robocalls, Telemarketing, <https://www.fcc.gov/general/telemarketing-and-robocalls> (last visited Feb. 5, 2019).

⁷⁷ FCC, FCC & AARP to Educate Older Americans About Phone Scams, <https://www.fcc.gov/news-events/events/2018/09/fcc-aarp-educate-older-americans-about-phone-scams> (last visited Feb. 5, 2019).

⁷⁸ See FCC, Caller ID Spoofing, <https://www.fcc.gov/consumers/guides/spoofing-and-caller-id> (last visited Feb. 5, 2019); FCC, Consumer Help Center, <https://www.fcc.gov/consumers> (last visited Feb. 5, 2019).

⁷⁹ FTC, Consumer Information Robocalls, <https://www.consumer.ftc.gov/features/feature-0025-robocalls> (last visited Feb. 5, 2019).

⁸⁰ FTC, Robocalls and the Do Not Call Registry, <https://www.ftc.gov/news-events/media-resources/do-not-call-registry/robocalls> (last visited Feb. 5, 2019).

robocalls.⁸¹ In addition, the agencies jointly hosted an expo in April 2018, showcasing innovative technologies, devices, and applications to eliminate or minimize the number of illegal robocalls consumers receive.⁸²

V. REMAINING CHALLENGES

37. While much has been done to eliminate or reduce illegal robocalls through technology, regulatory policy, enforcement, and outreach, much work remains. Industry work remains to implement the SHAKEN/STIR standards so that consumers can once again trust Caller ID. This work includes necessary network upgrades.⁸³ There may be additional opportunities to expand call blocking, while considering whether methods are needed to prevent inadvertent blocking of legal calls and to notify legitimate callers when their calls are blocked or labeled.⁸⁴ In August, the Consumer and Governmental Affairs Bureau released a Public Notice seeking to refresh the record on how the Commission might empower voice service providers to block illegal calls, including methods for identifying these calls, means to prevent these calls from reaching consumers, industry traceback efforts, and means to prevent false positives.⁸⁵ Beyond network solutions and regulation, government agencies, consumer groups, and industry groups can expand consumer education and fraud prevention awareness programs to help minimize losses from scams.

38. The Commission faces several enforcement challenges in its robocalling investigations:

- First, many illegal robocallers are operating in foreign countries. Although Congress recently gave the Commission express jurisdiction over foreign Caller ID spoofers, in practice the Commission may also need cooperation from foreign governments.⁸⁶
- Second, the vast majority of service providers that originate calls from illegal robocallers appear to be VoIP providers. Many of these providers do not keep updated contact information with the Commission or do not keep accurate records of all calls made across their networks.⁸⁷
- Third, the statute of limitations for TCPA violations is one year, which too often is not enough time to complete investigations involving complex robocalling cases.⁸⁸

⁸¹ FCC, Fighting the Scourge of Illegal Robocalls, <https://www.fcc.gov/fcc-ftc-robocalls-forum> (last visited Feb. 5, 2019).

⁸² Public Notice, FCC and FTC to Co-Host Expo on April 23 Featuring Technologies to Block Illegal Robocalls (Apr. 16, 2018), available at <https://docs.fcc.gov/public/attachments/DOC-350238A1.pdf>.

⁸³ NANC Report at 16-17.

⁸⁴ See, e.g., Noble System Comments at 5-7; PACE Comments at 4-7; Sirius XM Reply Comments at 3-5.

⁸⁵ *Consumer and Governmental Affairs Bureau Seeks to Refresh the Record on Advanced Methods to Target and Eliminate Unlawful Robocalls*, Public Notice, 33 FCC Red 8114 (CGB 2018).

⁸⁶ Consolidated Appropriations Act, 2018, Pub. L. No. 115-141 § 503. See also, *Implementing the Anti-Spoofing Provisions of the RAY BAUM'S Act*, WC Docket Nos. 18-335, 11-39, Notice of Proposed Rulemaking, FCC-CIRC1901-05 (Jan. 3, 2019).

⁸⁷ Letter from Rosemary C. Harold, Chief, Enforcement Bureau and Eric Burger, Chief Technology Officer, to Jonathan Spalter, President & CEO, USTelecom - The Broadband Association (Nov. 6, 2018).

⁸⁸ The Truth in Caller ID Act has a two-year statute of limitations and the FTC has five years for its cases.

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- Fourth, in many instances, the TCPA requires notice via a citation before the Commission can launch forfeiture proceedings, allowing a cited offender the chance to incorporate under a new name to evade further detection and begin illegal activity anew.⁸⁹

VI. CONCLUSION

39. Chairman Pai has often referred to illegal robocalls as a “scourge,” and the Commission has devoted significant resources to fighting illegal calls. Available data show that robocalls remain a substantial consumer problem. And challenges remain, especially in implementation of Caller ID authentication and expanded call blocking. Further, the Commission faces hurdles enforcing against robocallers, including the need for cooperation from foreign governments to stop illegal robocalls that originate overseas, greater provider participation in traceback efforts, and a one-year TCPA statute of limitations. Government and industry have taken strong action to stop the worst robocalls before they reach consumer phones, with stepped-up enforcement, call blocking, and Caller ID authentication.

40. In short, the Commission stands committed to working with the FTC, industry, trade associations, and consumers to eliminate the scourge of illegal robocalls.

⁸⁹ In contrast, the Truth in Caller ID Act allows the Commission to directly issue an NAL without first issuing a citation to the apparent violator. The Truth in Caller ID Act only requires that the Commission provide the notice required under section 503(b)(3) of the Act (notice and opportunity for a hearing before the Commission or an administrative law judge) or section 503(b)(4) of the Act (Notice of Apparent Liability for Forfeiture) before assessing a forfeiture for unlawful spoofing. 47 U.S.C. § 227(e)(5)(A).