I. Report Overview

In February of 2008, Congress passed the Do-Not-Call Registry Fee Extension Act of 2007 (“Fee Extension Act”), requiring this biennial report on the National Do Not Call Registry (“Registry”). In compliance with the Fee Extension Act, this Report contains a summary of the current operations of the Registry, the impact on the Registry of new telecommunication technologies, and the impact of the established business relationship exception in our enforcement efforts.

The Registry currently has over 244 million active registrations. During FY 2021, the Registry increased by more than 2.8 million phone numbers. Over 12,000 sellers, telemarketers, and exempt organizations subscribed to access the Registry in FY 2021, and 2,000 of those entities paid fees totaling nearly $13 million.

II. Introduction

The Registry has been in operation since the summer of 2003. Consumers continue to register their telephone numbers, verify registration of numbers, and submit complaints of suspected violations at a high rate. During the last 18 years, the Registry has also successfully served businesses, as they accessed the Registry, and law enforcement, as they investigated violations of the Do Not Call rules. The FTC continues to look for and make improvements to the system to better serve consumers, telemarketers, and law enforcers while maintaining the efficient management and accuracy of the Registry. FTC staff continues to work closely with the contractor overseeing the Registry to ensure that the integrity of the Registry is maintained.

The Fee Extension Act required the FTC, in consultation with the Federal Communications Commission (“FCC”), to first report to Congress on the Registry by December 31, 2009, and biennially thereafter. Specifically, the Fee Extension Act requires that the FTC’s report provide the following information:

- the number of consumers who have placed their telephone number(s) on the Registry;
- the number of persons paying fees for access to the Registry and the amount of such fees;
- the impact on the Registry of
the five-year re-registration requirement;
new telecommunication technology;
number portability and abandoned telephone numbers; and

- the impact of the established business relationship exception on businesses and consumers.

This biennial Report provides an overview of the operation of the Registry for FY 2020 and 2021.

III. Number of Consumers Who Placed Their Telephone Numbers on the National Registry

Americans continue to utilize the Registry in very high numbers. In the first four days following the launch of the Registry on June 27, 2003, more than 10 million numbers were registered. As of September 30, 2003, a total of 51,968,777 telephone numbers had been registered. With each fiscal year, the number has steadily increased. By the end of FY 2020, the number of active registrations was 241,483,968. As of September 30, 2021, the Registry had 244,302,202 active registrations.3

IV. Number of Entities Paying Fees for Access to the National Registry

In FY 2020, a total of 1,952 entities paid fees totaling $12,461,638 for access to the Registry. In FY 2021, a total of 2,000 entities paid fees totaling $12,927,876 for access to the Registry.4 In addition, certain entities can access data from the Registry without having to pay a fee. These include entities that access five or fewer area codes of data in a year, as well as exempt organizations (such as charitable organizations) that are not required to access the Registry to comply with do-not-call requirements under federal law, but voluntarily access the Registry to avoid calling consumers who do not wish to receive calls.5 In FY 2020, 10,420 entities subscribed to access five or fewer area codes at no charge, and 556 entities claiming “exempt organization” status obtained free access. In FY 2021, 9,595 entities subscribed to access five or fewer area codes at no charge, and 512 entities claiming “exempt organization” status obtained free access.

V. Impact on the National Registry of the Five-Year Re-Registration Requirement, New Telecommunications Technology, and Number Portability and Abandoned Telephone Numbers

A. Five-Year Re-Registration Requirement
When the Registry was first implemented in 2003, registrations were scheduled to expire after five years. Out of concern that the expiration of numbers on the Registry would be detrimental to consumers, the FTC, in the fall of 2007, pledged not to drop any numbers from the Registry, pending final Congressional action. The following February, Congress passed the Do Not Call Improvement Act of 2007 (“DNCIA”), eliminating the automatic removal of numbers from the Registry.

At the time the DNCIA was passed in February 2008, no registrations had yet expired, because the first registrations were made in late June 2003, less than five years earlier. Consequently, no consumers ever had to re-register their numbers. The FTC continues to believe that eliminating the re-registration requirement has not decreased the accuracy of the Registry, but that it has enabled consumers to maintain their right to privacy without interruption and made it possible to avoid the cost associated with educating consumers about the need to re-register.

B. New Telecommunications Technology

The FTC also continues to track how technology affects the Registry and the consumers and telemarketers who access it. Advancements in technology have increased the number of illegal telemarketing calls made to telephone numbers on the Registry. For example, Voice over Internet Protocol (VoIP) technology allows callers, including law-breakers, to make higher volumes of calls inexpensively from anywhere in the world. In 2019 and 2020, the FTC brought its first two cases against interconnected VoIP service providers for assisting and facilitating abusive telemarketing calls. The FTC will continue to enforce the Telemarketing Sales Rule against VoIP service providers, as appropriate.

Technological developments also allow illegal telemarketers to easily fake, or “spoof,” the caller ID information that accompanies their calls, which allows them to conceal their identity from consumers and law enforcement. Further, many telemarketers use automated dialing technology to make calls that deliver prerecorded messages (commonly referred to as “robocalls”), which allow violators to make very high volumes of illegal calls without significant expense. The net effect of these technological developments is that bad actors who refuse to comply with the Registry or other telemarketing laws, are able to make more cheap and illegal telemarketing calls using methods that make it difficult for the FTC and other law enforcement agencies to find them. As a result, consumer complaints about illegal calls—especially robocalls—have increased significantly. In the fourth quarter of 2009, the FTC received approximately 63,000 complaints about illegal robocalls each month. That number has more than quintupled—in the first three quarters of FY 2021, the FTC received an average of more than 300,000 robocall complaints per month. The FCC also receives complaints about unwanted calls and received approximately 155,000 unwanted call complaints in FY 2020, and approximately 175,000 in FY 2021.

To help end caller ID spoofing, among other purposes, Congress passed the Pallone-Thune Telephone Robocall Abuse Criminal Enforcement and Deterrence Act (TRACED Act) at the end of 2020. To combat illegal caller ID spoofing, and as directed by the TRACED Act, the
FCC required that voice service providers implement the STIR/SHAKEN caller ID authentication framework in their Internet Protocol (IP) networks and take reasonable measures to implement a caller ID authentication solution for non-IP networks by June 30, 2021. Consistent with the TRACED Act, the FCC extended the deadline for STIR/SHAKEN implementation for small and other eligible voice service providers until June 30, 2023; but the agency recently shortened the small voice service provider extension for those providers the FCC determined are most likely to be the source of illegal robocalls. Once full implementation of STIR/SHAKEN is complete, it should be much more difficult for illegal callers to spoof caller IDs on calls transiting IP networks. Non-IP legacy networks do not support STIR/SHAKEN, but pursuant to the TRACED Act and FCC regulation, providers with non-IP networks must participate in efforts to develop a non-IP caller ID authentication framework. Any provider that has not yet implemented STIR/SHAKEN also must engage in other forms of robocall mitigation. More information on the FCC’s implementation of the TRACED Act appears below in this Report’s update on the FCC’s response to new telecommunications technology.

To combat the technologies that telemarketers use to make illegal calls, FTC staff has undertaken a number of initiatives, described below, designed to spur the development and availability of technology that will protect consumers from illegal calls. FTC staff have worked closely with industry groups, academic experts, and counterparts at federal, state, and international government bodies to encourage the development of new technologies and telecommunications standards to combat illegal calls.

The FTC has held four public challenges designed to spur private sector development of technological solutions that will stop illegal telemarketing calls. The FTC held its first public challenge in conjunction with its 2012 Robocall Summit, offering a $50,000 prize to the individual or small team who proposed the best technological solution that blocks robocalls on consumers’ landlines and mobile phones. After reviewing 798 submissions, the FTC announced three winning solutions on April 2, 2013. One of the winners, “NomoRobo,” was on the market and available to consumers by October 2013—just 6 months after being named one of the winners. NomoRobo also reports blocking nearly 2.4 billion calls, is being offered directly to consumers by a number of telecommunications providers, and is available as an app on iPhones and Android phones. Following on the success of the first challenge, the FTC conducted its second contest, “Zapping Rachel,” in August 2014, where it awarded $17,000 in prizes to five winners who developed solutions that improved telephone honeypots—a system of phone lines that collect information and data about illegal calling patterns. In 2015, the FTC conducted two more challenges: “DetectaRobo” and “Robocalls: Humanity Strikes Back.” The FTC held “DetectaRobo” in conjunction with the 2015 National Day of Civic Hacking in June 2015, and asked contestants to create predictive algorithms that can identify robocalls. “Robocalls: Humanity Strikes Back” followed, in August 2015, and challenged contestants to build solutions that not only block robocalls from reaching consumers, but enable consumers to forward those unwanted robocalls to a crowd-sourced honeypot so that law enforcement and industry stakeholders can use the data collected. Winners for the 2015 challenge were announced on August 17, 2015.
The challenges contributed to a shift in the development and availability of technological solutions in this area, particularly call-blocking and call-filtering products. All of the major voice service providers now offer call-blocking or call-filtering products to some or all of their customers. In addition, there are a growing number of free or low-cost apps available for download on wireless devices that offer call-blocking and call-filtering solutions.

The FTC has taken additional measures to support analytics companies and voice service providers with their call-blocking and call-filtering efforts. In August 2017, the FTC began releasing a daily list of Do Not Call and robocall complaints, including the caller ID number, the date and time the unwanted call was received, the topic of the call, and whether the call was a robocall. Several analytics firms and call blocking companies report that this daily data release improved their ability to identify abusive and fraudulent calls.

The FTC has taken a multi-pronged approach to combating illegal calls, including those made by telemarketers.

First, like the FTC, the FCC has looked to call blocking as a means of combating illegal robocalls. The FCC has encouraged voice service providers (including terminating voice service providers and intermediate providers) to block robocalls in certain instances and protected those providers from liability under the FCC’s rules if they block in error.

The FCC, in 2017, took a clear, bright-line approach by authorizing voice service providers, including intermediate providers, to block calls that purport to be from invalid, unallocated, or unused numbers without first obtaining customer consent. The FCC also permitted blocking of calls using a do-not-originate list, which includes numbers that should never be used to originate calls. The FCC determined that, along with calls originating within the United States, these rules apply to foreign-originated calls that purport to originate from U.S. North American Numbering Plan (NANP) numbers on the grounds that many illegal calls originate from call centers abroad.

Subsequent FCC action ensured that terminating voice service providers can respond to the evolving tactics of bad actors. In 2019, the FCC made clear that terminating voice service providers may block calls based on reasonable analytics so long as consumers are given the opportunity to opt out of such blocking. In 2020 the FCC adopted a safe harbor from violations of the Act and the FCC’s rules for terminating voice service providers that block based on reasonable analytics designed to identify unwanted calls, so long as the analytics take into account caller ID authentication information and consumers are given the opportunity to opt out. The FCC also established a safe harbor for voice service providers (including intermediate providers) to block calls from a bad-actor upstream provider that fails to effectively mitigate illegal traffic after being notified of such traffic by the FCC. At the same time, the FCC took steps to reduce the risk of erroneous blocking.

In December 2020 the FCC expanded the safe harbor for blocking based on reasonable analytics to include certain network-level blocking, without consumer opt out, designed to
identify calls that are highly likely to be illegal. The safe harbor is available to terminating voice service providers that disclose to consumers that they are engaging in such blocking. The FCC also adopted enhanced transparency and redress requirements for voice service providers that block calls.

Beyond blocking, the FCC has established three affirmative obligations that apply to voice service providers (including intermediate providers). First, voice service providers must respond to all traceback requests from the FCC, law enforcement, or the industry traceback consortium, fully and timely. Second, voice service providers must take steps to effectively mitigate illegal traffic when notified of such traffic by the FCC. Finally, voice service providers must adopt affirmative, effective measures to prevent new and renewing customers from using the network to originate illegal calls.

The FCC authorized creation of a Reassigned Numbers Database that launched on November 1, 2021. The database enables callers to determine whether numbers they wish to call have been disconnected since they obtained consent, and therefore whether the consent they have to call each number remains valid.

In addition, the FCC has pushed industry to develop and deploy the STIR/SHAKEN caller ID authentication standards, a protocol to verify that the person dialing the call has authority to use the displayed caller ID number. STIR/SHAKEN are acronyms for the Secure Telephony Identity Revisited (STIR) working group of the Internet Engineering Task Force, which developed several protocols for authenticating caller ID information and the Signature-based Handling of Asserted information using toKENs (SHAKEN) specification produced by the Alliance for Telecommunications Industry Solutions and the SIP Forum, which standardizes how the protocols produced by STIR are implemented across the industry.

Deployment of STIR/SHAKEN will help reduce caller ID spoofing and assist telecommunications and analytics companies determine which calls they should block. However, it should be noted that this protocol applies exclusively to calls that are originated and delivered using Internet Protocol (IP) technology; existing technology does not permit STIR/SHAKEN to work with calls delivered using non-IP technology, including traditional time-division multiplexing technology. The FCC required voice service providers to implement STIR/SHAKEN on their IP networks by June 30, 2021, subject to some extensions. Voice service providers that received an extension are required to perform robocall mitigation on calls they originate until they have implemented STIR/SHAKEN.

Throughout 2019, several of the larger telecommunications companies issued press releases stating that they had begun beta testing and a phased-in implementation. Although SHAKEN/STIR will not be a panacea, both the FTC and FCC believe that it will be another useful tool for improving trust in the telephone network and reducing the number of spoofed calls.
The FTC and the FCC also share information to help facilitate technological solutions, such as call blocking, and have taken steps to increase the quality and quantity of shared information. To that end, on September 28, 2016, the FTC updated its Do Not Call complaint intake process to provide a drop-down list of possible call categories for consumers to choose from to make it easier for consumers to report the topic of the call and to help the FTC and FCC identify trends. In FY 2020 and the first three quarters of FY 2021, the top five topics selected by consumers for unwanted call complaints were:

- Imposters (calls pretending to be government, businesses, or family and friends)
- Warranties and protection plans
- Reducing debt (credit cards, mortgage, student loans)
- Medical and prescriptions
- Computer and technical support

C. Number Portability and Abandoned Telephone Numbers

According to FCC regulations, people changing service providers are able to retain their phone number. As the FTC developed procedures to identify numbers to remove from the Registry, the FTC considered how to identify these ported numbers and differentiate them from abandoned or disconnected numbers. To increase the likelihood that ported numbers are not removed but abandoned numbers are, the FTC’s contractor first identifies the numbers that have been designated as new connections in the compiled disconnection and reassignment data. A number is designated as disconnected and reassigned for purposes of removing it from the Registry only if neither the name nor the address for the new account match the name or address associated with the previous account for that number.

Consequently, the only numbers removed from the Registry are those that have been disconnected (or abandoned) and then reconnected to a different account holder at a different address. This process, which is performed monthly, ensures that numbers that have been ported are not removed, but numbers that truly have been abandoned are deleted.

VII. Impact of Established Business Relationship Exception on Consumers and Businesses

The Telemarketing Sales Rule (TSR) and the FCC’s rules contain exemptions that permit a seller or telemarketer to call a person who has listed his or her telephone numbers on the Registry if the call is to a person with whom the seller has an “established business relationship.” An established business relationship under the TSR and the FCC rules is a relationship based on 1) the consumer’s purchase, rental, or lease of the seller’s goods or services, or a financial transaction between the consumer and seller, within the 18 months immediately preceding the date of a telemarketing call; or 2) a consumer’s inquiry or application regarding a product or service offered by the seller within the three months immediately preceding the date of a
telemarketing call. This exception allows sellers and their telemarketers to call customers who have recently made purchases or made payments, and to return calls to prospective customers who have made inquiries, even if their telephone numbers are on the Registry. Consumers have the option to request to be put on the seller's company-specific-do-not-call list. Such a request terminates the established business relationship with that seller for purposes of making telemarketing calls even if the consumer continues to do business with the seller. On November 18, 2015, the FTC amended the TSR to make clear that sellers and telemarketers have the burden of proof to demonstrate the existence of an established business relationship. Under the TSR, the relationship must be directly “between a seller and a consumer.”

Many businesses rely on this exemption to conduct telemarketing campaigns directed at recent or long-time customers, or consumers who have expressed an interest in becoming customers. Many consumers, however, perceive telemarketing calls that fall within this exemption to be inconsistent with the Registry because the consumers are unaware of the exception or do not realize that they have a relationship with the seller that falls within the definition of an established business relationship.

Such perceptions by consumers are especially likely when the relationship between the consumer and the seller arises from a brief, one-time transaction, or when the seller identified in the telemarketing call and the seller with whom the consumer has a relationship are part of the same legal entity, but are perceived by consumers to be different because they use different names or are marketing different products. Both the FTC and the FCC have stated that the issue of whether the exemption applies to calls by or on behalf of sellers who are affiliates and subsidiaries of a consumer has an established business relationship depends on consumer expectations. The FTC characterizes the issue as follows: “would consumers likely be surprised by that call and find it inconsistent with having placed their telephone number on the national ‘do-not-call’ registry?”

For both the FTC and the FCC, the factors to be considered in this analysis include 1) whether the subsidiary’s or affiliate’s goods or services are similar to the seller’s, and 2) whether the subsidiary’s or affiliate’s name is identical or similar to the seller’s name. The greater the similarity between the nature and type of goods or services sold by the seller and any subsidiary or affiliate and the greater the similarity in identity between the seller and any subsidiary or affiliate, the more likely it is that the call will fall within the established business relationship exemption.

Some businesses, seeking to circumvent the Registry, have sought to exploit the established business relationship exemption by making calls to persons who have not had the requisite contact with the seller. For example, some marketers claiming a business relationship have improperly placed telemarketing calls to consumers after acquiring the consumers’ telephone numbers from others. So-called “lead generators” collect information on consumer
interests through web advertising, by offering coupons or samples, or simply by “cold calling” consumers in order to determine whether the consumer has any interest in a particular product or service, such as debt relief or home alarms. Lead generators responsible for these so-called “call verified,” “permission-based,” or “opt-in” leads often fail to remove numbers listed on the Registry before calling consumers. Lead generating companies that have engaged in this type of “cold calling” have agreed to pay civil penalties to settle charges that their calls violated the TSR. At the same time, some telemarketers and sellers have acquired leads from lead generators and used them in telemarketing campaigns without screening the numbers to remove those listed on the Registry. In this way, a single sales pitch can produce multiple illegal calls, generating one or more calls from both the lead generators and the telemarketer.

Telephone calls from telemarketers to phone numbers provided by lead generators generally do not fall within the established business relationship exception because, while the consumers may have a relationship with the lead generator, they do not have an established business relationship with the seller who has purchased the leads. Unless the consumer inquired into the services of a specified seller, or the lead generator made disclosures that would alert the consumer that he or she should expect telemarketing calls from the seller as a result of his or her communications with the lead generator, the seller cannot claim that it has a relationship with the consumer such that it can ignore the consumer’s request not to receive telemarketing calls. In several enforcement actions, businesses that made telephone calls to consumers on the Registry after acquiring the consumers’ names from a lead generator, agreed to pay civil penalties to settle charges that their calls violated the TSR.

Other businesses have sought to circumvent the Registry by utilizing sweepstakes entry forms as a way to exploit the established business relationship exemption, arguing that the submission of a sweepstakes entry form creates an established business relationship for purposes of the TSR. The TSR, however, does not permit companies to circumvent the Registry in this manner because a sweepstakes entry form does not create an established business relationship for purposes of the TSR. Companies have agreed to pay civil penalties for making illegal calls that relied upon sweepstake entry forms as a basis for making telemarketing calls.

VIII. Conclusion

The Registry exists to provide consumers a choice whether to receive most telemarketing calls. It is important that the FTC and FCC work to keep it accessible and effective for consumers and telemarketers. As new technology provides new challenges, both agencies actively seek to address and confront these challenges. This includes encouraging private industry, other government entities, academia, and other interested parties to work towards solutions and create new strategies.

We publish an Annual Do Not Call Registry Data Book that gives a substantial amount of detail regarding registration numbers and other statistical information regarding the Registry. The 2021 Data Book can be found at https://www.ftc.gov/reports/national-do-not-call-registry-data-book-fiscal-year-2021. We have also created a new way to view the DNC data that is
updated quarterly, and it is accessible at FTC.gov/exploredata. Our Tableau Public page allows consumers to explore the data interactively, including drilling down to the information about their state or county. FTC staff continues to work closely with the contractor overseeing the Registry to ensure that the integrity of the Registry is maintained and that consumers’ preferences not to receive most telemarketing calls are honored.
ENDNOTES


2. On January 29, 2003, the FTC issued the final amendments to the Telemarketing Sales Rule (“TSR”) that, inter alia, established the National Do Not Call Registry. 16 C.F.R. § 310.

3. These totals exclude those telephone numbers that have been deleted by consumers or eliminated as part of the FTC’s process for removing disconnected and reassigned numbers from the Registry. A telephone number that was registered more than once between FY 2003 - FY 2021 is counted only once in these totals.

4. As established by the Fee Extension Act, in FY 2021, the annual fee per area code was $66 (with the first five area codes provided at no cost) with the maximum annual fee for accessing the entire Registry being $18,044.

5. Such “exempt” organizations include entities that engage in outbound telephone calls to consumers that do not involve the sale of goods or services, such as calls to induce charitable contributions, to raise funds for political purposes, or to conduct surveys. They also include entities who are engaged solely in calls to persons with whom they have an established business relationship or from whom they have obtained express written agreement to call, pursuant to the Amended TSR, 16 C.F.R. § 310.4(b)(1)(iii)(B)(1) or (2), and who do not access the Registry for any other purpose.


17. The Cellular Telecommunications Industry Association (CTIA) maintains a list of some of the available call blocking apps, both for iOS devices (https://www.ctia.org/consumer-resources/how-to-stop-robocalls/ios-robocall-blocking/) and for Android devices (https://www.ctia.org/consumer-resources/how-to-stop-robocalls/android-robocalls-blocking/)


47 C.F.R. § 52.21(m) and § 52.23.

16 C.F.R. § 310.4(b)(1)(iii)(B)(2) and § 310.2(q). The FCC’s rules similarly include an exemption for live-voice calls to consumers with whom the seller has an established business relationship. See 47 C.F.R. § 64.1200(c)(2), (f)(5), and (f)(15)(ii). These exemptions do not apply if the person has asked to be on the seller’s “entity-specific” do-not-call list by telling the seller or its representatives that he or she does not wish to receive telemarketing calls from the seller. See id. § 64.1200(f)(5)(i). The FCC eliminated the established business relationship exemption that applied to prerecorded telemarketing calls to residential lines, effective October 16, 2013. See Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991, CG Docket No. 02-278, Report and Order, 27 FCC Rcd 1830, 1845-47, paras. 35-43 (2012).

See United States v. Columbia House Co., Civ. No. 05C-4064 (N.D. Ill. filed July 14, 2005). In this case, the company agreed to a settlement after the FTC’s analysis found that its telemarketers continued to call former customers after the 18-month period provided by the established business relationship exemption had expired.


16 C.F.R. § 310.2(q).

See Statement of Basis and Purpose for Final Amended Telemarketing Sales Rule, 68 Fed. Reg. 4580, 4594 (Jan. 29, 2003). See also 47 C.F.R. § 64.1200(f)(5)(ii) (under the FCC’s rules, a consumer’s “established business relationship with a particular business entity does not extend to affiliated entities unless the [consumer] would reasonably expect them to be included”).

See Complying with the Telemarketing Sales Rule, at https://www.ftc.gov/tips-advice/business-center/guidance/complying-telemarketing-sales-rule. Similarly, the FCC has stated that “affiliates fall within the established business relationship exemption only if the consumer would reasonably expect them to be included given the nature and type of goods or


