Congressional Research Service
Informing the legislative debate since 1914

Protecting Consumers and Businesses from Fraudulent Robocalls

Updated August 1, 2018

Congressional Research Service
https://crsreports.congress.gov
R45070

CRS REPORT
Prepared for Members and
Committees of Congress

The Telephone Consumer Protection Act of 1991 (TCPA) regulates robocalls. A robocall, also known as "voice broadcasting," is any telephone call that delivers a prerecorded message using an automatic (computerized) telephone dialing system, more commonly referred to as an automatic dialer or "autodialer." Robocalls are popular with many industry groups, such as real estate, telemarketing, and direct sales companies. The majority of companies who use robocalling are legitimate businesses, but some are not. Those illegitimate businesses may not just be annoying consumers—they may also be trying to defraud them.

The Federal Trade Commission (FTC) and Federal Communications Commission (FCC) regularly cite "unwanted and illegal robocalls" as their number-one complaint category. The FTC received more than 1.9 million complaints filed in the first five months of 2017 and about 5.3 million in 2016. The FCC has stated that it gets more than 200,000 complaints about unwanted telemarketing calls each year. These statistics, as well as complaints to congressional offices, have spurred Congress to hold hearings and introduce legislation on the issue in an effort to protect consumers. Congressional policymakers have proposed a number of changes to existing law and regulations to address the problem of illegal robocalls under the TCA, many of which are intended to defraud. These changes would, for example, expand the definition of what a robocall is, increase penalties for illegal spoofing, and improve protection of seniors from robocall scams. As yet, none of these proposals has become law.

On August 19, 2016, a 60-day Robocall "Strike Force" convened, culminating in the testing of a Do Not Originate (DNO) Registry to stop unwanted calls from reaching customers. The intent of the registry is to block fraudulent calls before they can reach a consumer. With the FCC's permission, the Strike Force performed a trial of this concept. The trial was considered a success by the Strike Force and the FCC, reducing calls associated with one particular scam by about 90% in the third quarter of 2016.

In November 2017, the FCC promulgated rules on the creation and use of the DNO Registry. The new rules explicitly allow service providers to block calls from two categories of number (1) numbers that the subscriber has asked to be blocked, such as "in-bound only" numbers (numbers that should not ever originate a call); and (2) unassigned numbers, as the use of such a number indicates that the calling party is intending to defraud a consumer.

Notwithstanding the efforts above, based on their long history, scammers appear determined to continue their attempts to defraud consumers. Robocalls make these efforts easier. The FTC asserts that law enforcement on its own cannot completely solve the problem of robocalls. Technological solutions, including robust call-blocking technology, likely will also be required. The DNO Registry, a technology solution that has been proven to significantly decrease robocalls, is supported by most stakeholders, but concerns remain with legitimate telemarketers who fear it may negatively impact them. The FCC intends to address these concerns in 2018. The impacts of the FTC initiatives on fraudulent robocalls, and the resulting impacts in the telemarketing industry, may continue to be oversight issues for Congress.

In the 115th Congress, three hearings have been held, and 12 bills aimed at curtailing robocalls and protecting consumers have been introduced. Most of these bills are focused on the larger issue of spoofing, as well as curtailing robocalls for debt collection and politically oriented messages; two bills are aimed at protecting seniors from predatory robocalls intended to defraud them.

Contents

Introduction 1
The Do Not Call Registry 1
Classification of Telemarketing Calls 2
Calls to Mobile Phones 2
Calls to Landlines 2
The Growth of Robocalls—And Complaints 3
Civil Jurisdiction over Robocalls 4
Federal Trade Commission 4
Federal Communications Commission 5
States 5
Recent FTC Action Related to Robocalls 5
Sharing Consumer Complaint Data with Telecommunications Service Providers 6
Recent FCC Action Related to Robocalls 6
Robocall Strike Force 6
Robocall Strike Force Report 7
The Do Not Originate Registry Trial 7
Public Notice on Blocking Unwanted Robocalls 7
Twitter Town Hall on Robocalls 7
Ringless Voicemail: "All About the Message" Petition for Declaratory Ruling 8
Notice of Proposed Rulemaking and Notice of Inquiry 8
Notice of Proposed Rulemaking 8
Notice of Inquiry 9
NPRM/NOI Comments and Reply Comments 9
Report and Order and Further Notice of Proposed Rulemaking 9
Report and Order 10
Further Notice of Proposed Rulemaking 10
Robocall Report 12
The Do Not Originate Registry: Stakeholder Positions 12
Telecommunications Industry 12
Consumer Groups 13
Telemarketing Industry and Other Legal Call Originators 13
Congressional Action, 115th Congress 14
Outlook 16

Figures

Figure 1. Monthly Volume of U.S. Robocalls, June 2017-May 2018 3

Figure A-1. Digitone Call Blocker Plus 21

Tables

Table 1. Annual Active Registration and Complaint Figures 4
Table 2. Proposed Legislation, 115th Congress 15

Table A-1. Landline Robocall Blocking Services 20
Table A-2. VoIP Robocall Blocking Services 20
Table A-3. Mobile Robocall Blocking Services 21

Appendixes

Appendix A. Options for Responding to Unwanted Robocalls 17
Appendix B. Recent Law Enforcement Actions Against Robocallers 22
Appendix C. The FTC's Robocall Challenge Program 23
Appendix D. Fines Imposed on Robocallers by the FTC, 2017 25
Appendix E. Fines Imposed on Robocallers by the FCC, 2017 27
Appendix F. Proposed Legislation, 109th-114th Congresses 28

Contacts

Author Information 29

Introduction

The Telephone Consumer Protection Act of 1991 (TCPA)[1] regulates robocalls. A robocall, also known as "voice broadcasting," is any telephone call that delivers a prerecorded message using an automatic (computerized) telephone dialing system, more commonly referred to as an automatic dialer or "autodialer."[2] When the call is answered, the autodialer either connects the call to a live person or plays a prerecorded message. Both are considered robocalls. Some robocalls use personalized audio messages to simulate an actual personal phone call. As discussed in more detail below (in "Classification of Telemarketing Calls"), the TCPA prohibits robocalls to

- consumers' traditional landline numbers,
- consumers' Voice-over-Internet-Protocol (VoIP) landline numbers, and
- all mobile numbers.

Robocalls to business landlines are not covered by the TCPA.

Robocalls are popular with many industry groups, such as real estate, telemarketing, and direct sales companies. The majority of companies who use robocalling are legitimate businesses, but some are not. Those illegitimate businesses may not just be annoying consumers—they may also be trying to defraud them.

The Federal Trade Commission (FTC) and Federal Communications Commission (FCC) regularly cite "unwanted and illegal robocalls" as their number-one complaint category. These complaints, as well as complaints to congressional offices, have spurred Congress to take action in an effort to protect consumers. Congress has held hearings to investigate efforts to develop technical solutions to stop illegal robocalls and ways to update the TCPA to better protect consumers, especially seniors and other vulnerable groups (e.g., immigrants without a good understanding of English). Six bills have been introduced in the 115th Congress to address this issue. Legislative efforts have included proposals to expand the definition of "spoofing"[3] to include text messages and calls made from outside the United States, as well as to protect seniors from fraud perpetrated through robocalls.

The Do Not Call Registry

In addition to regulating robocalls, the TCPA authorized the National Do Not Call (DNC) Registry. The registry, which was created in 2003, allows consumers to "opt out" of receiving telemarketing calls on their landline and mobile phones, regardless of whether they are robocalls or not. As of September 30, 2017, the registry had nearly 230 million active registrations,[4] up from about 226 million[5] at the same time in 2016.

---

[1] P.L. 102-243, 47 U.S.C. §227. The TCPA governs other aspects of telemarketing outside the scope of this report.

[2] The term "automatic telephone dialing system" had been defined as "equipment which has the capacity to store or produce telephone numbers to be called, using a random or sequential number generator; and to dial such numbers." An autodialer can be an electronic device or computer software that automatically dials telephone numbers. 47 U.S.C. §227(a)(1)(A)-(B). See CRS Legal Sidebar LSB10139, *(Robo)Call Me Maybe: Robocalls to Wireless Phones Under the Telephone Consumer Protection Act*, by Kathleen Ann Ruane, for a detailed explanation of why this definition is under review.

[3] "Spoofing" is the act of falsifying caller ID information to present a false name and number, thereby making fraud easier to commit.

[4] Federal Trade Commission, *FY2017 National Do Not Call Registry Data Book*, December 2017, https://www.ftc.gov/sites/default/files/filefield_paths/dnc_data_book_fy2017.pdf. Hereinafter, "*FY2017 Data Book*."

[5] *FY2017 Data Book*.

Classification of Telemarketing Calls

The TCPA does not prohibit all robocalls, that is, not all robocalls are illegal. Legal robocalls are used by legitimate call originators for political, public service, and emergency messages, which are legal. Illegal robocalls are usually associated with fraudulent telemarketing campaigns, although an illegal robocall under the TCPA does not necessarily mean that the robocall is fraudulent. For example, it is illegal to make a marketing robocall to a cellphone without written consent. That call would not necessarily be intended to defraud the consumer. The TCPA also treats calls to mobile phones differently than calls to landlines and treats calls to consumers differently than calls to businesses. This report addresses robocalls that are both illegal under the TCPA and intended to defraud, not robocalls that are defined *only* as illegal.

Calls to Mobile Phones

Robocalls to mobile phones without written consent are generally illegal under the TCPA. This includes telemarketing and nontelemarketing calls to both consumer and business mobile phones. As noted above, the few exceptions to this rule are political, public service, and emergency messages. Furthermore, consent for some other nontelemarketing calls does not need to be in writing. However, even if a consumer has previously given consent, that consent may be revoked at any time. Subsequent calls would then be illegal.

Calls to Landlines

As is the case for mobile phones, robocalls to consumer landlines are illegal under the TCPA without prior consent in writing. (An autodialer legally may be used to call a consumer landline, only if the call does not use a prerecorded or artificial voice.) The exceptions to the landline robocall prohibition are

- calls for emergency purposes,
- purely informational calls (e.g., school closings, flight delays),
- calls made for a noncommercial purpose (e.g., charities, political parties), and
- calls made by a business that do not include an advertisement or constitute telemarketing (e.g., product recall notices).

Unlike the case for consumer landlines, nearly all sales calls to a business landline—including for a product or service from a telemarketer—are generally exempt from the DNC and robocall rules of the FTC. The two exceptions are if the caller is trying to make a

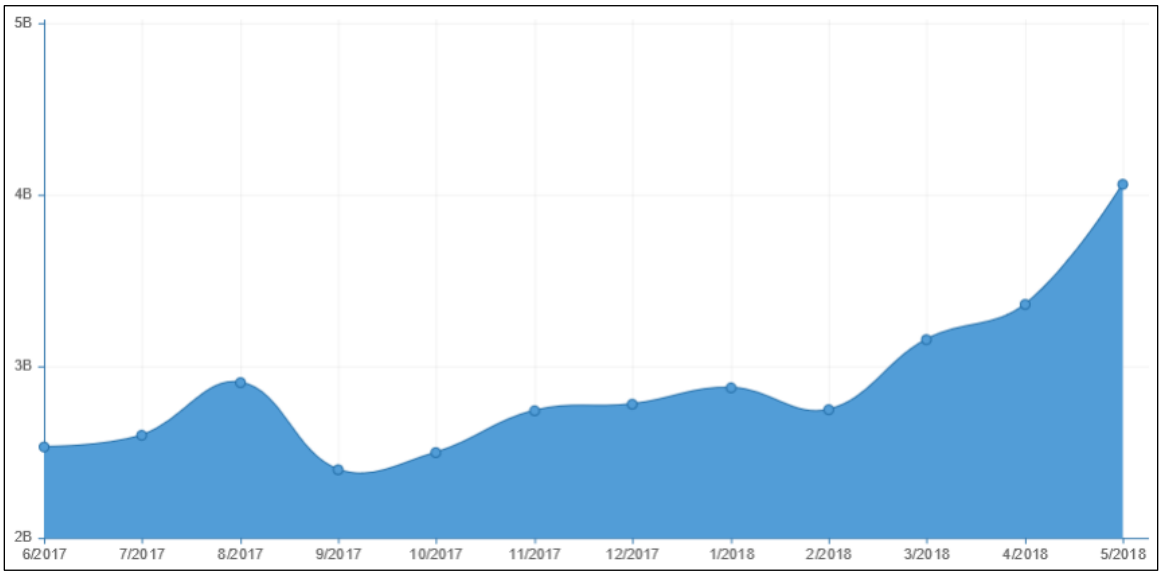
- sale to an employee at work that does not relate to work,[6] in which case the caller must comply with the DNC and robocall rules for a consumer landline; and
- sale of "nondurable office or cleaning supplies" (e.g., printer ink), in which case the caller must comply with the robocall rules.

[6] For example, a call made to a farm employee about farming supplies is legal, but a call made to that same employee regarding a magazine subscription would be illegal.

The Growth of Robocalls—And Complaints

Despite the existence of the DNC Registry and the fact that most robocalls are illegal, the number of robocalls continues to grow in the United States. In 2016, YouMail[7] reported an average of 2.4 billion robocalls being made each month. In May 2018, that figure rose to an all-time high of 4.1 billion robocalls, up sharply from the previous high of 2.9 billion robocalls in August 2017 (see **Figure 1**).

Figure 1. Monthly Volume of U.S. Robocalls, June 2017-May 2018



Source: The Robocall Index created by YouMail, https://robocallindex.com.

YouMail states that this latest figure equals about 12 to 13 calls per person each month in the United States, up from just under eight calls in January 2018.[8]

Consumer complaints continue to grow as well (see **Table 1**). The FTC received over 7.1 million complaints about robocalls in FY2017, up from 5.3 million complaints in FY2016.[9]

[7] The YouMail Robocall Index is cited by both the FCC and FTC. It is considered the most accurate estimate of monthly robocall statistics. In addition to compiling the National Robocall Index, YouMail is a developer of visual voicemail and robocall blocking software.

[8] According to an August 25, 2017, email to CRS from YouMail CEO Alex Quilici, YouMail's base is predominantly mobile numbers, but also includes some voice-over-Internet-protocol lines. The Robocall Index calculations are made with certain assumptions: YouMail users are representative; mobile and VoIP lines have the same robocall behavior; missed call traffic to YouMail represents the vast majority of robocalls that users get; the estimate of people who get phone calls is correct; etc. The company states that these assumptions are true of its samples, but admits they may not be true overall. YouMail then extrapolates a final figure based on the number of people using YouMail and the number of people with phone numbers in the United States, assuming that YouMail is representative of total call traffic. That is, for each active YouMail account in a given month, the company knows how many robocalls are made to its subscribers. There are roughly 250 million mobile, VoIP, and traditional phone lines in the United States.

[9] *FY2017 Data Book*.

Table 1. Annual Active Registration and Complaint Figures

June 27, 2003 through September 30, 2017

Fiscal Year	Active Registrations	Increase in Active Registrations	Complaints per Year	Cumulative Complaints
2003	50,267,097	50,267,097	0	0
2004	61,741,124	11,474,027	579,838	579,838
2005	103,193,927	41,452,803	669,474	1,249,312
2006	126,981,844	23,787,917	1,149,818	2,399,130
2007	145,756,274	18,774,430	1,297,865	3,696,995
2008	166,582,471	20,826,197	1,767,798	5,464,793
2009	183,505,798	16,923,327	1,808,351	7,273,144
2010	192,917,741	9,411,943	1,633,813	8,906,957
2011	200,520,793	7,603,052	2,273,516	11,180,473
2012	207,938,719	7,417,926	3,840,556	15,021,029
2013	213,400,640	5,461,921	3,748,646	18,769,675
2014	217,855,659	4,455,019	3,241,086	22,010,761
2015	222,841,484	4,985,825	3,578,711	25,589,481
2016	226,001,288	3,159,804	5,340,234	30,929,715
2017	229,816,164	3,814,876	7,157,370	38,087,085

Source: Federal Trade Commission, *FY2017 National Do Not Call Registry Data Book*, December 2017, https://www.ftc.gov/sites/default/files/filefield_paths/dnc_data_book_fy2017.pdf.

Note: Active registration and complaint figures reflect the total number of phone numbers registered and the total number of National Do Not Call Registry complaints submitted to the FTC as of September 30, 2017.

Civil Jurisdiction over Robocalls

Both the FTC and the FCC, as well as individual states, have jurisdiction over robocalls and fraudulent calls; they can impose civil fines on those who break the law. In addition, in some instances, other federal agencies, such as the Department of Homeland Security, the Department of the Treasury, and the Internal Revenue Service (IRS), may prosecute robocall-related cases under criminal law.

Federal Trade Commission

The FTC regulates trade, including all telemarketing practices, regardless of how a call is initiated. The FTC's focus is on protecting consumers from scams and enforcing the rules associated with the DNC Registry. The FTC's primary concerns are the content of the call, whether that call was fraudulent, and whether the call was made to a number on the DNC Registry.

The Telemarketing and Consumer Fraud and Abuse Prevention Act,[10] which became law in 1994, authorized the FTC to regulate telemarketing calls. As required by the law, the FTC promulgated the Telemarketing Sales Rule (TSR)[11] which

- requires telemarketers to disclose certain information;
- prohibits misrepresentations by telemarketers;
- sets limits on the times of day that telemarketers may call consumers;
- prohibits calls to a consumer who has asked not to be called again; and
- sets payment restrictions for the sale of certain goods and services.

The FTC rules apply only to interstate calls (calls that originate in one state and end in another), not intrastate calls (calls that originate and end in the same state), as the FTC does not have jurisdiction over intrastate trade activities. The FTC provides exemptions similar to those of the FCC, but the FTC specifically excludes any exemption for telemarketers calling on behalf of exempt entities. For example, a politician running for office cannot hire a contractor to make robocalls on behalf of the campaign.

Federal Communications Commission

The FCC regulates communications, including all telemarketing calls, regardless of whether they are fraudulent or not. Its focus is on the call itself, rather than the content of the call. The FCC's authority to regulate robocalls comes from the TCPA and its rules apply to both interstate and intrastate calls (with exemptions for certain entities and certain types of calls, as noted previously).

States

States have their own laws covering intrastate telemarketing calls. Many of the laws have exemptions, like those of the FCC and FTC. Plus, many states claim authority to apply their statutes to calls originating outside the state.

Recent FTC Action Related to Robocalls

The FTC has undertaken vigorous law enforcement efforts against those making illegal calls. The FTC has brought 131 law enforcement actions against more than 750 companies and individuals that the agency alleged were responsible for placing billions of fraudulent telemarketing calls to consumers in violation of the Telemarketing Sales Rule.[12] The FTC has obtained more than $1.5 billion in judgments against these violators and banned many of them from making robocalls in the future. (See **Appendix D** for a summary of the cases and fines imposed by the FTC on individuals and companies for conducting fraudulent robocall campaigns.)

In addition to enforcement actions against individuals responsible for making robocalls intended to defraud, the FTC is pursuing technical solutions to block robocalls, including its Robocall

[10] 15 U.S.C. 6101-6108, as amended.

[11] 16 C.F.R. Part 310. Available at https://www.law.cornell.edu/cfr/text/16/part-310.

[12] A listing of recent actions the FTC has taken against violators, including those sending out illegal robocalls can be found at https://www.ftc.gov/news-events/media-resources/do-not-call-registry/enforcement and at https://www.ftc.gov/news-events/media-resources/do-not-call-registry/robocalls.

Challenge program. (Details of the individual challenges and the winners are included in **Appendix B**.)

Sharing Consumer Complaint Data with Telecommunications Service Providers

As of August 1, 2017, when consumers report DNC or robocall violations to the FTC, the robocaller phone numbers provided are released each day to telecommunications carriers and other industry partners that are implementing technical call-blocking solutions.[13]

The consumer complaint data are critical to achieving the goal of this initiative, as many existing call-blocking solutions rely on "blacklists." These blacklists are databases of telephone numbers that have received a significant number of consumer complaints. The data being provided include the date and time an unwanted call was received, the general subject matter of the call (such as debt reduction, energy, warranties, home security, etc.), and whether the call was a robocall. Using this information, carriers can better determine which calls should be blocked or flagged before they reach consumers' phones.

To ensure the most complete databases can be compiled, the FTC has made it as easy as possible for consumers to report unwanted calls. This information is particularly helpful to law enforcement and industry. The data are posted to the FTC website every weekday (with Monday postings including weekend data) on the "Do Not Call Reported Calls Data" web page.[14]

Recent FCC Action Related to Robocalls

Since 2016, the FCC has taken various actions to address the problem of illegal, fraudulent, and unwanted robocalls. The agency's most recent actions include convening a Robocall Strike Force and promulgating new rules that will empower telecommunications providers with new tools to stop robocalls. For a summary of the cases and fines imposed by the FCC on individuals and companies for conducting fraudulent robocall campaigns, see **Appendix E**.

Robocall Strike Force

On July 26, 2016, then-Chairman of the FCC Tom Wheeler asked the telecommunications industry to "develop an action plan for providing consumers with robust robocall-blocking solutions."[15] On August 19, 2016, a 60-day "Strike Force" convened[16] and created four work groups: Authentication; Empowering Consumer Choice; Detection, Assessment, Traceback, and Mitigation; and Regulatory Support/Root Cause Removal. These work groups subsequently

[13] Federal Trade Commission, "FTC Escalates the Fight Against Illegal Robocalls Using Consumer Complaints to Aid Industry Call-Blocking Solutions," press release, August 1, 2017, https://www.ftc.gov/news-events/press-releases/2017/08/ftc-escalates-fight-against-illegal-robocalls-using-consumer.

[14] This information is available at https://www.ftc.gov/site-information/open-government/data-sets/do-not-call-data.

[15] Federal Communications Commission, Statement of Chairman Wheeler on Progress Toward Offering Consumer Robocall Blocking Choices, July 25, 2016, https://apps.fcc.gov/edocs_public/attachmatch/DOC-340458A1.docx.

[16] Members of the Robocall Strike Force were AT&T, Apple, Bandwidth.com, Birch, Blackberry, British Telecom, CenturyLink, Charter, Cincinnati Bell, Comcast, Cox, Ericsson, FairPoint, Frontier, GENBAND, Google, Inteliquent, Level 3, LG, Microsoft, Nokia, Qualcomm, Rogers, Samsung, SilverStar, Sirius/XM, Sprint, Syniverse, T-Mobile, US Cellular, Verizon, West, and Windstream.

developed both short- and long-term plans to address the FCC Chairman's request. Highlights of their work are described below.

Robocall Strike Force Report

Each work group contributed to the Strike Force report issued on October 16, 2016.[17] Topics included the development of technical standards and consumer education plans and goals. Additionally, the Detection Work Group developed, implemented, and tested a Do Not Originate (DNO) Registry to stop unwanted calls from reaching customers.

The Do Not Originate Registry Trial

The intent of the DNO Registry is to block numbers that should never originate any call: invalid numbers, valid numbers that are not allocated to a voice service provider, and valid numbers that are allocated but not assigned to a subscriber.[18] With the FCC's permission, the Strike Force performed a trial of this concept. The trial was considered a success by the Strike Force and the FCC,[19] playing a significant role in reducing IRS scam calls by about 90% from September 2016 to February 2017.[20]

Public Notice on Blocking Unwanted Robocalls

During the time that the Robocall Strike Force was convened, the FCC released a Public Notice[21] clarifying one aspect of its robocall rules. Specifically, the FCC clarified that if a subscriber to a telephone number requests call blocking to prevent that telephone number from being spoofed, a voice service provider (regardless of the type of service: traditional landline, VoIP, or mobile) may block such calls so they do not reach the intended recipient consumer. The clarification was intended to encourage initiatives such as the DNO database.

Twitter Town Hall on Robocalls

On November 4, 2016, the FCC held a "Twitter Town Hall" on robocalls. During the town hall, the FCC policy staff talked to the public about robocall policies, consumer tips, and concerning trends. A transcript of the event is available online using the hashtag #RobocallChat.[22]

---

[17] Federal Communications Commission, *FCC-Industry Robocall Strike Force Report*, October 26, 2016, https://transition.fcc.gov/cgb/Robocall-Strike-Force-Final-Report.pdf.

[18] Federal Communications Commission, "In the Matter of Advanced Methods to Target and Eliminate Unlawful Robocalls," CG Docket No. 17-59, Notice of Proposed Rulemaking and Notice of Inquiry, March 23, 2017, https://apps.fcc.gov/edocs_public/attachmatch/FCC-17-24A1.pdf.

[19] Federal Communications Commission, "FCC Acts to Confront 'IRS Debt' Scam Robocalls and Malicious Caller ID Spoofing," March 23, 2017, https://apps.fcc.gov/edocs_public/attachmatch/DOC-344034A1.pdf.

[20] According to a September 6, 2017, email to CRS from YouMail CEO Alex Quilici, the reduction in IRS scam calls from September 2016 to February 2017 was attributable to the DNO Registry Trial and successful law enforcement actions; similarly, the drop in robocalls from May to June 2017 was attributed to a large-scale arrest of robocallers in India.

[21] Federal Communications Commission, "Clarification on Blocking Unwanted Robocalls," September 30, 2016, https://apps.fcc.gov/edocs_public/attachmatch/DA-16-1121A1.pdf.

[22] See https://twitter.com/search?f=tweets&q=%23RobocallChat&src=typd.

Ringless Voicemail: "All About the Message" Petition for Declaratory Ruling

On March 31, 2017, a company called "All About the Message" (AATM) filed a petition[23] for a declaratory ruling requesting that the FCC declare the delivery of a voice message directly to a voicemail box does not constitute a call that is subject to the prohibitions on the use of an automatic telephone dialing system or an artificial or prerecorded voice under the TCPA. In short, AATM requested that a robocall that goes directly to a consumer's voicemail not be categorized as an illegal robocall.

Although there was some support for such a ruling, including from the Republican National Committee[24] and the U.S. Chamber of Commerce,[25] in the end, the company withdrew the petition.[26] It may have done so because of the overwhelming amount of negative press coverage and comments filed in opposition to the petition.[27] However, since the petition was withdrawn, the company is entitled to file it again.

Notice of Proposed Rulemaking and Notice of Inquiry

Stemming from the work of the Regulatory Support/Root Cause Removal Work Group, on March 23, 2017, the FCC released "Advanced Methods to Target and Eliminate Unlawful Robocalls," a Notice of Proposed Rulemaking (NPRM) and Notice of Inquiry (NOI).[28]

Notice of Proposed Rulemaking

The NPRM sought comment on FCC-proposed rules regarding the DNO Registry and clarified guidance contained in the 2016 Public Notice. The FCC sought comment on a proposal that would authorize providers to block calls from three categories of numbers: invalid numbers, valid numbers that are not allocated to a voice service provider, and valid numbers that are allocated but not assigned to a subscriber. These are the same criteria used in the DNO Registry trial.

---

[23] All About the Message, "In the Matter of Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991," Petition for Declaratory Ruling, CG Docket No. 02-278, March 31, 2017, https://ecfsapi.fcc.gov/file/104010829816078/Petition%20for%20Declaratory%20Ruling%20of%20All%20About%20the%20Message%20LLC.pdf. Hereinafter, "All About the Message Petition."

[24] All About the Message Petition, Comments of the Republican National Committee, May 18, 2017, https://ecfsapi.fcc.gov/file/1051800793918/RNC%20Comments%20on%20AATM%20Petition.pdf.

[25] All About the Message Petition, Comments of the U.S. Chamber of Commerce, May 18, 2017, https://consumermediallc.files.wordpress.com/2017/05/chambercomments.pdf.

[26] All About the Message Petition, Hackleman, Olive & Judd (Attorneys for All About the Message), "Re: Petition for Declaratory Ruling of All About the Message, LLC," June 20, 2017, https://ecfsapi.fcc.gov/file/1062101171891/2017-06-20%20Letter%20to%20Ms.%20Dortch.pdf.

[27] See, for example, Eversheds Sutherland, LLP, "All Dressed Up and Nowhere to Go: Ringless Voicemail FCC Petition Withdrawn," June 28 2017, https://us.eversheds-sutherland.com/NewsCommentary/Legal-Alerts/201496/Legal-AlertAll-Dressed-Up-and-Nowhere-to-Go-Ringless-Voicemail-FCC-Petition-Withdrawn.

[28] Federal Communications Commission, "In the Matter of Advanced Methods to Target and Eliminate Unlawful Robocalls," CG Docket No. 17-59, Notice of Proposed Rulemaking and Notice of Inquiry, March 23, 2017, https://apps.fcc.gov/edocs_public/attachmatch/FCC-17-24A1.pdf. This was published in the *Federal Register* on May 17, 2017, setting July 3, 2017, as the deadline for submitting comments and July 31, 2017, as the deadline for submitting reply comments. https://www.federalregister.gov/documents/2017/05/17/2017-09463/advanced-methods-to-target-and-eliminate-unlawful-robocalls. Hereinafter, "Robocall NPRM."

Notice of Inquiry

In the Notice of Inquiry, the FCC sought input on

- possible standards that could be used to indicate to a reasonably high degree of certainty that a call is illegal, and
- whether to adopt a safe harbor provision to protect carriers in case they inadvertently violate the FCC's call completion requirements in blocking a suspected robocaller.

The agency also asked for comments regarding ways that callers who make legitimate calls can guard against being blocked and to ensure that legitimate callers whose calls are blocked by mistake can prevent further blocking.

NPRM/NOI Comments and Reply Comments

The vast majority of participants[29] in this proceeding supported the FCC's plans as laid out in the NPRM, specifically, to permit carriers to block outgoing calls at the request of a subscriber, as well as calls originating from invalid numbers, unallocated numbers, and allocated but unassigned numbers. They also supported enacting a broad safe harbor to protect carriers engaged in call blocking.

The FTC also proposed expanding the coverage of the DNO Registry beyond robocalls to certain live calls. One of the largest categories of complaints to the DNC is about impostor calls, in which the caller pretends to be someone else, like an IRS agent. In about one-third of those cases, consumers have indicated the call was not a robocall. So, while 60% of monthly DNC complaints to the FTC are about robocalls, "live" calls also generate hundreds of thousands of complaints each month.[30] The FTC believes that provider-based blocking would not be complete without the ability to block illegal "live" calls that target numbers registered on the DNC Registry.

Commenters also broadly agreed that the FCC should avoid imposing burdensome processes or creating any complex new infrastructure, such as a "white list" (a set of numbers that may be called) or any centralized database or administrator.

Report and Order and Further Notice of Proposed Rulemaking[31]

In November 2017, the FCC promulgated rules on the creation and use of the DNO Registry.[32] The new rules explicitly allow service providers to block calls from two categories of number: (1) numbers that the subscriber has asked to be blocked, such as "in-bound only" numbers (numbers

[29] All filings in this proceeding can be found at https://www.fcc.gov/ecfs/search/filings?proceedings_name=17-59&q=Advanced%20Methods%20to%20Target%20and%20Eliminate%20Unlawful%20Robocalls&sort=date_disseminated,DESC.

[30] Federal Trade Commission, Comments to the Robocall NPRM, July 3, 2017, https://www.ftc.gov/system/files/documents/advocacy_documents/ftc-staff-comment-federal-communications-commission-supporting-fccs-proposed-expansion-provider/ftc_comment_to_fcc_re_nprm_noi_call_blocking_07032017.pdf.

[31] Certain aspects of this rule dealing with reassigned numbers and the definition of "autodialer" were successfully challenged in court. Those issues are addressed in detail in CRS Legal Sidebar LSB10139, *(Robo)Call Me Maybe: Robocalls to Wireless Phones Under the Telephone Consumer Protection Act*, by Kathleen Ann Ruane.

[32] Federal Communications Commission, "In the Matter of Advanced Methods to Target and Eliminate Unlawful Robocalls," CG Docket No. 17-59, Report and Order and Further Notice of Proposed Rulemaking, November 16, 2017, https://apps.fcc.gov/edocs_public/attachmatch/FCC-17-24A1.pdf.

that should not ever originate a call); and (2) unassigned numbers, as the use of such a number indicates that the calling party is intending to defraud a consumer.

The FCC also established safeguards to mitigate the possibility of blocking desired calls. The commission is also seeking further comment on additional mitigation techniques and comment on two issues related to the new rules. Additionally, the order contains a requirement that the Consumer and Governmental Affairs Bureau, in consultation with the Federal Trade Commission's Bureau of Consumer Protection, to prepare a report on the state of robocalling in the United States and to submit it to the commission within a year from publication of the order in the Federal Register.

Report and Order

The new rules give voice service providers the option of blocking illegal robocalls in certain, well-defined circumstances, providing the telecommunications industry the flexibility to block illegal calls. The record showed broad support among consumer groups, telecommunications service providers, government, and callers for blocking DNO calls. The FCC did not accept the assertion of some commenters that any gains from blocking DNO numbers would be temporary, because those making illegal robocalls will simply choose other numbers to spoof when their calls are blocked.

Blocking at the Request of the Subscriber to the Originating Number

The FCC provided clarification that telecommunications providers may block calls when they receive a request from the subscriber to which the originating number is assigned. For example, "in-bound only" numbers to government agencies such as the IRS should not be originating calls. The commission found that where the subscriber did not consent to the number being used, the call was very likely made to annoy and defraud.

Calls Purporting to Originate from Unassigned Numbers

The new order explicitly allows providers to block calls purporting to originate from a number that is unassigned, as use of such a number provides a strong indication that the calling party is spoofing the Caller ID to potentially defraud and harm a consumer. The commission identified three categories of unassigned numbers

- numbers that are invalid under the North American Numbering Plan (NANP);
- numbers that have not been allocated by the North American Numbering Plan Administrator (NANPA) or the Pooling Administrator (PA) to any provider; and
- numbers that NANPA or PA has allocated to a provider, but are not currently used.

Providers are now allowed to block calls purporting to be from numbers that fall into any of these categories.

Further Notice of Proposed Rulemaking

In the Further Notice of Proposed Rulemaking (FNPRM), the FCC is seeking comment on potential mechanisms to

- ensure that erroneously blocked calls can be unblocked as quickly as possible and without undue harm to callers and consumers; and

- measure the effectiveness of the commission's robocall rules and the industry's technical efforts to block robocalls.

Mechanisms to Ensure Erroneously Blocked Calls Can Be Unblocked

In the Report and Order, the FCC encourages providers who block calls under approved criteria to identify and quickly rectify erroneous blocking. In the FNPRM, the commission is seeking comments on whether it should require providers who block calls to establish a formal challenge mechanism or appeals process. Some of the questions posed were[33]

- Should we require blocking providers to establish a challenge mechanism by which callers can inform them of erroneous blocking and such blocking can quickly be fixed?
- What is the quickest way for callers to be informed of blocking, e.g., should providers send an intercept message to callers to notify them of the block with contact information by which a caller can report and rectify the situation?
- Should challenge mechanisms be different based on the scale of the blocking provider?
- What challenge mechanisms are blocking providers considering adopting, even absent a requirement? Is such a requirement necessary? Does our informal complaint process provide a mechanism to surface erroneous blocking to providers and correct it?
- Are there ways we could modify our informal complaint process to address the time-sensitive nature of erroneous call blocking?
- Are there other Commission processes that would provide an appropriate mechanism for rectifying erroneous blocking?

Measuring the Effectiveness of FCC and Industry Anti-Robocall Efforts

The commission also asked, if it were to adopt a reporting obligation on all service providers, what information should be collected? Some of the questions posed were[34]

- Should providers be required to report the quantity of false positives? Should this be a quarterly requirement or an annual requirement?
- In what ways could the information collected help the commission evaluate the effectiveness of our efforts as well as those of industry and/or support additional measures to combat illegal robocalls?
- What consumer benefits would come from requiring all voice service providers to publicly report the number of illegal robocalls blocked each day/month/year?
- What are the costs of requiring voice service providers to report this information? Should we consider different requirements for smaller providers? Alternatively, should the commission use data from the FCC's Consumer Complaint Data Center as a benchmark for determining the effectiveness of FCC and industry efforts?

[33] Ibid.

[34] Ibid.

- Are there other Commission or third-party data sources that the commission could use to assess the effectiveness of its efforts as well as industry's at targeting illegal robocalls?

Robocall Report

The FCC directed that the report should encompass both the progress made by industry, government, and consumers in combatting illegal robocalls, as well as the remaining challenges to continuing these efforts. It asked for a focus on quantitative data, including calling trends and consumer complaints. The intent of the report is to provide insight into the current state of the robocalling problem and how to target additional measures to help consumers.

The Do Not Originate Registry: Stakeholder Positions

The DNO Registry, to be established through the FCC's November 2017 Order, has broad support from telecommunications service providers and consumer groups, but only conditional support for limited intervention from groups representing telemarketers and other legal call originators.

Telecommunications Industry

Telecommunications service providers generally support the registry, but have expressed concern about the expected high cost to fully implement it and how those costs would be covered. The costs would likely vary based on the architecture and size of the network, as well as the solutions a company selects. Further, the registry would likely require continual upgrades to keep up with new methods developed by the robocallers. Telecommunications service providers ideally want a funding mechanism that could be used for onetime costs, short-term initiatives, and longer-term initiatives related to the registry. Part of a three-pronged[35] solution proposed by the telecommunications industry is to ask Congress to appropriate funds for this purpose.[36]

The telecommunications industry has also recommended that Congress amend 47 C.F.R. Section 64.2105 to state that calls blocked to protect consumers from receiving illegal robocalls will not be considered when evaluating the long-distance call completion rates. Other changes to existing law could place more robocall scams under criminal jurisdiction rather than civil jurisdiction. Escalating the manner in which robocallers are punished by adding prison time to the fines imposed might have more effect than the fines alone seem to have—especially since most fines are suspended because the individual is unable to pay.

[35] The other two elements of this strategy are a subscription service and surcharges/fees levied across the customer base. The subscription service element would give customers the option to subscribe to a basic service or a premium service. A basic service could include standard call blocking, call logging, and illegal call reporting features. A premium service could include optional robocall protection features such as a fraudulent call threat score and call treatment options. The surcharge/fee element would apply a small surcharge or fee to the customer's monthly bill for the entire customer base. Such a fee could be collected as a separate "Robocall Mitigation Fee" or could be added to existing fee categories, such as the "Cost Recovery Charge."

[36] Robocall NPRM.

Consumer Groups

Consumer groups have been unequivocal in their support for additional restrictions on robocalls and implementation of the DNO Registry. Together, the Consumers Union, Consumer Action, Consumer Federation of America, National Association of Consumer Advocates, National Consumer Law Center, Public Citizen, and Public Knowledge submitted joint comments to the FCC's robocall proceeding, "Advanced Methods to Target and Eliminate Unlawful Robocalls." These groups support the FCC's proposals, but also asked the FCC to

- explicitly permit and encourage the providers, where it can be done reliably and with the consumer's consent, to use additional tools, such as advanced analytics, to identify and block clearly illegal robocalls;
- clarify that providers should make available to consumers the option to block calls that fail to authenticate their Caller ID information (i.e., ensure the person calling is who they say they are);
- continue to press providers to offer effective, optional, comprehensive, and free call-blocking tools to all of their customers to help block legal but unwanted robocalls, which they already have permission to do; and
- revise the definition of "illegal robocall" for the purposes of these rules so that it is clear that it includes autodialed or prerecorded text messages and voicemails.[37]

Telemarketing Industry and Other Legal Call Originators

The U.S. Chamber of Commerce has long expressed a concern over congressional action related to telemarketing calls.[38] In September 2016, the chamber wrote to the chairman of the House Committee on Energy and Commerce asking that the committee not make any legislation overly broad. For example, it asked that companies not be penalized for contacting customers for informational calls regarding prescription reminders, low bank account balance alerts, etc.[39]

The Professional Association for Customer Engagement (PACE)[40] is another industry group that has expressed concern specifically about the establishment of the DNO Registry and the potential harm to its members if their calls are misidentified. In response to this concern, PACE created the Communication Protection Coalition (CPC), a cross-industry group of stakeholders interested in mitigating the harm caused by blocking and mislabeling of legal calls. The CPC web page states

> As a result of the FCC's Robocall Strike Force initiatives, the carriers and their associated analytics companies are making decisions about your calls. These unregulated analytics companies apply their own algorithms to determine if a call should be blocked from ringing your customer's phone or replace your Caller ID with a label such as "Scam Likely", "Robocaller", "Fraud Call", "Telemarketer" or "Debt Collector."

[37] Consumers Union, et al., "Comments in the Matter of Advanced Methods to Target and Eliminate Unlawful Robocalls," CG Docket No. 17-59, Notice of Proposed Rulemaking and Notice of Inquiry, June 30, 2017, https://www.citizen.org/system/files/case_documents/robocalls-nprm-and-noi-final.pdf.

[38] The chamber has been active on this issue since 2011. See U.S. Chamber of Commerce, "Telephone Consumer Protection Act (TCPA)," web page, https://www.uschamber.com/issue-brief/telephone-consumer-protection-act-tcpa.

[39] U.S. Chamber of Commerce, letter to Congressman Fred Upton, September 15, 2016, https://www.uschamber.com/sites/default/files/documents/files/160915_tcpa_hearing_upton.pdf.

[40] Professional Association for Customer Engagement website, http://www.paceassociation.org/.

> The issue that is very concerning to PACE and our members is that the algorithms do not take into account legal entities delivering legal calls for which consent has been provided. The analytics companies are merely applying their algorithm without knowing all the facts regarding the call.[41]

On September 20, 2017, PACE held the first CPC meeting. It was attended by carriers, analytics companies, PACE members, industry associations, and federal regulators, including two industry members of the Robocall Strike Force. The initial meeting ended with consensus on the need for cooperation from all parties to develop best practices and a proposal to consider inviting consumer groups to participate in future meetings. The next meeting is scheduled for January 2018.[42]

Congressional Action, 115th Congress

In the 115th Congress, 12 bills aimed at curtailing robocalls and protecting consumers have been introduced (**Table 2**). Most of these bills are focused on the larger issue of spoofing, as well as curtailing robocalls for debt collection and politically oriented messages; two bills are aimed at protecting seniors from predatory robocalls intended to defraud them.

Three hearings have been held on robocalls in the 115th Congress

- **"Do Not Call: Combating Robocalls and Caller ID Spoofing"**
  House Committee on Energy and Commerce
  Subcommittee on Digital Commerce and Consumer Protection
  April 27, 2018.
  Information about this hearing, including video and testimony, can be found online at https://energycommerce.house.gov/hearings/do-not-call-combating-robocalls-and-caller-id-spoofing.
- **"Abusive Robocalls and How We Can Stop Them"**
  Senate Committee on Commerce, Science, and Transportation
  April 18, 2018.
  Information about this hearing, including video and testimony, can be found online at https://www.commerce.senate.gov/public/index.cfm/hearings?ID=E0EB17D2-A895-40B4-B385-F94EA2716957.
- **"Still Ringing Off the Hook: An Update on Efforts to Combat Robocalls"**
  Senate Special Committee on Aging
  October 4, 2017.[43]
  Information about this hearing, including video and testimony, can be found online at https://www.aging.senate.gov/hearings/still-ringing-off-the-hook-an-update-on-efforts-to-combat-robocalls.

[41] Communication Protection Coalition web page, http://www.paceassociation.org/coalition.

[42] PACE, Minutes of the September 20, 2017, Communications Protection Coalition meeting, http://www.paceassociation.org/files/CPC%20Meeting%20Minutes%20Sept%202017.pdf.

[43] The hearing page is available at https://www.aging.senate.gov/hearings/still-ringing-off-the-hook-an-update-on-efforts-to-combat-robocalls.

Table 2. Proposed Legislation, 115th Congress[44]

Seniors Fraud Prevention Act of 2017 (S. 81, H.R. 444) S. 81 was introduced by Senator Amy Klobuchar on January 10, 2017; it was passed on August 2, 2017. The bill was reported[45] by the Senate Committee on Commerce, Science, and Transportation on August 11, 2017, and referred to the House Committee on Energy and Commerce Subcommittee on Digital Commerce and Consumer Protection. H.R. 444 was introduced by Representative Theodore Deutch on January 11, 2017. It was referred to the House Committee on Energy and Commerce Subcommittee on Digital Commerce and Consumer Protection on January 25, 2017. **Summary:** These bills would direct the FTC to establish an office within the Bureau of Consumer Protection to advise the FTC on the prevention of fraud targeting seniors and to assist the FTC in monitoring the market for mail, television, internet, telemarketing, and recorded message telephone call (robocall) fraud targeting seniors.
Spoofing Prevention Act of 2017[46] (S. 134, H.R. 423) S. 134 was introduced by Senator Bill Nelson on January 12, 2017; it was passed on August 3, 2017. The bill was received in the House and held at the desk on August 4, 2017. H.R. 423 was introduced by Representative Grace Meng on January 10, 2017; it was passed on January 23, 2017. The bill was referred to the House Committee on Energy and Commerce on January 24, 2017. **Summary:** These bills would amend the Communications Act of 1934 to expand the prohibition against knowingly transmitting misleading or inaccurate caller identification information to apply to (1) persons outside the United States if the recipient of the call is within the United States, and (2) text messages.
Robo Calls Off Phones ("Robo COP") Act (H.R. 740) H.R. 740 was introduced by Representative Virginia Foxx on January 30, 2017. It was referred to the House Committee on Energy and Commerce Subcommittee on Digital Commerce and Consumer Protection on February 3, 2017. There is no Senate companion bill. **Summary:** This bill would direct the FTC to revise the DNC registry provisions of the TSR to prohibit politically oriented recorded message telephone calls to telephone numbers listed on that registry.
Help Americans Never Get Unwanted Phone Calls ("HANGUP") Act (S. 564, H.R. 5633) S. 564 was introduced by Senator Edward Markey on March 8, 2017, and referred to the Senate Committee on Commerce, Science, and Transportation the same day. H.R. 5633 was introduced by Representative Anna Eshoo on March 8, 2017, and referred to the Committee on Commerce, Science, and Transportation. **Summary:** These bills would amend the Communications Act of 1934 and the Bipartisan Budget Act of 2015 to repeal provisions that authorize the use of robocall equipment to call mobile telephones or residential telephone lines to collect debts owed to the U.S. government. The bill would also extend the TCPA to restrict government contractors and other legal entities from using robocall equipment without the prior consent of the called party. (Currently, government contractors are exempt from TCPA restrictions under an FCC declaratory ruling released on July 5, 2016.)
Consolidated Appropriations Act, 2018 (H.R. 1625) H.R. 1625 became P.L. 115-141 on March 23, 2018. The law contains a provision that expanded and clarified the existing prohibition on misleading or inaccurate caller identification information.
Repeated Objectionable Bothering of Consumers on Phones (ROBOCOP) Act (H.R. 5573) H.R. 5573 was introduced by Representative Jackie Speier on April 18, 2018, and referred to the House Committee on Energy and Commerce.

[44] Additionally, Representative Debbie Dingell has circulated the CEASE Robocalls Act, which would lift the communications common carrier exemption in the FTC Act to permit the FTC to bring enforcement actions against telecommunications carriers and VoIP providers when they engage in unfair and deceptive practices with respect to illegal robocalls. It has not been introduced.

[45] The House report is available at https://www.congress.gov/bill/115th-congress/senate-bill/81; the Senate report is available at https://www.congress.gov/congressional-report/115th-congress/senate-report/141/.

[46] https://www.congress.gov/congressional-report/115th-congress/senate-report/91/1.

Robocall Enforcement Enhancement Act (S. 2694) S. 2694 was introduced by Senator Brian Schatz on April 18, 2018, and referred to the Senate Committee on Commerce, Science, and Transportation. **Summary:** This bill would amend the Communications Act of 1934 to lengthen the statute of limitations from two years to three years for spoofing violations, lengthen the statute of limitations from one year to three years for robocall violations, and amend how the FCC imposes penalties for illegal use of automated telephone equipment.
Stopping Bad Robocalls Act (S. 3078, H.R. 6026) S. 3078 was introduced by Senator Edward Markey on June 7, 2018, and referred to the House Committee on Energy and Commerce. H.R. 6026 was introduced by Representative Frank Pallone on June 18, 2018, and referred to the Senate Committee on Commerce, Science, and Transportation. **Summary:** These bills clarify the prohibitions on making robocalls, require the FCC to establish a nationwide database of reassigned telephone numbers, and require the FCC, in consultation with the FTC, to submit to Congress a report regarding enforcement of robocall regulations. Specifically, these bills were introduced in response to the May 2018 U.S. Court of Appeals for the D.C. Circuit case striking down the FCC's definition of an automatic telephone dialing system.
Deter Obnoxious, Nefarious, and Outrageous Telephone Calls (DO NOT Call) Act (S. 3149) S. 3149 was introduced by Senator Catherine Cortez Masto on June 27, 2018, and referred to the Senate Committee on Commerce, Science, and Transportation. **Summary:** This bill would provide for criminal penalties, including fines and imprisonment, for robocall violations detailed in the legislation.

Outlook

Based on their long history, scammers appear determined to continue their attempts to defraud consumers. Robocalls make these efforts easier. The FTC asserts that law enforcement on its own cannot completely solve the problem of robocalls. Technological solutions, including robust call-blocking technology, likely will also be required. The DNO Registry, a technology solution that has been proven to significantly decrease robocalls, is supported by most stakeholders, but concerns remain with legitimate telemarketers who fear it may negatively impact them. The FCC intends to address these concerns in 2018. The impacts of the FTC initiatives on fraudulent robocalls, and the resulting impacts in the telemarketing industry, may continue to be oversight issues for Congress.

Appendix A. Options for Responding to Unwanted Robocalls

Because robocalls to consumers and businesses are not treated the same under existing laws and regulations, consumers and businesses have different options for responding to robocalls. Both the FTC and FCC have published consumer guidance for how to deal with unwanted calls

- *Stop Unwanted Calls and Texts*, Federal Communications Commission;[47] and
- *Blocking Unwanted Calls*, Federal Trade Commission.[48]

Cutting down on unwanted robocalls most likely will reduce consumer exposure to fraudulent ones, along with every other type of unwanted robocall.

Reporting a Violation (Consumers)

Consumers can file a complaint with both the FCC and FTC. The agencies choose which robocallers to pursue for legal or regulatory enforcement based partly on these complaints.

- Complaints can be filed with the FCC at https://consumercomplaints.fcc.gov/hc/en-us/requests/new?ticket_form_id=39744 (Under "Phone Issues," select "Unwanted Calls.")
- Complaints can be filed with the FTC at https://complaints.donotcall.gov/complaint/complaintcheck.aspx.
- Prior to filing a complaint, consumers should confirm that their number is in the DNC Registry. This can be done at https://donotcall.gov/confirm/conf.aspx.

Reporting a Violation (Businesses)

Businesses have limited legal recourse against robocallers, but they can still take steps to curtail them. If a business receives a call that falls into one of the two exceptions above—sale to an employee at work that does not relate to work or sale of "nondurable office or cleaning supplies"—the business can report it to the FTC using the same website listed above for consumers.

Blocking Robocalls (Consumers and Businesses)

Both consumers and business can take advantage of a number of technical options for blocking robocalls.

[47] Federal Communications Commission, "Stop Unwanted Calls, Texts, and Faxes," web page, https://www.fcc.gov/unwanted-calls.

[48] Federal Trade Commission, "Blocking Unwanted Calls," web page, https://www.consumer.ftc.gov/articles/0548-blocking-unwanted-calls.

Third-Party Blocking Services for Landlines

Blocking services provided by commercial firms can be used by individual consumers, small businesses, and large businesses. For VoIP services, some of these options may be "cloud-based," meaning they are managed from a remote location rather than on-site.

Consumers and businesses with a small number of lines may employ a third-party blocking service. One such example is Nomorobo, a winner of the 2013 Robocall Challenge[49] hosted by the FTC. (See **Appendix B** for information about the Robocall Challenge.) Nomorobo is a cloud-based solution that uses "simultaneous ringing," which routes incoming calls to a second telephone line managed by Nomorobo. In the Nomorobo solution, this second line would identify and hang up on the illegal robocall before it can ring through to the user. Nomorobo uses a database of known robocallers compiled with the help of the FTC, user reports, and its own "honeypots."[50] If a call gets a match in the Nomorobo database, the call is not allowed to reach the intended recipient. If there is not a match, the call is allowed to go through.

One example of an enterprise-wide service for large businesses is Pindrop,[51] which provides robocall solutions to secure phone communications. The company developed and deploys patented "Phoneprinting" technology that can identify, locate, and authenticate phone devices just from the call audio, thereby detecting fraudulent calls as well as verifying legitimate callers. The service is used globally by banks, insurers, brokerages, and retailers. The company states that its service succeeds in detecting over 80% of fraud—even against first-time callers.

Third-Party Mobile Phone Applications[52]

Both consumers and businesses can download software applications ("apps"), often free, to their mobile phones to filter out calls from unidentified callers and/or numbers not in the person's contact list. One app is YouMail. While YouMail is primarily used for voicemail transcriptions, it also provides protection against robocalls. The data the company collects through the app is used to calculate the Robocall Index. Another app requires a caller to enter the first two letters of the recipient's last name for the call to go through. Users of Apple's iPhone can download and use the Nomorobo app[53] for a monthly fee. An Android-compatible Nomorobo app is expected to be available soon. CTIA,[54] the wireless industry association, has a web page that lists existing Android apps.[55]

Telecommunications Carrier Services

Traditional landline, internet-based (i.e., VoIP), and mobile telephone carriers provide customers with various options for blocking robocalls. **Table A-1**, **Table A-2**, and **Table A-3** contain details

[49] Federal Trade Commission, 2013 Robocall Challenge, April 2013, https://robocall.devpost.com.

[50] A "honeypot" is a set of thousands of telephone lines that answers and traps incoming calls by capturing caller IDs and voice recordings. The FTC also employs honeypots in its fight against robocallers.

[51] https://www.pindrop.com.

[52] Additionally, some mobile phones come equipped with call-blocking features.

[53] Nomorobo, http://www.nomorobo.com/ios/.

[54] CTIA is a trade association representing the wireless communications industry in the United States. When the organization was established in 1984, it was known as the "Cellular Telecommunications Industry Association. Later, that name was changed to the "Cellular Telecommunications and Internet Association," and then "CTIA—The Wireless Association." Since 2015, the organization is known as "CTIA."

[55] CTIA, "Android Robocall Blocking," https://www.ctia.org/consumer-tips/robocalls/android-robocall-blocking.

of the offerings of each type of provider, as reported by *Consumer Reports*.[56] An October 2016 *Consumer Reports* examination[57] found that the quality of these services varied greatly among carriers. Overall, this examination found that consumers using internet-based phone services have the best call-blocking options and that most phone companies are not providing strong protection to their traditional landline and wireless customers.

[56] *Consumer Reports* is a magazine published by Consumers Union, a nonprofit organization focused on product testing, consumer-oriented research, public education, and advocacy.

[57] Carla Fried, "New Study Finds Some Phone Companies Offer Better Robocall Protections Than Others," *Consumer Reports*, October 26, 2016, http://www.consumerreports.org/consumer-protection/the-best-service-providers-for-blocking-robocalls/.

Table A-1. Landline Robocall Blocking Services

Provider	Price	Uses Nationwide Database to Block Calls	Offers Personal Blacklist	Rejects Anonymous Calls	Offers Do Not Disturb	Offers Personal Whitelist
Sonic	Free			•		
CenturyLink	$$		•	•	•	•
Windstream	$		•	•	•	•
Frontier	$		•	•		
Fairpoint	$$			•		
Verizon	$$		•	•		
AT&T	$$		•	•		

Source: Carla Fried, "New Study Finds Some Phone Companies Offer Better Robocall Protections Than Others," *Consumer Reports*, October 26, 2016, https://www.consumerreports.org/consumer-protection/the-best-service-providers-for-blocking-robocalls/.

Note: $ means $5 or less, and $$ means $6 or more per month.

Table A-2. VoIP Robocall Blocking Services

Provider	Price	Uses Nationwide Database to Block Calls	Offers Personal Blacklist	Rejects Anonymous Calls	Offers Do Not Disturb	Offers Personal Whitelist
Time Warner Cable	Free	•	•	•	•	•
CenturyLink	Free		•	•	•	•
Verizon FiOS	Free		•	•	•	•
AT&T U-verse	Free		•	•	•	•
Ooma	$$	•	•	•	•	
Comcast	Free		•	•		
Frontier	Free		•	•		

Source: Carla Fried, "New Study Finds Some Phone Companies Offer Better Robocall Protections Than Others," *Consumer Reports*, October 26, 2016, https://www.consumerreports.org/consumer-protection/the-best-service-providers-for-blocking-robocalls/.

Note: $ means $5 or less, and $$ means $6 or more per month.

Table A-3. Mobile Robocall Blocking Services

Provider	Price	Uses Nationwide Database to Block Calls	Offers Personal Blacklist	Rejects Anonymous Calls	Offers Do Not Disturb	Offers Personal Whitelist
RingPlus	Free	•	•	•	•	
Boost	$	•	•	•		
T-Mobile	$		•		•	•
Sprint	Free		•		•	
AT&T Wireless	$		•			
Verizon Wireless	$		•	•	•	
U.S. Cellular	$		•			

Source: Carla Fried, "New Study Finds Some Phone Companies Offer Better Robocall Protections Than Others," *Consumer Reports*, October 26, 2016, https://www.consumerreports.org/consumer-protection/the-best-service-providers-for-blocking-robocalls/.

Note: $ means $5 or less, and $$ means $6 or more per month.

Call-Blocking Devices

Businesses and consumers can install devices to stop robocalls. These devices work with traditional and VoIP landlines with Caller ID. There are at least four such devices available. These devices generally use a "blacklist" or a "whitelist." The former blocks all calls in the list (all others are allowed), while the latter only allows calls that are on the list (all others are blocked). Some devices use both types of lists.[58] One example of a device that uses both a blacklist and a whitelist is the Digitone Call Block Plus (see **Figure A-1**). This device, like the others, is installed between the telephone wall jack and the telephone.

Figure A-1. Digitone Call Blocker Plus

An Example of a Blocking Device

Source: "Consumers Put Robocall-Blocking Devices to the Test," *Consumerist*, July 28, 2015, https://consumerist.com/2015/07/28/consumers-put-robocall-blocking-devices-to-the-test/.

[58] All the devices tested are reviewed in the article "Consumers Put Robocall-Blocking Devices to the Test," *Consumerist*, July 28, 2015, https://consumerist.com/2015/07/28/consumers-put-robocall-blocking-devices-to-the-test/.

Appendix B. Recent Law Enforcement Actions Against Robocallers

One of the most enduring and harmful methods used in an attempt to defraud people is the "IRS Scam." It has been perpetrated by numerous entities since about 2013. This scam involves callers who claim to be employees of the IRS, using fake names and bogus identification. The callers may even know details about their targets and they usually use spoofed telephone numbers. Potential victims are told they owe money to the IRS and are threatened with arrest. They are also told that the amount owed must be paid immediately using gift cards or a wire transfer. Potential victims may not even be safe if they do not answer the phone: if the phone isn't answered, the scammers often leave an "urgent" message demanding a return call. Some scammers have even used video relay services to try to scam deaf and hard of hearing individuals. In another variation of the scam, recent immigrants with limited knowledge of English are approached in their native language. In these cases, victims are threatened with deportation. Phone scams of this kind have been on the IRS's "Dirty Dozen" list of scams since 2014. The IRS believes that the scam is responsible for over $54 million in losses to victims.

Appendix C. The FTC's Robocall Challenge Program

In response to the significant growth in complaints about robocalls from consumers, the FTC held four Robocall Challenges, discussed below.

The Original Robocall Challenge

The original FTC challenge, held in 2013, asked participants to develop a solution to block illegal robocalls on landlines and mobile phones. There were two winners: Aaron Foss for Nomorobo[59] and Serdar Danis for "Robocall Filtering System and Device with Autonomous Blacklisting, Whitelisting, Graylisting and Caller ID Spoof Detection."[60]

Both winning entries work by intercepting and filtering out robocalls using technology to blacklist robocaller phone numbers and whitelist numbers associated with acceptable incoming calls. Both proposals also filter out unapproved robocallers by employing a CAPTCHA-style[61] test to prevent illegal calls from ringing through to a user.

Zapping Rachel

The second challenge, held in 2014, was called Zapping Rachel. In this challenge, security experts were asked to build tools that investigators could use to track and minimize illegal robocalls. The challenge had three phases:

- The Creator Phase challenged contestants to build a honeypot[62] that identifies inaccurate information in incoming calls, such as spoofed caller IDs, or determines which calls are likely robocalls. The winning entry used a combination of an audio CAPTCHA filter,[63] call detail analysis, and recording and transcription analysis to determine the likelihood that an incoming call was a robocall.[64]
- The Attacker Phase challenged contestants to circumvent an existing honeypot and prevent it from collecting information on incoming calls. The winning entry, "Droid Rachel," circumvented the honeypot by employing a four-step targeting process that screened out phone numbers potentially connected to a honeypot, and optimized Droid Rachel's ability to send robocalls using unsuspecting consumers' Android phones.[65]

[59] Nomorobo, https://nomorobo.com.

[60] Serdar Danis and Aaron Foss each received $25,000 for their solutions.

[61] A CAPTCHA is a program that protects websites against computer programs logging into them by generating and grading tests that humans can pass, but current computer programs cannot. "CAPTCHA" stands for "Completely Automated Public Turing Test to Tell Computers and Humans Apart."

[62] As defined earlier in this report, a "honeypot" is a set of thousands of telephone lines that answers and traps incoming calls by capturing caller IDs and voice recordings. The FTC employs honeypots in its fight against robocallers.

[63] An audio CAPTCHA allows visitors to request a pronunciation of the CAPTCHA code.

[64] Jon Olawski received $3,133.70 for his winning honeypot.

[65] Jan Volzke received $3,133.70 for his solution.

- The Detective Phase challenged contestants to analyze call data from an existing honeypot and develop algorithms to predict which calls were likely robocalls. The winning solution focused on metrics such as the number of calls made, whether the number called was a toll-free number, and the time of the call to identify likely robocalls.[66]

Robocalls: Humanity Strikes Back

The third challenge, Robocalls: Humanity Strikes Back, was held in 2015. Contestants were asked to create tools people could use to block and forward robocalls automatically to a honeypot. The winner of this contest was RoboKiller,[67] created by Ethan Garr and Bryan Moyles.

DetectaRobo

As part of the National Day of Civic Hacking in June 2015, the FTC challenged the public with DetectaRobo,[68] the agency's fourth contest. Participants were asked to analyze call data and create algorithms that could predict which calls were likely robocalls. Three of the 19 teams that registered were selected as demonstrating superior functionality, accuracy, innovation, and creativity

- The winning team in this challenge was "Team HaV" (Ved Deshpande and M. Henry Linder).
- The two runners-up were—
  - "Team Milibo" (Sridhar Ramakrishnan and Shuping Liu) and
  - "Team RDAC" (Charles Julian Knight, Taylor Kelley, Ian Moraes, Rohan Smith, Will Mavis, John Cowhig, Sean Browning, James Albert Snow, and Pablo River).

[66] The winning team of Yang Yang and Jens Fischer shared $3,133.70. The judges also selected two honorable mentions, Sean Beck and DarkTyphoon, who each received $1,337.

[67] Robokiller, http://www.robokiller.com.

[68] DetectaRobo, https://www.ftc.gov/news-events/contests/detectarobo.

Appendix D. Fines Imposed on Robocallers by the FTC, 2017

The Federal Trade Commission has successfully concluded four cases against fraudulent robocallers, summarized below.

Justin Ramsey

On April 13, 2017, the FTC obtained a settlement order with Justin Ramsey, the ringleader of telemarketing operations that bombarded consumers with illegal robocalls and called phone numbers listed on the National DNC Registry. The order banned Ramsey and his company, Prime Marketing LLC, from, among other things, placing robocalls to individuals to sell goods or services and initiating sales calls to numbers listed on the DNC Registry. Ramsey and Prime Marketing were also fined a $2.2 million civil penalty, to be suspended upon payment of $65,000.

According to the FTC's January 2017 complaint, in 2012 and 2013 Ramsey and several codefendants made millions of robocalls to consumers and also placed millions of calls to phone numbers listed on the DNC Registry. In just one week in July 2012, the complaint states, the defendants made more than 1.3 million illegal robocalls to consumers nationwide, 80% of which were to numbers listed on the DNC Registry. From 2014 through 2016, Ramsey continued his unlawful telemarketing through his new company, Prime Marketing. During April and May of 2016, Ramsey and Prime Marketing initiated at least 800,000 calls to numbers in the DNC Registry. The other defendants in the case, except Ramsey and Prime Marketing, settled the commission's charges at the same time the agency filed its complaint.[69]

Aaron Michael Jones and Steven Stansbury[70]

On June 2, 2017, a federal district court judge in California approved default judgments proposed in January 2017 by the FTC against Aaron Michael Jones, Steven Stansbury, and nine associated companies for making billions of illegal telemarketing robocalls to consumers. The FTC estimated that more than 100 million illegal robocalls per year were made to numbers listed on the DNC Registry.

In addition to permanently banning Jones, Stansbury, and their companies from all telemarketing activities, including initiating robocalls, the order imposed a $2.7 million penalty against each of them, payable to the FTC. Seven of the nine individual defendants, and corporate defendant Local Lighthouse Corp., agreed to court orders that settled the FTC's charges in January.

All Us Marketing LLC

There were numerous defendants in this case, together doing business as All Us Marketing LLC (previously known as Payless Solutions). These individuals were responsible for thousands of calls to consumers nationwide making false claims about bogus debt relief services. After convincing consumers to provide their credit card information, the defendants charged them

[69] Federal Trade Commission, "Recidivist Robocaller Settles FTC Telemarketing Complaint," press release, April 13, 2017, https://www.ftc.gov/news-events/press-releases/2017/04/recidivist-robocaller-settles-ftc-telemarketing-complaint.

[70] Federal Trade Commission, "FTC Obtains Court Judgments Against California-based Robocallers Who Placed Billions of Illegal Calls, Federal Trade Commission," press release, June 2, 2017, https://www.ftc.gov/news-events/press-releases/2017/06/ftc-obtains-court-judgments-against-california-based-robocallers.

between $300 and $4,999 up front, but provided nothing in return. In some cases, the defendants used consumers' personal information to apply for new credit cards. The complaint also charged the defendants with making many calls to consumers whose phone numbers were on the DNC Registry, along with several other violations of the TSR and Florida's Telemarketing and Consumer Fraud and Abuse Act.

This large case, involving 15 defendants, was settled on June 5, 2017, with eight orders entered by a federal district court against Orlando-based individuals and companies. The order imposed financial judgments on 12 of the defendants that totaled $4,890,797. The orders also permanently ban most of the defendants from robocalling, telemarketing, or providing so-called "debt relief" services. The orders against three other defendants were for lesser amounts: two were fined $389,915 and one was fined $640,747.

Caribbean Cruise Lines[71]

In February 2017, the FTC, along with nine states and the Tennessee Valley Authority[72] settled with the remaining defendants who assisted Caribbean Cruise Lines, Inc. (CCL), a Florida-based cruise line company, in running an illegal telemarketing campaign that made billions of robocalls. Most defendants had settled their charges in 2015. In settling the final charges, CCL's owner Fred Accuardi was barred from robocalling and illegal telemarketing, as well as helping anyone else make such calls. The settlement order also includes a judgment of $1.35 million, which is to be suspended after the defendants pay $2,500.

The CCL robocall campaign ran from October 2011 through July 2012 and averaged approximately 12 million to 15 million illegal sales calls a day. Consumers who answered these calls typically heard a prerecorded message telling them they had been selected to participate in a 30-second research survey, after which they would receive a "free" two-day cruise to the Bahamas. In reality, the calls were designed to market CCL's cruises and various up-sell packages. The illegal robocalls generated millions of dollars for CCL.

[71] Federal Trade Commission, "Caribbean Cruise Lines Robocall Operation in Permanent Dry Dock," press release, February 21, 2017, https://www.ftc.gov/news-events/press-releases/2017/02/ftc-states-put-remaining-defendants-massive-caribbean-cruise.

[72] The nine states and one federally owned corporation were: Colorado, Florida, Indiana, Kansas, Mississippi, Missouri, North Carolina, Ohio, Washington, and the Tennessee Regulatory Authority. The attorneys general of these states helped the FTC in bringing this case.

Appendix E. Fines Imposed on Robocallers by the FCC, 2017

Changes in technology have made it easier and cheaper for robocallers to manipulate caller ID information. To address this problem, the Federal Communications Commission has focused both on enforcement actions and on pursuing policies to help consumers and their service providers block malicious robocalls.

Adrian Abramovich

In June 2017, the FCC took its first enforcement action under the 2009 Truth in Caller ID Act. It proposed[73] a $120 million fine—its largest ever—on a Florida-based robocaller, Adrian Abramovich.[74] Abramovich is believed to have been responsible for 96 million spoofed robocalls over the final three months of 2016. Of those calls, about 90% were made to mobile phones and 10% to landline phones. The calls used "neighborhood spoofing" technology that uses the local area code and the first three digits of the recipient's own phone number to encourage people to answer the calls. If the call was answered, recipients would hear a recorded message asking them to press one to hear about vacation deals from travel companies such as Marriott, Expedia, Hilton, and TripAdvisor. Callers would then be transferred to call centers in Mexico, where live operators would try to sell them vacation packages at Mexican timeshare facilities not affiliated with the companies in the recorded messages.

Philip Roesel

The FCC proposed a fine of $82 million on robocaller Philip Roesel in August 2017.[75] This robocaller, doing business as Wilmington Insurance Quotes, reportedly made more than 21 million spoofed robocalls in violation of the Truth in Caller ID Act. Based on subpoenaed records, the FCC verified that 82,106 health insurance telemarketing calls were made from October 2016 through January 2017 using falsified caller ID information. The fine was based on these verified calls, which were found to target vulnerable consumers, including the elderly, the infirm, and low-income families.

[73] Before a case can be settled, a case requires that after a fine has been proposed, the company must have an opportunity to make its case and fully respond to the notice served. At the FCC, the Enforcement Bureau reviews the case, conducts any additional investigation necessary, and makes any adjustments to the case as appropriate, including reducing or even cancelling a fine if warranted. After this review, the case is either closed with a mutually agreeable settlement or, if not settled, the FCC may vote to assess a fine through a forfeiture order. Even after the Forfeiture Order, a company may continue to challenge an enforcement action before the commission. Once it has exhausted its right to challenge an enforcement action before the commission, however, a company is required to pay the fine imposed in the Forfeiture Order. If the company does not do so within the required time, the fine is considered a debt to the United States and is referred to the U.S. Department of Justice for a collection action.

[74] Federal Communications Commission, "In the Matter of Adrian Abramovich, Marketing Strategy Leaders, Inc., and Marketing Leaders, Inc.," File No. EB-TCD-15-00020488, Citation and Order, Prerecorded Message Violations and Wire Fraud, June 22, 2017, https://apps.fcc.gov/edocs_public/attachmatch/FCC-17-80A1.pdf.

[75] Federal Communications Commission, "In the Matter of Best Insurance Contracts, Inc., and Philip Roesel, dba Wilmington Insurance Quotes," File No. EB-TCD-16-00023195, Citation and Order, Prerecorded Message Violations and Wire Fraud, August 4, 2017, https://apps.fcc.gov/edocs_public/attachmatch/FCC-17-107A1.pdf.

Appendix F. Proposed Legislation, 109th-114th Congresses

Both the House and the Senate introduced legislation during this timeframe aimed at protecting consumers from fraudulent robocalls.

House of Representatives

One bill related to robocalls has passed the House since 2005 (H.R. 5175, the "Democracy is Strengthened by Casting Light on Spending in Elections" (DISCLOSE) Act, in the 111th Congress). The DISCLOSE Act contained one relatively narrow provision related to public safety, prohibiting robocalls to public service access points (911 call centers). Other legislation proposed in the House of Representatives during this timeframe would have

- expanded the ability of the FCC to impose forfeiture penalties;
- expanded the statute of limitations and increased the maximum penalty for certain violations;
- expanded prohibitions on providing inaccurate caller ID data to apply to persons outside the United States if the recipient of the call is within the United States;
- directed providers of spoofing services to take such steps as the FCC may prescribe to verify that users do not engage in caller ID information violations;
- expanded the definition of "caller identification information" to include text messages;
- amended the federal criminal code to make it a crime to knowingly initiate a commercial robocall from within the United States or to a recipient within the United States;[76]
- directed the FTC to establish an office within the Bureau of Consumer Protection to advise the FTC on the prevention of fraud targeting seniors; and
- directed the FTC to revise the DNC Registry provisions of the TSR to prohibit politically oriented recorded message telephone calls to telephone numbers listed on that registry.[77]

Senate

Legislation proposed during this timeframe would have

- directed the FTC to establish an office within the Bureau of Consumer Protection to advise on the prevention of fraud targeting seniors;
- authorized the FCC to impose forfeiture penalties, without first sending a citation regarding the charged violation, against persons not licensed by the FCC who violate prohibitions on the use of robocall equipment; and

[76] Without the prior written consent of the recipient.

[77] A "politically-oriented recorded message telephone call" is defined as an outbound telephone call that plays a recorded message that promotes, advertises, campaigns, or solicits donations for or against a political candidate or regarding a political issue; or uses a political candidate's name.

- amended the federal criminal code to make it a crime to knowingly initiate most commercial robocalls, without the prior written consent of the recipient, from within the United States or to a recipient within the United States.

The Senate has not passed any bills related to robocalls since 2005.

Author Information

Patricia Moloney Figliola
Specialist in Internet and Telecommunications Policy

Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.