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# UNMASKING THE VILLAIN: EXPOSING SCAMMERS' IDENTITIES TO DEFEAT HARMFUL CALLS

## ABSTRACT

*Since 1991, Congress has attempted to limit unwanted phone calls through legislative efforts. However, past and current laws remain ineffective as scam call complaints continue to increase while the harm of these calls remains severe. Currently, the laws affecting telecommunication regulation focus on reactive measures rather than preventative solutions. Most recently, Congress has passed the Telephone Robocall Abuse Criminal Enforcement and Deterrence Act, which will require telecommunication companies to implement SHAKEN/STIR technology to end scam calls before they reach consumers. While this is the most progressive legislation addressing scam calls, this Note will suggest that phone numbers be registered to all end users, in order to hold callers accountable and bad actors liable.*

## INTRODUCTION

“The man that does not fear punishment, little regards crime.”<sup>1</sup>

Scammers are becoming savvier; our laws should too. Today, scammers use telecommunication technology to mask themselves and escape liability by hiding their identities.<sup>2</sup> With rapidly developing technology, traditional telemarketing calls have turned into rampant scam calls.<sup>3</sup> Further, these calls have become a technological nightmare, by allowing scammers to bombard consumers through automated dialing systems.<sup>4</sup> What was once simply an annoyance of being interrupted at dinner has now become a grave security risk for our nation, as scammers steal victims' information, money, and identities.<sup>5</sup>

Scam calls are more harmful than unwanted telemarketing calls. Scam callers will often pose as credit card companies, the Internal Revenue Service (IRS), or even a local police precinct with the sole purpose of obtaining personal information and large sums of money from unsuspecting callers.<sup>6</sup>

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1. NORMAN MACDONALD, *MAXIMS AND MORAL REFLECTIONS* 116 (1827).

2. 74 AM. JUR. PROOF OF FACTS 3d *Scams and Cons* § 11 (2013).

3. See *Do Not Call Registry Data Book 2018: Complaint Figures by Year*, FED. TRADE COMM'N, <https://www.ftc.gov/policy/reports/policy-reports/commission-staff-reports/national-do-not-call-registry-data-book-fy-9> (last visited Oct. 8, 2019) [hereinafter *Do Not Call Registry Data Book 2018*].

4. Currently, automated dialing systems can call 10,000 generated numbers per hour. Dennis Cauchon, *States Try to Pull Plug on “Robo-Calls”*, USA TODAY (Jan. 19, 2008), [http://www.usatoday.com/news/politics/election2008/2008-01-17-robocall\\_N.htm](http://www.usatoday.com/news/politics/election2008/2008-01-17-robocall_N.htm).

5. *Phone Scams*, FED. TRADE COMM'N (2019), <https://www.consumer.ftc.gov/articles/0208-phone-scams>.

6. 74 AM. JUR. PROOF OF FACTS 3d *Scams and Cons* §11 (2013) (“The technique [scammers use] over the phone is similar to that used by the previous generation of con artists: a very attractive

Scam callers are bold enough to impersonate family members and trick victims by using their family members' phone numbers.<sup>7</sup> While there are a number of solutions consumers can explore to reduce these calls and protect themselves from scams, consumers continue to face a Sisyphean<sup>8</sup> undertaking in battling the never-ending onslaught of unsolicited calls.

Rather than expect consumers to continuously try to block unwanted calls, telephone companies should stop the offending calls where originated. Telecommunication companies have the ability to control the calls that travel through their networks and can stop calls from ever reaching consumers.<sup>9</sup> Additionally, the burden should shift to telecommunication companies, since they procure vast revenue each year on telemarketing calls, whether the calls are wanted or unwanted.<sup>10</sup>

In Part I, this Note will examine the current issues with scam calls and how the advancement of technology has helped scammers escape liability. Next, Part II will address the current legislation enacted to protect consumers against unwanted calls and scam calls. Section II.A. will discuss the Telephone Consumer Protection Act (TCPA), its history, and why it is insufficient. Section II.B. will discuss the solutions that developed from the TCPA in attempting to regulate telemarketing calls, and why these too have failed. Lastly, Part III will discuss recently passed legislation that requires telecommunication companies to implement SHAKEN<sup>11</sup> and STIR<sup>12</sup> technologies. Additionally, Part III will propose a mandatory registration for phone numbers to ensure traceability to the original caller.

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offer, the creation of a sense of urgency to force the victim to commit during the call and sending no product or a product that is grossly overvalued.”).

7. A new, popular scam involves a caller targeting grandparents. The caller will spoof their number and pretend to be a relative or grandchild in trouble. The caller will ask to have money wire-transferred to an account and will be told to not mention the incident to anyone else. *See* N.Y. STATE ATT'Y GEN., GRANDPARENT SCHEME (n.d.) [https://ag.ny.gov/sites/default/files/grandparent\\_scheme\\_brochure.pdf](https://ag.ny.gov/sites/default/files/grandparent_scheme_brochure.pdf).

8. In Greek mythology, Sisyphus was punished by being forced to roll an immense boulder up a hill only for it to roll down when it nears the top, repeating this action for eternity. Through the classical influence on modern culture, tasks that demand unending, thankless, and ultimately unsuccessful efforts are described as Sisyphean. *Sisyphean*, MERRIAM-WEBSTER, <https://www.merriam-webster.com/dictionary/Sisyphean> (last visited Feb. 29, 2020).

9. Currently, telecommunication companies exhibit the ability to stop unwanted calls by offering it as an additional service to one's phone bill. David Lazarus, *Column: Phone Companies Could Stop Robocalls. They're Just Not Doing It*, L.A. TIMES (July 29, 2016, 3:00 AM), <https://www.latimes.com/business/lazarus/la-fi-lazarus-fcc-robocalls-20160729-snap-story.html>.

10. *Id.* (“All of these robocallers represent billable minutes.”).

11. “SHAKEN” stands for Signature-based Handling of Asserted Information Using toKENs. *Combating Spoofed Robocalls with Caller ID Authentication*, FED. COMM. COMM'N, <https://www.fcc.gov/call-authentication> (last visited Oct. 26, 2019) [hereinafter *Combating Spoofed Robocalls with Caller ID Authentication*].

12. “STIR” stands for Secure Telephone Identity Revisited. *See id.*

## I. THE HIDDEN VILLIAN: HOW SCAMMERS HAVE REMAINED ELUSIVE

As time progresses, scams grow more elaborate and devious. Nowadays, while many consumers are wary about winning unanticipated prizes or funding princes of foreign nations, sophisticated scammers will impersonate government organizations, family members,<sup>13</sup> or even take advantage of national disasters.<sup>14</sup> For example, in May 2003, the Federal Trade Commission (FTC)<sup>15</sup> reported that fraudulent callers solicited personal information by pretending to invite consumers to pre-register for the National Do Not Call Registry (Do Not Call Registry).<sup>16</sup> However, the FTC neither accepts pre-registration nor does it invite consumers to register at all. Scammers often use similar ploys in order to collect and benefit from their victims' personal and financial information.<sup>17</sup>

Early legislation, such as the TCPA, and proposed solutions for consumers have proven ineffective.<sup>18</sup> Laws targeting telemarketing regulation assume that all telemarketing calls are made by law abiding companies for commercial purposes. Technological advancement has made finding and targeting bad faith callers nearly impossible and has proven to be the biggest challenge in regulating illegal telemarketing and scam calls.<sup>19</sup> Recently, many calls are being created through Voice over IP calls (VoIP calls), which are less traceable calls created through an Internet Protocol (IP) address and do not require registration of a user unlike landlines or cell phone calls.<sup>20</sup>

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13. The FTC received 10,565 family impersonation complaints in 2015 alone. Richard B. Stolley, *How to Beat the Grandparent Scam*, AARP (Jan./Feb. 2017), <https://www.aarp.org/money/scams-fraud/info-2016/how-to-beat-grandparent-scam.html>. *Id.*

14. Caralynn Lippo, *The 8 Most Sophisticated Phone Scams Right Now the Average Person Falls For*, BUS. INSIDER (Apr. 1, 2019, 2:33 PM), <https://www.businessinsider.com/phone-scams-robocall-spoofing-2019-4#fraudsters-will-even-take-advantage-of-national-disasters-5> (noting that after every storm, the Federal Emergency Management Agency receives “reports of fraudsters posing as FEMA inspectors” asking for social security numbers, bank account numbers, and even demanding payment for home inspections).

15. The Federal Trade Commission is an independent agency that provides civil resolution for antitrust law and consumer protection disputes. *About the FTC*, FED. TRADE COMM’N, <https://www.ftc.gov/about-ftc> (last visited Feb 22, 2020).

16. 74 AM. JUR. PROOF OF FACTS 3d *Scams and Cons* § 10 (2013).

17. *See id.*

18. Tara Siegel Bernard, *Yes. It’s Bad. Robocalls and Their Scams, Are Surging*, N.Y. TIMES (May 6, 2018), <https://www.nytimes.com/2018/05/06/your-money/robocalls-rise-illegal.html> (“[T]he volume [of automated phone calls] has skyrocketed in recent years, reaching an estimated 3.4 billion in April [2018] . . . That’s an increase of almost 900 million a month compared with [2017].”). *See discussion infra* Section II.A.

19. Justin Hurwitz, *Telemarketing, Technology, and the Regulation of Private Speech: First Amendment Lessons from the FCC’s TCPA Rules*, 84 BROOK. L. REV. 1, 4 (2018) (“They cannot be sued because they cannot be found; and because they cannot be sued, they do not care about the TCPA and make no effort to comply with it.”).

20. *See Can VoIP be Traced?*, CALLSPROUT, <http://www.callsprout.com/can-voip-be-traced/> (last visited Oct. 10, 2019).

“Robocalls” and “spoofing” are two additional technologies that helped further telemarketing efforts but eventually turned into harmful scam call tactics. Robocalls are automated phone calls that are mass delivered to phones and automatically play a recording whenever the call is answered.<sup>21</sup> The FTC describes robocalls as: “[i]f you answer the phone and hear a recorded message instead of a live person, it’s a robocall.”<sup>22</sup> Currently, robocalls are 60% of calls made to consumers, and complaints to the Federal Communications Commission (FCC)<sup>23</sup> will continue to increase as software for robocall technology allows users to inexpensively send thousands of calls at once.<sup>24</sup>

Spoofing is when a caller deliberately falsifies their identification by altering the information transmitted to a caller identification (caller ID) to disguise their true identity.<sup>25</sup> Similar to blocking a name from caller ID, spoofing itself is not illegal for privacy reasons and allows anonymity when calling.<sup>26</sup> Spoofing is only illegal when the technology is “used to commit fraud or otherwise perpetrate a crime.”<sup>27</sup> Often, scammers will use this method to create a fraudulent caller ID and make it appear that the bank, the IRS, or a neighbor is calling.<sup>28</sup> Spoofing calls are one of the biggest problems in regulating unwanted calls, since spoofing makes these callers harder to detect.<sup>29</sup> Spoofing is also incredibly dangerous, since it allows scammers to use phone numbers familiar to consumers, thus making consumers more vulnerable to scams.<sup>30</sup>

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21. *Robocalls*, FED. TRADE COMM’N, <https://www.consumer.ftc.gov/articles/0259-robocalls> (last visited Oct. 10, 2019) [hereinafter FED. TRADE COMM’N, *Robocalls*].

22. *Id.*

23. “The Federal Communications Commission . . . enforces the Telephone Consumer Protection Act (TCPA), which also regulates telemarketing.” *Complying with the Telemarketing Sales Rule*, FED. TRADE COMM’N, <https://www.ftc.gov/tips-advice/business-center/guidance/complying-telemarketing-sales-rule> (last visited Feb. 22, 2020).

24. See Lauren Hall, *Relentless Robocalls Anger Consumers*, CONSUMER ACTION NEWS (Consumer Action News, San Francisco, Cal.), Spring 2019, at 1, <https://www.consumer-action.org/news/articles/the-robocall-scourge-spring-2019>.

25. “Spoofing is when a caller deliberately falsifies the information transmitted to your caller ID display to disguise their identity.” *Caller ID Spoofing*, FED. COMM. COMM’N, <https://www.fcc.gov/consumers/guides/spoofing-and-caller-id> (last updated Jan. 6, 2020) [hereinafter *Caller ID Spoofing*].

26. Chris Morran, *Phone Companies Can Filter Out Robocalls, They Just Aren’t Doing It*, CONSUMER REP. (May 4, 2018), <https://www.consumerreports.org/consumerist/phone-companies-can-filter-out-robocalls-they-just-arent-doing-it/>.

27. *Id.*

28. See Emma Fletcher, *That’s Not Your Neighbor Calling*, FED. TRADE COMMISSION: CONSUMER INFO. (Jan. 31, 2018), <https://www.consumer.ftc.gov/blog/2018/01/thats-not-your-neighbor-calling?page=1>.

29. Lippo, *supra* note 14.

30. Spoofing makes it easier for scammers to defraud victims by altering a caller’s number to a familiar or trustworthy number, such as a neighbor or a government agency. Patrick Webre, *FCC Stands United with Consumers to Stop Spoofing Scams*, FED. COMM. COMM’N (Mar. 4, 2019, 11:06 AM), <https://www.fcc.gov/news-events/blog/2019/03/04/fcc-stands-united-consumers-stop-spoofing-scams>. A common example of a scam that relies on spoofing are calls with a caller ID

In 2009, the FCC tried to address the increase in internet generated phone calls with the Truth in Caller ID Act (Caller ID Act). The Caller ID Act prohibits any person or entity from transmitting misleading or inaccurate caller ID information with the “intent to defraud, cause harm, or wrongly obtain anything of value” and prohibits using caller ID spoofing on VoIP services.<sup>31</sup> Anyone illegally spoofing a phone number can face penalties of up to \$10,000 per violation.<sup>32</sup> However, the Caller ID Act does not eliminate spoofing technology. Scammers, who already knowingly disregard the law, will continue to use masking technology to further their illegal acts.<sup>33</sup>

As early legislation proved ineffective in ending unwanted calls,<sup>34</sup> the FTC and FCC proposed other methods for consumers to stop these calls.<sup>35</sup> Nevertheless, the efforts by the FCC and FTC have been fruitless, as scam calls have continued to increase. In May 2019, the FTC received 46,000 impostor scam complaints.<sup>36</sup> Additionally, those fallen victim to scams tend to suffer large monetary losses.<sup>37</sup> As of August 2019, consumers reported a total loss of \$285.2 million.<sup>38</sup>

Even though victims continue to suffer, stopping or decreasing unwanted calls is an onerous task to tackle for an ill-equipped consumer. One proposed solution for consumers is simply to not answer spoofed calls. However, this is easier said than done, since spoofed numbers are often convincing.<sup>39</sup> Further, the Caller ID Act is not intended eliminate spoofed calls; it is only

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from the police department claiming the target’s family members are in jail and that target needs to pay up to bail them. See Alvaro Puig, *Scammers Impersonate the Police*, FED. TRADE COMM’N (July 17, 2015), <https://www.consumer.ftc.gov/blog/2015/07/scammers-impersonate-police>.

31. Truth in Caller ID Act of 2009, Pub. L. No. 111-331, 124 Stat. 3572 (2010) (codified at 47 U.S.C. § 227(e) (2012)).

32. *Id.* at § 227(e)(5)(A)(i).

33. See Octavio Blanco, *Mad About Robocalls?*, CONSUMER REP. (Apr. 2, 2019), <https://www.consumerreports.org/robocalls/mad-about-robocalls/> [hereinafter Blanco, *Mad About Robocalls?*].

34. See discussion *infra* Section II.A.

35. For example, the FTC has suggested consumers report unwanted calls or personally download call-blocking apps to their phones. *How to Stop Unwanted Calls*, FED. TRADE COMM’N, <https://www.consumer.ftc.gov/features/how-stop-unwanted-calls> (last visited Mar. 26, 2020).

36. *Complaints About Government Imposter Scams Reach Record High, According to New FTC Data*, FED. TRADE COMM’N (July 1, 2019), <https://www.ftc.gov/news-events/press-releases/2019/07/complaints-about-government-imposter-scams-reach-record-high>.

37. Kate Fazzini, *Robocalls Jumped 60 Percent in the U.S. Last Year and Scammers Are Finding More Ways to Make Money*, CNBC (Jan. 4, 2019, 2:12 PM), <https://www.cnbc.com/2019/01/02/as-robo-calling-ramps-up-consumers-increasingly-wonder-why-carriers-cant-stop-scammers-from-spoofing-their-phone-numbers.html> (“The scams are surprisingly effective, with 3 percent to 5 percent of people responding to the automated messages and sometimes sending scammers thousand[s] of dollars.”).

38. Octavio Blanco, *Robocall Scams Get More Sophisticated and Costly*, CONSUMER REP. (Aug. 21, 2019), <http://www.consumerreports.org/scams-fraud/robocall-scams-get-more-sophisticated-and-costly>.

39. See Connie Thompson, *Thanks to Spoofing, Call ID Is No Longer a Reliable Way to Tell Who’s Calling You*, KOMONEWS (May 23, 2019), <https://komonews.com/news/consumer/thanks-to-spoofing-caller-id-is-no-longer-a-reliable-way-to-tell-whos-calling-you>.

meant to deter users from spoofing with malice.<sup>40</sup> While the Caller ID Act imposes a heavier fine of \$10,000 for every violation, a consumer would still have to identify the actual caller to claim a private right of action. The Caller ID Act also does not cover calls outside the United States.<sup>41</sup>

Another suggested solution is consumers block every unknown and perceived scam call that is received.<sup>42</sup> However, this solution is, in itself, a nearly impossible task due to the very nature of spoofing.<sup>43</sup> Consumers can block a spoofed number, but the caller can call back one minute later under the guise of another spoofed number. Spoofed numbers are untraceable without the right tools.<sup>44</sup> For the average consumer, spoofing makes finding the scammer's actual phone number unreasonable and filing a complaint pointless without an accurate report.

One suggested remedy is that consumers turn their phones to "Do Not Disturb."<sup>45</sup> This blocks any callers absent from a person's contact list and only allows calls from unlisted numbers if two calls are made in quick succession. However, this remedy is impractical because consumers would be unable to receive calls from anyone not on their contact list.

Consumers also have the option of registering with the Do Not Call Registry or filing a consumer complaint with the FTC<sup>46</sup> or FCC.<sup>47</sup> The Do Not Call Registry instructs companies to remove consumers from their list who do not wish to be called.<sup>48</sup> Furthermore, consumer complaints are "informal complaints" with no enforcement ability on the basis of individual complaints, which act to inform of policy decisions.<sup>49</sup> Lastly, in addition to

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40. Marguerite Reardon, *New Robocall Rules Let FCC Crack Down on Texts and Overseas Callers*, CNET (Aug. 1, 2019, 1:17 PM), <https://www.cnet.com/news/fcc-adopts-rules-to-go-after-international-robocallers/>.

41. See Truth in Caller ID Act of 2009, Pub. L. No. 111-331, 124 Stat 3572 (2010) (codified at 47 U.S.C. § 227(e) (2012)).

42. Brooke Crothers, *In 2019 Here's How To Stop and Block Robocalls, Spam, and Unknown Calls on iPhone, Android*, FORBES (Dec. 30, 2018), <https://www.forbes.com/sites/brookecrothers/2018/12/30/in-2019-heres-how-to-stop-robocalls-scammers-on-iphone-android-verizon-att/#759919b03fbc>.

43. Spoofing is to disguise a caller's true number on caller ID. Therefore, it would be difficult to find the original caller if the number you are investigating was never accurate. See *Caller ID Spoofing*, *supra* note 25.

44. Spoofing technology allows callers to easily hide their number without being traced. Brad Stephenson, *How to Trace A Spoofed Phone Number*, LIFEWIRE (Dec. 6, 2019), <https://www.lifewire.com/trace-a-spoofed-phone-number-4774972> ("It may be possible to track down a spoofer by convincing a phone carrier and law enforcement to begin an investigation, but this can be incredibly time consuming and still isn't guaranteed to get the result you require.").

45. Crothers, *supra* note 42.

46. *Submit A Consumer Complaint to the FTC*, FED. TRADE COMM'N, <https://www.ftc.gov/fair/consumer-protection/submit-consumer-complaint-ftc> (last visited Mar. 5, 2020).

47. *Unwanted Calls – Phone*, FED. COMM. COMM'N, <https://consumercomplaints.fcc.gov/hc/en-us/articles/115002234203-Unwanted-Calls?from=button> (last visited Mar. 5, 2020).

48. *National Do Not Call Registry*, FED. TRADE COMM'N, <https://www.consumer.ftc.gov/articles/0108-national-do-not-call-registry> (last visited Oct. 11, 2019) [hereinafter *National Do Not Call Registry*]; see also *infra* Section II.B.1.

49. See *Unwanted Calls – Phone*, *supra* note 47.

phone bills, consumers can pay telephone companies to block known telemarketing numbers to protect them from these unwanted and potentially dangerous calls.<sup>50</sup>

The “Big Four” wireless telecommunication companies, T-Mobile, Verizon, Sprint, and AT&T, have begun implementing technology within their networks to align with federal agencies in regulating unwanted calls.<sup>51</sup> However, since a phone call must travel through multiple networks from caller to receiver, these methods will only be successful if the largest telecommunication companies cooperate and have compatible systems.<sup>52</sup> Currently, these telecommunication companies’ call-blocking technology are implemented at varying degrees of effectiveness while using different platforms and methods.<sup>53</sup>

In 2017, T-Mobile was the first carrier to provide free services, called “Scam ID” and “Scam Block,” in attempts to end robocalls.<sup>54</sup> Scam ID displays a message on consumers’ phones that an incoming call is a “scam likely” number, so consumers are less likely to answer the call.<sup>55</sup> Scam Block allows consumers, who opted-in, to reject potential scam calls outright rather than let the calls come through and ring.<sup>56</sup> Sprint does not offer any spam identification or blocking features unless consumers pay an additional \$2.99 per month.<sup>57</sup> Since other telecommunication companies did not widely provide similar services, there was no noticeable impact on fraudulent calls made between 2017 and 2019.<sup>58</sup> Beginning in May 2019, Verizon began to utilize Call Filter technology. Similar to T-Mobile’s “Scam ID,” Verizon’s Call Filter will alert callers of suspected spam calls, but the calls will still go through to consumers’ phones.<sup>59</sup> Lastly, AT&T, one of the largest telecommunication companies world-wide, started offering base level spam identification services in July 2019.<sup>60</sup> But, these major carriers are still failing to unify and stop spam calls from ever getting through their networks in the first place.

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50. See Morran, *supra* note 26.

51. Adam Ismail, *Stopping Robocalls: What the Big Four Carriers Are Really Doing*, TOM’S GUIDE (Aug. 14, 2019), <https://www.tomsguide.com/us/wireless-carrier-robocalls,news-30351.html>.

52. See Brian X. Chen, *You Can’t Stop Robocalls. You Shouldn’t Have To*, N.Y. TIMES (Apr. 24, 2019), <https://www.nytimes.com/2019/04/24/technology/personaltech/stop-robocalls.html>.

53. Ismail, *supra* note 51.

54. *Id.*

55. *Id.*

56. *Id.*

57. *Id.*

58. Sarah Elizabeth Adler, *Scam Calls Are ‘Epidemic’ — and Getting Worse*, AARP (Sept. 14, 2018), <https://www.aarp.org/money/scams-fraud/info-2018/scammer-calls-increasing.html> (“In 2017, only 3.7 percent of calls to cell phones were fraudulent. This year [in 2018], that number reached 29.2 percent — and it’s expected to climb to 44.6 percent in 2019.”).

59. Ismail, *supra* note 51.

60. *Id.*



## II. THE TELEPHONE CONSUMER PROTECTION ACT: ITS HISTORY AND DEVELOPMENT

While Congress is aware of the harms and frustrations that scam calls cause residents, the legislative remedies provided are futile. Building upon the TCPA, which was created to limit telemarketing calls, most laws focus on the consumers' actions rather than that of companies and callers abusing communication technologies.<sup>61</sup> But, the onus on consumers is too great. Telephone companies, who profit from high call traffic on their lines, escape the responsibility of preventing these deceiving or fraudulent calls.<sup>62</sup> Consumers will still be inundated with unwanted calls if legislation simply provides reactive instructions for consumers rather than preventative protection, while the identities of bad actors remain hidden.

### A. THE TELEPHONE CONSUMER PROTECTION ACT

Telemarketing was first used as a marketing method in the 1900s in order to solicit existing and potential customers.<sup>63</sup> By the 1980s, telemarketing had become a sophisticated sales method with designated call centers.<sup>64</sup> In 1991, Congress enacted the TCPA in response to consumers' mass outrage at increased telemarketing calls.<sup>65</sup>

The TCPA aimed to restrict telephone solicitations and the use of automated telephone calls without prior express consent of the called party.<sup>66</sup> The TCPA regulates sales made through facsimiles, phone calls, and text messages.<sup>67</sup> It was created in order to balance individuals' privacy rights, public safety interests, and commercial freedoms of speech and trade.<sup>68</sup>

As the use of automated dialing systems grew, businesses, consumers, and emergency lines worried about getting their phone lines tied up.<sup>69</sup> The TCPA makes it illegal for any person to "make any call (other than a call made for emergency purposes or made with the prior express consent of the called party) using any automatic telephone dialing system or an artificial or prerecorded voice"<sup>70</sup> However, the TCPA allows telemarketers to call

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61. *Id.*

62. *See* Lazarus, *supra* note 9.

63. *Telemarketing: Overview*, AD AGE: ENCYCLOPEDIA, <https://adage.com/article/adage-encyclopedia/telemarketing-overview/98900> (last visited Oct. 13, 2019).

64. *Id.*

65. *See* 47 U.S.C. § 227 (2012).

66. S. REP. NO. 102-178, at 1, (1991), *as reprinted in* 1991 U.S.C.C.A.N. 1968, 1968.

67. *See* Reardon v. Uber Techs. Inc., 115 F. Supp. 3d 1090, 1093–94 (N.D. Cal. 2015).

68. Rules & Regulations Implementing the Telephone Consumer Protection Act of 1991, 30 FCC Rcd. 7961, 7964, ¶ 2 (2015).

69. Martin Cunniff, *Then v. Now: 7 Major Changes Since the TCPA Passed in 1991*, TCPA DEF. FORCE (Apr. 19, 2018), <https://www.tcpadefenseforce.com/tcpa-law-blog/7-major-changes-since-the-tcpa-passed>. "Phone lines tied up" refers to a phone line being used by an unwanted caller, and therefore, preventing wanted calls from coming through to the receiver. *Id.*

70. 47 U.S.C. § 227(b)(1)(A) (2012).

consumers with “prior express consent.”<sup>71</sup> Although the TCPA does not define “prior express consent,” the FCC stated that a consumer may revoke their prior consent by sending the telemarketer a message to “opt-out.”<sup>72</sup>

To assert a TCPA claim, a plaintiff must show that the defendant: (1) called the plaintiff’s telephone for non-emergency purposes; (2) called the plaintiff using an automatic dialing system or an artificial or prerecorded voice for sales purposes; (3) and called without the plaintiff’s prior express consent.<sup>73</sup> Further, the TCPA does not provide guidance to consumers about the revocation of prior express consent, thus leaving the FCC and courts to interpret how consumers may effectively revoke consent.<sup>74</sup> After the TCPA’s enactment, courts reverted to the common law definition of consent from tort or contract law.<sup>75</sup>

Difficulties arise when consumers are required to stop unwanted calls themselves. Often, many consumers are unaware they provided consent to telemarketing companies, since these clauses are usually hidden within contracts with vague relation to the product actually purchased.<sup>76</sup> If consent was either intentionally or mistakenly given to receive calls, consumers need to contact the company to remove themselves from the list<sup>77</sup>—granted the consumer can successfully contact the company. Spoofing calls and robocallers, legal or illegal, make it increasingly difficult for consumers to trace the call, let alone to express a desire to be removed from the company call list.

If a consumer did not consent to these calls and decides to pursue a private right of action against a caller in state court, the complainant still faces the daunting task of identifying the company.<sup>78</sup> A complainant does have the

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71. 47 U.S.C. § 227(b)(1)(B) (2012).

72. SoundBite Commc’ns, Inc., 27 FCC Rcd. 15,391, 15,397 n.47 (2012).

73. See L.A. Lakers, Inc. v. Fed. Ins. Co., 869 F.3d 795, 804 (9th Cir. 2017) (holding that in establishing these three elements, a plaintiff has proven a claim for invasion of privacy under the TCPA and may obtain damages).

74. Zachary D. Miller, *Effective Revocation of Consent Under the Telephone Consumer Protection Act Following Reyes v. Lincoln Automotive Financial Services*, 72 CONSUMER FIN. L.Q. REP. 453, 467 (2018).

75. *Id.*; see also Gager v. Dell Fin. Servs., LLC., 727 F.3d 265, 270 (3d Cir. 2013) (using the common law definition in the TCPA, the court in Gager interpreted consent as acceptance that is “given voluntarily” (quoting BLACK’S LAW DICTIONARY, 346 (9th ed. 2009))).

76. Van Patten v. Vertical Fitness Grp., 847 F.3d 1037, 1043–46 (9th Cir. 2017) (holding a consumer gave consent to be contacted on his telephone in connection with his application for a gym membership).

77. Consumers have a right to revoke consent using any reasonable method, including orally or in writing. Consumers generally may revoke by way of a consumer-initiated call, directly in response to a call initiated or made by a caller, or at an in-store bill payment location. Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991, 30 FCC Rcd. 7961, 7996 ¶ 64 (2015).

78. Hall, *supra* note 24.

ability to file a claim against a “Doe defendant.”<sup>79</sup> However, courts generally disfavor this type of litigation and usually only allow discovery if the defendant can otherwise be identified, except for by name.<sup>80</sup> Even after costly litigation, victims of these calls are only awarded up to \$500 for each violation and \$1,500 for knowing violations, sums that would not deter most robocallers.<sup>81</sup>

Scam calls have continued to increase since the enactment of the TCPA.<sup>82</sup> The FCC’s top consumer complaints are unwanted calls, including illegal spoofed calls and robocalls. The FCC receives over 200,000 call complaints each year,<sup>83</sup> which comprises 60% of their overall complaints.<sup>84</sup> In 2018, the Do Not Call Registry<sup>85</sup> had 5,780,172 live-caller and robocall complaints logged.<sup>86</sup> Despite these complaints, fraudulent callers can continue committing largely undetected crimes due to new technology without matched regulation.<sup>87</sup>

The TCPA is ineffective because its solution provides little protection for consumers from scam callers who knowingly disregard the law. While the problem of unwanted calls remains the same, society and technology have drastically changed. Cell phones allow any person to be reached at any time.<sup>88</sup> The internet provides readily available technology to spoof numbers and steal personal information.<sup>89</sup> Autodialing software and programs have become

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79. A “Doe defendant” is a fictitious name or name placeholder for when a defendant’s name is unknown. *See* *Spencer v. Doe*, Case No. 3:10-CV-1801-N-BH, 2011 WL 3444336, at \*1 (N.D. Tex. Aug. 4, 2011).

80. *Id.*

81. Hall, *supra* note 24; *see also* 47 U.S.C. § 227(c)(5)(B) (“A person who has received more than one telephone call within any 12-month period by or on behalf of the same entity in violation of the regulations prescribed under this subsection may . . . recover for actual monetary loss from such a violation, or to receive up to \$500 in damages for each such violation, whichever is greater . . .”).

82. According to the FTC complaint figures, from 2014 to 2017, unwanted telemarketing call complaints increased from 3,241,050 complaints to 71,157,337 complaints. *Do Not Call Registry Data Book 2018*, *supra* note 3.

83. *The FCC’s Push to Combat Robocalls & Spoofing*, FED. COMM. COMM’N, <https://www.fcc.gov/about-fcc/fcc-initiatives/fccs-push-combat-robocalls-spoofing> (last visited Oct. 8, 2019).

84. *Id.*

85. The Do Not Call Registry is a national registry organized by the Federal Trade Commission. Consumers volunteer their numbers to be added to the registry, and sales companies are supposed to check the registry against their call list. If a number on the registry appears, the company is supposed to strike that number from their call list and refrain from contacting the consumer. *See National Do Not Call Registry*, *supra* note 48.

86. *Do Not Call Registry Data Book 2018*, *supra* note 3.

87. “Con artists also saw the value of the anonymity of the telephone; the mark had no physical description of the swindler.” 74 AM. JUR. PROOF OF FACTS 3d *Scams and Cons* § 9 (2013).

88. *See* Calvin Sims, *All About/Cellular Telephones; A Gadget that May Soon Become the Latest Necessity*, N.Y. TIMES (Jan. 28, 1990), <http://www.nytimes.com/1990/01/28/business/all-about-cellular-telephones-a-gadget-that-may-soon-become-the-latest-necessity.html>.

89. “*Spoofed*” *Local Phone Numbers*, OFF. MINN. ATT’Y GEN., <https://www.ag.state.mn.us/Consumer/Publications/SpoofingLocalNumbers.asp> (last visited Oct. 11, 2019).

more varied and advanced.<sup>90</sup> Additionally, the solutions spawned from the development of the TCPA still put the burden on consumers to block and report scam calls, rather than eliminate the calls within the network. The TCPA fails to protect the interests of the public. Telemarketing and scam calls are ever pervasive and harmful today.<sup>91</sup> Furthermore, the TCPA and other federal statutes have largely failed because their solutions become irrelevant due to the dynamic advancement in technology.<sup>92</sup>

## B. AFTER THE TCPA AND WHY CURRENT REMEDIES CONTINUE TO FAIL

In 2003, the FTC created the Do Not Call Registry in response to the ineffectiveness of the TCPA. The Do Not Call Registry was established in order to regulate and prohibit commercial telemarketers from making unsolicited calls.<sup>93</sup> However, despite these measures, consumer complaints continued to grow.<sup>94</sup> In addition to the increased calls, many called parties are now victimized by complex, costly scams that often target the more vulnerable populations.<sup>95</sup>

### 1. The National Do Not Call Registry

The Do Not Call Registry allows consumers to choose whether to receive marketing calls from specific numbers.<sup>96</sup> If a consumer chooses to list their number on the registry, telemarketing companies are supposed to remove that consumer's number from their call lists.<sup>97</sup> However, the Do Not Call Registry has proven ineffective as well. The Registry only stops sales calls from actual

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90. See Dan Sincavage, *Sale Managers, How Important Are Auto Dialers?*, TENFOLD, <https://www.tenfold.com/dialer/auto-dialer> (last visited Feb 22, 2020). Different types of auto dialers offer different features. For example, predictive dialers are “[a] computer-based systems that automatically and simultaneously call a large group of numbers and pass them on to an available live agent.” *Id.* Voice broadcasting, fixed dialing, and inbound call routing are other types of auto dialers. *See id.*

91. *Do Not Call Registry Data Book 2018*, *supra* note 3.

92. *Current TCPA Reflects Failure to Recognize Modern Communications*, CREDIT UNION NAT'L ASS'N. (May 6, 2019), <https://news.cuna.org/articles/115991-current-tcpa-reflects-failure-to-recognize-modern-communications>. The TCPA rules were last updated in 2010. Harold Furchtgott-Roth, *Failing to Protect Consumers Under the Telephone Consumer Protection Act*, FORBES (July 16, 2015, 11:05 PM), <https://www.forbes.com/sites/haroldfurchtgottroth/2015/07/16/failing-to-protect-consumers-under-the-telephone-consumer-protection-act/#5561e1b27603>

(“Rather than adopt new rules to reflect the most recent changes in technology, both good and bad, the [FCC] chose instead to issue opinions for more than 20 petitions on a case-by-case basis.”).

93. *National Do Not Call Registry Opens*, FED. TRADE COMM'N (June 27, 2003), <https://www.ftc.gov/news-events/press-releases/2003/06/national-do-not-call-registry-opens>.

94. In 2014, the Do Not Call Registry recorded a total of 3,241,050 live-caller and robocall complaints. By 2018, 7,157,337 call complaints were made. *Do Not Call Registry Data Book 2018*, *supra* note 3.

95. For example, elderly people are more vulnerable to scams. *See* Blanco, *Mad About Robocalls?*, *supra* note 33.

96. *See National Do Not Call Registry*, *supra* note 48.

97. *Id.*

companies but not fraudulent entities or individuals.<sup>98</sup> The Registry is unable to prevent political calls, charitable calls, debt collection calls, surveys, and purely informational calls, as well as calls from scammers who ignore the registry's existence.<sup>99</sup> Additionally, while the FTC has a method for consumers to report unwanted calls, the FTC receives millions of these reports each year and cannot respond to many of them. Given that many scammers and robocallers spoof their numbers, this makes it nearly impossible to report an accurate phone number to the FTC.<sup>100</sup>

## 2. The Bolstering Online Transparency Act

In response to the dangers of harmful calls, California enacted the Bolstering Online Transparency Act (BOT Act) in 2019, which makes it:

unlawful for any person to use a bot to communicate or interact with another person in California online . . . in order to incentivize a purchase or sale of goods or services in a commercial transaction or to influence a vote in an election [without disclosing that the communication is through a bot].<sup>101</sup>

The BOT Act combats one of the biggest issues with unwanted calls: robocalls. Robocalls pose an issue in regulating unwanted calls because a consumer cannot revoke their consent in accordance with the TCPA.<sup>102</sup> Additionally, robocalling technology, in conjunction with automatic dialing technology, allow unwanted callers to make calls at a very low cost.<sup>103</sup> The proliferation of “[r]obocalls increased from 831 million calls per month in September 2015 to 3.2 billion calls in March 2018—a 285% increase in less than three years.”<sup>104</sup>

California is the first U.S. state to address the growing concern of unwanted calls and scam calls—especially when utilizing robot technology.<sup>105</sup> Drafters of the BOT Act tackled one of many problems that plague telephone networks; the bill requires that robots “reveal their ‘artificial identity’ when they are used to sell a product or influence a voter.”<sup>106</sup>

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98. *Id.*

99. *Id.*

100. *Id.*

101. CAL. BUS. & PROF. CODE § 17941 (West 2019).

102. *Abusive Robocalls and How We Can Stop Them: Hearing Before the S. Comm. on Commerce, Sci. & Transp.*, 115th Cong. 3 (2018) (statement of Margot Freeman Saunders, Senior Counsel of National Consumer Law Center) (“[O]nce Ms. Stevens provided consent to be called on her cellphone, she could never revoke that consent.”).

103. See Blanco, *Mad About Robocalls?*, *supra* note 33 (noting that a caller can “pick a borough in New York City and hit every person with a voicemail telling them to go visit some website . . . for a couple of thousand bucks”).

104. *Abusive Robocalls and How We Can Stop Them: Hearing Before the S. Comm. on Commerce, Sci. & Transp.*, *supra* note 102.

105. Noam Cohen, *Will California’s New BOT Law Strengthen Democracy?*, NEW YORKER (July 2, 2019), <https://www.newyorker.com/tech/annals-of-technology/will-californias-new-bot-law-strengthen-democracy>.

106. *Id.*

Originally, the BOT Act tried to set barriers of protection for society; however, the bill faced strong resistance during its conception. Opposition came from many different parties ranging from large social-network platforms<sup>107</sup> to those who fear government regulation will infringe on the freedom of expression.<sup>108</sup> The initial versions of bill were much broader, encompassing all types of bots and targeted multiple platforms. Early drafts also required online platforms to facilitate the disclosure of bots and verify of whether callers were bots, as well as provide users with a way to report bots involved with illegal activity.<sup>109</sup> However, companies pushed back on this responsibility, arguing verification of callers for smaller telecommunication companies would be impossible.<sup>110</sup> Given the pushbacks and limitations from the BOT Act's originally proposed requirements, the BOT Act, as it stands now, has major flaws that render it ineffective.<sup>111</sup>

While the BOT Act is seemingly a novel solution, this is a state law and only applies to California citizens.<sup>112</sup> Additionally, the statute only targets commercial calls and political calls, while ignoring scam calls wherein the real danger lies.<sup>113</sup> Some states even consider laws similar to the BOT Act to be unconstitutional, by alleging discrimination against political speech.<sup>114</sup>

Although the BOT Act requires bots to identify themselves to consumers,<sup>115</sup> the law does not ban any robocalls or messages and provides no deterrent for users of robocall technology. The BOT Act simply requires bots to identify themselves in a "clear, conspicuous, and reasonably designed [manner]."<sup>116</sup> Additionally, the BOT Act fails to mandate platform responsibility, thus leaving the question of enforcement ambiguous.<sup>117</sup> Those

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107. Lazarus, *supra* note 9.

108. Jamie Lee Williams, *Cavalier Bot Regulation and the First Amendment's Threat Model*, KNIGHT FIRST AMEND. INST. (Aug. 21, 2019), <https://knightcolumbia.org/content/cavalier-bot-regulation-and-the-first-amendments-threat-model>.

109. Renee Diresta, *A New Law Makes Bots Identify Themselves—That's the Problem*, WIRED (July 24, 2019, 9:00 AM), <https://www.wired.com/story/law-makes-bots-identify-themselves/>.

110. *Id.*

111. *See id.* ("[T]he law has three major flaws: ambiguity, limited platform responsibility, and misguided enforcement.").

112. Gail J. Kamal, *California's BOT Disclosure Law, SB 1001, Now in Effect*, NAT. L. REV. (July 15, 2019), <https://www.natlawreview.com/article/california-s-bot-disclosure-law-sb-1001-now-effect>.

113. *See* Cohen, *supra* note 105.

114. The Fourth Circuit found the South Carolina Law of banning robocalls for political campaigns unconstitutional since it was underinclusive and singled out commercial and political speech. *Fourth Circuit: SC Robocall Ban Is Unconstitutional*, FITSNEWS (Aug. 18, 2015), <http://www.fitsnews.com/2015/08/18/fourth-circuit-sc-robocall-ban-is-unconstitutional>. The BOT Act has not faced claims of constitutionality. The reason may be because the BOT Act has not banned any type of speech and only requires robotic recordings announce that they are an automated message.

115. Diresta, *supra* note 109.

116. CAL. BUS. & PROF. CODE § 17941(b) (West 2019).

117. Diresta, *supra* note 109.

using robocalls for illegal means<sup>118</sup> will continue to ignore the law's regulatory authority.<sup>119</sup> In effect, the current legislation regarding unwanted calls remains only reactive rather than preventative.

With ambiguous enforceability, people or companies using robocalling technology for illegal purposes can continue their usage without any repercussions.<sup>120</sup>

### 3. Proposed Future Legislation

Besides California, other states and the federal government continue to propose different laws in an attempt to address the problem of unwanted calls and regulate the telecommunication industry.<sup>121</sup> The most recent effort from Congress to end scam calls is the Stopping Bad Robocalls Act (SBR).<sup>122</sup> Among other provisions, the SBR would require carriers to implement nationwide call identification technology and require the FCC to create rules to protect consumers from receiving unconsented calls and to ensure consumers can withdraw consent.<sup>123</sup> Additionally, the FCC has worked separately in efforts to put a stop to unwanted calls.<sup>124</sup> However, as is evident in the number of calls people still receive,<sup>125</sup> the number of bills passed is not going to make a difference. The bigger issue is not about being able to file a complaint but rather tracking and finding the true source of the illegal call.

Without a technological method for identifying the caller, consumers will be left in the same position. Consumers will be unable to trace most calls to

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118. Some types of robocalls are legal, such as purely informational messages, pharmaceutical reminders regarding prescriptions, and debt collection calls. FED. TRADE COMM'N, *Robocalls*, *supra* note 21.

119. Jason C. Miller, *Regulating Robocalls: Are Automated Calls the Sound of, or a Threat to, Democracy?*, 16 MICH. TELECOMM. & TECH. L. REV. 213, 236 (2009) (“[A]n absolute ban on robocalls would only affect legitimate robocalls. . . . When robocalls are outlawed, only outlaws will have robocalls.”).

120. Diresta, *supra* note 109.

121. In June 2019, the House announced the Stop Bad Robocalls Act, which focused on requiring the FCC to update the definition of what qualifies as a robocall and subject a wider array of companies to obtain consent before calling a consumer. *See* Stopping Bad Robocalls Act, H.R. 3375, 116th Cong. (2019); *see also* Tony Romm, *House Lawmakers Unveil Bipartisan Anti-Robocall Bill*, WASH. POST (June 20, 2019, 11:03 AM), <https://www.washingtonpost.com/technology/2019/06/20/house-lawmakers-unveil-bipartisan-anti-robocall-bill/>.

122. *See* H.R. 3375.

123. *See* H.R. 3375.

124. Daniel Bukszpan, *House Passes the Stopping Bad Robocalls Act*, FIERCEWIRELESS (July 25, 2019, 12:22 PM), <https://www.fiercewireless.com/regulatory/house-passes-stopping-bad-robocalls-act> (“In early June, the FCC voted unanimously to give [telecommunication companies] the authority to identify and block robocalls without having to first get permission from subscribers. AT&T became the first carrier to implement a robocall blocking process based on the FCC's authority.”).

125. Before robocall specific laws were passed, the FTC received 3,790,602 robocall complaints in 2018. FED. TRADE COMM'N, THE NATIONAL DO NOT CALL REGISTRY DATA BOOK (2019), [https://www.ftc.gov/system/files/documents/reports/national-do-not-call-registry-data-book-fiscal-year-2019/dnc\\_data\\_book\\_2019.pdf](https://www.ftc.gov/system/files/documents/reports/national-do-not-call-registry-data-book-fiscal-year-2019/dnc_data_book_2019.pdf). In 2019, the amount of complaints remained about the same at 3,786,771 complaints. *Id.* Also, robocalls still comprise the majority of call complaints. *Id.*

file complaints, telecommunication companies will not identify these unwanted callers to block them, and fraudulent scammers will continue to hide behind the veil of technology.

### III. REVEAL THE IDENTITY; UNMASK THE VILLAIN

The two biggest hurdles of stopping harmful calls are: (1) call authentication and (2) caller identification. Both are needed to hold fraudulent callers liable. In order to eradicate scam calls, telecommunication companies must work together to implement technologies to authenticate calls as they travel through various networks and require caller identification registration.<sup>126</sup>

#### A. TELEPHONE COMPANIES SHOULD BE HELD LIABLE

In November 2018, FCC Chairman Ajit Pai called for telecommunication companies to implement call authentication technology within their networks.<sup>127</sup> Currently, telecommunication companies profit from usage of their phonelines,<sup>128</sup> while remaining shielded from liability despite allowing harmful and illegal calls to pass through those lines. Telecommunication companies cannot expect to receive the benefits of their lines being used without being held accountable for the known dangers it poses.

First, telecommunication companies can control their networks. Large telecommunication companies, such as AT&T and Verizon, are also operators for cellphones<sup>129</sup> and landlines,<sup>130</sup> among other services, such as the internet. While telecommunication companies cannot predict what a caller says into the phone, they can control which calls reach the consumer. Also, different technologies can detect unusual activity and warn networks of potentially harmful calls.<sup>131</sup> With these technologies added to the networks,

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126. See Bernard, *supra* note 18.

127. *Combating Spoofed Robocalls with Caller ID Authentication*, *supra* note 11.

128. Lazarus, *supra* note 9.

129. Telecommunication companies can control wireless communication they provide. Companies such as AT&T and Verizon are Mobile Network Operators, which provide wireless communication that controls all the elements necessary to deliver services to consumers. See *MNO (Mobile Network Operator)*, INFOBIP: GLOSSARY, <https://www.infobip.com/glossary/mno-mobile-network-operator> (last visited Mar. 5, 2020).

130. Telecommunication companies have the ability to control the landlines they provide. A fixed-line network connects landline phone calls by means of a cable, which then links to the rest of the phone network. Gloria Moore, *How Is A Landline Phone Call Made?*, STREETDIRECTORY, [https://www.streetdirectory.com/travel\\_guide/116949/phones/how\\_is\\_a\\_landline\\_phone\\_call\\_made.html](https://www.streetdirectory.com/travel_guide/116949/phones/how_is_a_landline_phone_call_made.html) (last visited Mar. 6, 2020).

131. “A robocaller might spoof a random number but when that fake number starts calling 5,000 people in an hour, well, humans don’t call like that . . . .” Morran, *supra* note 26 (noting how technology can help combat robocalls).



such as call validation, telecommunication companies have the ability to more accurately detect scam calls.<sup>132</sup>

Second, it befits telecommunication companies to regulate the calls that harm their consumers. If telecommunication companies do not act quickly, phone calls may become the “scourge of modern civilization.”<sup>133</sup> Telecommunication may begin to decline into an untrustworthy and unusable form of communication—similar to how Internet Service Providers (ISPs) worked to block spam electronic mail (e-mail) ensuring email communication remained viable.<sup>134</sup>

Communication platforms have been called to strengthen and unify regulation in the past. In a similar situation, e-mails once faced the threat of being unusable when many consumers became frustrated with the amount of spam e-mails received.<sup>135</sup> In May 2009, 95% of emails that reached inboxes were spam e-mails—an all-time high.<sup>136</sup> However, by 2016, although estimates indicate that 86% of the world’s e-mail traffic was spam, only a small fraction of spam would make it into inboxes.<sup>137</sup> The aggravation caused by spam e-mails put ample pressure on technology companies to innovate preventative solutions so the vast majority of spam did not reach inboxes.<sup>138</sup> Aiming to drastically lessen spam e-mail, ISPs recognized spam prevention as a shared responsibility to protect customers from unwanted solicitations.<sup>139</sup> The telecommunications industry must implement a similar solution.

In order to drastically reduce unwanted calls, cooperation and enforcement between the nation’s largest telecommunication companies is needed. A consumer protection measure, the responsibility needs to fall on telecommunication companies because they are controlling the communication networks and profit from the continued deterioration of the telecommunication industry.<sup>140</sup>

## B. CALLS MUST BE AUTHENTICATED AND CALLERS UNMASKED

In order to finally unmask scammers, calls must be authenticated as they travel through the various telecommunication networks, before reaching

132. Tara Siegel Bernard, *Phone Companies Are Testing Tech to Catch Spam Calls. Let’s Hope It Works.*, N.Y. TIMES (Apr. 26, 2019), <https://www.nytimes.com/2019/04/26/your-money/robocalls-spam-calls.html>.

133. 137 CONG. REC. 18,122-23 (1991) (statement of Sen. Hollings) (“Computerized calls are the scourge of modern civilization. They wake us up in the morning; they interrupt our dinner at night; they force the sick and elderly out of bed; they hound us until we want to rip the telephone right out of the wall.”).

134. See Lazarus, *supra* note 9.

135. See Chen, *supra* note 52.

136. Dermot Harnett, *2000 – 2009: The Spam Explosion*, Symantec Official Blog (Jan. 21, 2010), <https://www.symantec.com/connect/blogs/2000-2009-spam-explosion>.

137. Lazarus, *supra* note 9.

138. See Chen, *supra* note 52.

139. Lazarus, *supra* note 9.

140. *Id.*

consumers. Additionally, every phone number must be registered in order to verify callers and hold scammers liable.

Most recently, on December 31, 2019, Congress passed the bi-partisan Telephone Robocall Abuse Criminal Enforcement and Deterrence Act (TRACED Act). The TRACED Act amends a section of the TCPA by requiring companies to implement telecommunication technology, called “SHAKEN” and “STIR,” to prevent unverified numbers from ever traveling through the network to reach consumers phones.<sup>141</sup> “SHAKEN” technology stands for Signature-based Handling of Asserted information using toKENs, and “STIR” stands for Secure Telephone Identity Revisited.<sup>142</sup> SHAKEN and STIR technologies help verify if a call is legitimate, like a check point, as the call travels through interconnected networks.<sup>143</sup> Both technologies together in authenticating calls.<sup>144</sup>

As the call travels, it carries the phone number that identifies its origin.<sup>145</sup> SHAKEN and STIR technology are used to continuously check if the number associated with the call is legitimate.<sup>146</sup> SHAKEN and STIR technology act as a “digital signature” and verifies the number originated from a caller.<sup>147</sup> These signals repeatedly validate the phone number against other carriers before reaching consumers.<sup>148</sup> At any point in the transfer, if a network detects an unverified number, then the telecommunication network can alert the consumer that the call is “unverified.”<sup>149</sup> The digital signature enables the receiving party to verify that the calling number is accurate and has not been spoofed.<sup>150</sup> The TRACED Act will require major telecommunication companies to implement this within eighteen months of the enactment.<sup>151</sup> Smaller telecommunication companies will also have to implement this technology, but a less definitive timeline is enforced, given the particular struggle smaller companies face in updating to support the technology.<sup>152</sup>

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141. Pallone-Thune Telephone Robocall Abuse Criminal Enforcement and Deterrence Act, Pub. L. No. 116-105, § 4(a)(1), 133 Stat. 3274, 3276 (2019) (codified as amended in 47 U.S.C. § 277(b)).

142. *Combating Spoofed Robocalls with Caller ID Authentication*, *supra* note 11.

143. *Id.*

144. *Id.*

145. *Id.*

146. *Id.* A “legitimate number” means the call truly originated from the number shown on caller ID. Jason Cipriani, *Inside Your Phone Company’s Plan to Stop Robocalls*, CNET (Sept. 2, 2019, 4:00 AM PDT), <https://www.cnet.com/how-to/inside-your-phone-companys-plan-to-stop-robocalls/>.

147. Chen, *supra* note 52.

148. *Combating Spoofed Robocalls with Caller ID Authentication*, *supra* note 11.

149. Lazarus, *supra* note 9.

150. *Understanding STIR/SHAKEN*, TRANSNEXUS, <https://transnexus.com/whitepapers/understanding-stir-shaken/> (last visited Feb. 22, 2020).

151. Pallone-Thune Telephone Robocall Abuse Criminal Enforcement and Deterrence Act, Pub. L. No. 116-105, § 4(b), 133 Stat. 3274, 3277 (2019) (codified as amended in 47 U.S.C. § 277(b)).

152. Octavio Blanco, *How the New Robocall Law Would Protect Consumers*, CONSUMER REP. (Dec. 31, 2019), <https://www.consumerreports.org/robocalls/how-traced-act-robocall-law-will-protect-consumers/>.

Currently, the SHAKEN and STIR technology does not block callers. If a call is verified but the caller is a bad actor, SHAKEN and STIR technology is not capable of detecting the caller's intentions and does not provide the caller's identity. However, these technologies can provide a means for informing a network when fraud is occurring and to stop the call.<sup>153</sup> Telecommunication companies can take the next step by removing unverified calls from the network altogether. The FCC believes this technology has the ability to “digitally validate the handoff of phone calls passing through the complex web of networks, allowing the phone company of the consumer receiving the call to verify that a call is from the person making it.”<sup>154</sup>

With SHAKEN and STIR call verification, unverified numbers can be cut off—which would greatly minimize many unwanted calls.<sup>155</sup> However, verification is meaningless without identification. Identification is needed to trace illegal callers and hold them liable for their fraudulent acts. SHAKEN and STIR technology falls short in connecting an identity with these phone numbers.

Additionally, the TRACED Act creates a deadline for telecommunication companies to implement the technology.<sup>156</sup> Congress also increased the statute of limitations, and the FCC can bring a claim within four years after a reported violation.<sup>157</sup> While these efforts shift the obligation of reducing robocalls from the consumers onto telecommunication companies, companies must go beyond just preventing these calls.<sup>158</sup> Since fraudulent callers are able to change their number and phone lines with ease, telecommunication companies need to ensure consumer and business numbers are traceable. By knowing the origin of the call, traceable numbers ensure consumers can file accurate complaints and law enforcement agencies can better hold fraudsters accountable for any illegal activity. However, SHAKEN and STIR technology alone is not enough.<sup>159</sup> In order for this technology to be effective, the second step in ensuring calls are made only

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153. *Combating Spoofed Robocalls with Caller ID Authentication*, *supra* note 11.

154. *Id.*

155. Chen, *supra* note 52.

156. Pallone-Thune Telephone Robocall Abuse Criminal Enforcement and Deterrence Act, Pub. L. No. 116-105, 133 Stat. 3274 (2019); *see also* Timothy B. Lee, *Congress Passes Legislation Expanding Robocall Penalties*, ARS TECHNICA (Dec. 19, 2019), <https://arstechnica.com/tech-policy/2019/12/congress-slaps-robocallers-with-10000-penalty-per-call/>.

157. Telephone Robocall Abuse Criminal Enforcement and Deterrence Act, Pub. L. No. 116-105, § 3(a)(1), 133 Stat. 3274, 3275 (2019) (codified as amended in 47 U.S.C. § 277(b)).

158. “The implementation of SHAKEN/STIR technology won’t end robocalls on its own. The technology aims to prevent scammers from making calls with inaccurate caller-ID information. But people might find ways to make robocalls anyway.” Lee, *supra* note 156.

159. *See id.* (“[I]mplementation of SHAKEN/STIR won’t end robocalls on its own. . . . Maybe [scammers will] find ways to call from international numbers. Or maybe they’ll find other loopholes in the system. Preventing abuse will require coordinated effort among service providers and may take years to get right.”).

from legitimate callers is requiring all phone numbers be registered to individuals or companies.<sup>160</sup>

The drawback of anonymity and privacy of phone numbers is that it attracts people who aim to use anonymous numbers to commit fraud and crime.<sup>161</sup> In order to deter scammers from continuing to misuse telecommunication, authenticating the calls is essential to unmasking callers.<sup>162</sup> For these reasons, many countries impose a mandatory registration of Subscriber Identification Module (SIM) cards.<sup>163</sup> In 2003, mandatory registration for prepaid SIM card users began in Brazil, Germany, and Switzerland.<sup>164</sup> Since then, an increasing number of governments have required purchasers of prepaid phone numbers present proof of identification and register their identities.<sup>165</sup> Further, these requirements hold mobile operators and phone companies accountable by requiring them to adhere to the registration process.<sup>166</sup>

As of February 2019, eighty countries from around the world, including China, Japan, Brazil, Australia, Germany, and France, have already implemented mandatory phone number registration.<sup>167</sup> For example, in 2013, China's Ministry of Industry and Information Technology required that all mobile phone users register with their legally given name when purchasing a SIM card by 2017.<sup>168</sup> By 2016, the Chinese government was able to shut down 23,000 illegal VoIP lines and over half a million illegal service lines.<sup>169</sup> Additionally, almost 2,000 number spoofing software were removed.<sup>170</sup>

This proposed solution will most likely face criticism for encroaching on the traditions of free expression and personal privacy.<sup>171</sup> Some countries, such as the United Kingdom, Czech Republic, and New Zealand, have

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160. Solana Larsen, *Your Phone Number Isn't Secret*, WEB WE WANT (Dec. 10, 2015), <https://webwewant.org/news/your-phone-number-isnt-secret/>.

161. Kai Imgenberg, *Biometric KYC (Part III) Registration of Prepaid SIM Cards*, AWARE, <https://www.aware.com/blog/biometric-kyc-registration-of-prepaid-sim-cards/> (last visited Oct. 26, 2019).

162. Bernard, *supra* note 18.

163. Imgenberg, *supra* note 161.

164. GSM ASS'N, THE MANDATORY REGISTRATION OF PREPAID SIM CARD USERS 7 (2013), [https://www.gsma.com/publicpolicy/wp-content/uploads/2013/11/GSMA\\_White-Paper\\_Mandatory-Registration-of-Prepaid-SIM-Users\\_32pgWEBv3.pdf](https://www.gsma.com/publicpolicy/wp-content/uploads/2013/11/GSMA_White-Paper_Mandatory-Registration-of-Prepaid-SIM-Users_32pgWEBv3.pdf) [hereinafter GSM ASS'N, PREPAID SIM CARD USERS].

165. *Id.*

166. *Id.*

167. GSM ASS'N, ACCESS TO MOBILE SERVICES AND PROOF OF IDENTITY IN 2019, at 46–53 (2019), [https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/02/ProofofIdentity2019\\_WebSpreads.pdf](https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/02/ProofofIdentity2019_WebSpreads.pdf) [hereinafter GSM ASS'N, MOBILE SERVICES]; see also Larsen, *supra* note 160.

168. *All Phone Numbers Registered in China*, CHINA DAILY, [https://www.chinadaily.com.cn/china/2017-01/02/content\\_27838431.htm](https://www.chinadaily.com.cn/china/2017-01/02/content_27838431.htm) (last updated Jan. 2, 2017, 9:54 AM).

169. *Id.*

170. *Id.*

171. The tradition of free speech and personal privacy stem are exemplified in the United States constitution. U.S. CONST. amends. I, IV.

considered mandating phone number registration but ultimately nixed the idea due to the possible controversy such regulation would bring.<sup>172</sup> Familiarity and trust in mandating phone number registration is a difficult hurdle. North America is the only major continent with little support for the movement of mandating phone number registration.<sup>173</sup> The concerns include denying access to communication to those who lack possession of formal identity documents and the unavailability of service to those in low-income or rural areas.<sup>174</sup>

While there is some concern that registration will greatly disadvantage low-income or immigrant groups, the United States can alter the identification requirement to allow other types of identity verification.<sup>175</sup> Similar to federal aid applications, other means of verifying identification are available, even to those without formal documentation.<sup>176</sup> The law has often been used to protect people's freedoms, but it is also one of the most effective means in protecting our nation's safety. Mandatory phone number registration has shown promisingly effective as a system in holding scam callers liable and reducing future crimes.<sup>177</sup>

SHAKEN and STIR technologies along with a mandatory number registry will address one of the biggest pitfalls of the TCPA and previous legislation: consent and traceability. Previously, if an unwanted caller phoned using a robotic system or spoofed their number, consumers would not be able to revoke their consent as they would not know who to contact because one cannot reply to a robot or a fake number.<sup>178</sup> With a SHAKEN and STIR authentication system, unwanted calls can be prevented before the calls reach the consumer.<sup>179</sup> In addition, a mandatory registered number policy will hold scammers accountable and liable, since consumers would know who to contact to revoke their consent or file an accurate complaint if the calling company or individual does not comply.

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172. GSM ASS'N, PREPAID SIM CARD USERS, *supra* note 164, at 4.

173. *See* GSM ASS'N, MOBILE SERVICES, *supra* note 167.

174. GSM ASS'N, PREPAID SIM CARD USERS, *supra* note 164, at 12–14; *see also* GSM ASS'N, MOBILE SERVICES, *supra* note 167.

175. The United States can require a multiple documentation verification, such as utility bill, credit or debit card, and bank statement, or have a third party who has identification verify the subscriber's identity, as is done when applying for food stamps. *See, e.g., Apply for SNAP, Supplemental Nutrition Assistance Program*, N.Y. ST., <https://www.ny.gov/services/apply-snap> (last visited Nov. 17, 2019).

176. *See, e.g.,* SOC. SECURITY ADMIN., SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP) FACTS (2019), <https://www.ssa.gov/pubs/EN-05-10101.pdf> (allowing a benefit applicant who does not have access to their social security number or identification issued from the Department of Motor Vehicles to submit other valid forms of identification such as an alternative photo ID, a current utility bill, a bank statement, or a government check).

177. *See All Phone Numbers Registered in China*, *supra* note 168.

178. *Robocalls 101: What Are They and How Can I Stop Them?*, ROBOKILLER (Oct. 30, 2017), <https://www.robokiller.com/blog/robocalls/>.

179. Chen, *supra* note 52.

**CONCLUSION**

While there are many good faith actors and legitimate telemarketing businesses, bad actors are long overdue to have their harmful actions curtailed.<sup>180</sup> In order to combat damaging and unwanted calls, Congress needs to treat the cause not the symptom. Along with utilizing SHAKEN and STIR technology, the next step must be to register phone numbers, so callers are held accountable and liable for any wrongdoings. With an identity attached to the caller, finally the veil of protection can be lifted to expose the face of scammers.

*Katherine Teng\**

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180. While this proposed solution of identifying callers will help in holding bad actors liable, this Note does not address the added obstacle with international callers. This Note also does not address the difficulty in litigating cross border lawsuits or the difficulties in collecting damages from international defendants. *See* ASSOCIATED PRESS, *Trump Signs Law to Reduce Robocalls, Though They Won't End*, NBC NEWS (Dec. 31, 2019), <https://www.nbcnews.com/politics/politics-news/trump-signs-law-reduce-robocalls-though-they-won-t-end-n1108896>.

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