

**BEFORE THE  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, DC 20554**

In the Matter of

Call Authentication Trust Anchor

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WC Docket No. 17-97



**COMMENTS OF THE AMERICAN CABLE ASSOCIATION**

The American Cable Association (“ACA”)<sup>1</sup> submits these comments in response to the Notice of Inquiry (“NOI”) in this proceeding.<sup>2</sup> ACA applauds the Federal Communications Commission (“Commission”) for its efforts to work with industry to combat the growing problem of illegal robocalling. In this proceeding, the Commission seeks comment on an authentication solution for IP network telephone calls, and in particular standards developed by Internet Engineering Task Force (IETF), Alliance for Telecommunications Industry Solutions (ATIS), and the SIP Forum, known as “SHAKEN/STIR,” that uses a digital certificate scheme to “verify and authenticate caller

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<sup>1</sup> ACA represents approximately 750 small and medium-sized cable operators, incumbent telephone companies, and municipal utilities offering voice, broadband and video service in mostly smaller communities and rural areas. In aggregate, ACA member operators pass nearly 19 million homes and provide service to close to seven million subscribers. The vast majority of ACA members serve fewer than 5,000 subscribers, and half of ACA members serve fewer than 1,000 subscribers.

<sup>2</sup> *In the Matter of Call Authentication Trust Anchor*, Notice of Inquiry, WC Docket No. 17-97 (released July 14, 2017) (“NOI”).

identification for calls carried over an Internet Protocol (IP) network”<sup>3</sup> based on the Session Initiation Protocol (SIP). While ACA believes that the SHAKEN/STIR call authentication framework could serve as the foundation for an effective industry-led partial solution to the problem of illegal robocalls, small and mid-sized VoIP providers have not been involved in the development of the proposed authentication protocols, and thus cannot address key issues such as the technical feasibility of implementing the protocols or the potential costs involved. Before taking any steps to formally endorse or adopt the SHAKEN/STIR framework, the Commission should seek broader industry input, including from small interconnected VoIP providers, to ensure that the SHAKEN/STIR standards are feasible and cost-effective for all facilities-based VoIP providers. This would allow the Commission the opportunity to examine and fully consider the costs and burdens that small providers may face in implementing this or other call authentication solutions, look for ways in which those costs can be mitigated, and could help the Commission establish an appropriate glide path for the implementation by smaller VoIP providers of any approved call authentication framework following implementation by larger VoIP providers.

Despite more widely available call-blocking technology, and more robust Commission enforcement of abusive, illegal robocalling and call spoofing,<sup>4</sup> U.S. consumers, some of them the voice customers of ACA member companies, are receiving more robocalls

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<sup>3</sup> *Id.*, ¶ 5, citing Robocall Strike Force, *Robocall Strike Force Report* (2016), available at <https://transition.fcc.gov/cgb/Robocall-Strike-Force-Final-Report.pdf>.

<sup>4</sup> The Commission has focused on enforcing unlawful caller ID spoofing recently. See, e.g. FCC Proposes \$82 Million Fine for Spoofed Telemarketing Robocalls, (2017), <https://www.fcc.gov/document/fcc-proposes-82-million-fine-spoofed-telemarketing-robocalls> (last visited Aug. 14, 2017); *In the Matter of Best Insurance Contracts, Inc., and Philip Roesel, dba Wilmington Insurance Quotes*, Notice of Apparent Liability for Forfeiture (rel. Aug. 3, 2017) (following an investigation, the Commission found the named parties apparently liable under the Truth in Caller ID Act of 2009 and FCC rules for spoofing unassigned telephone numbers to mislead consumers in making more than 21 million robocalls over a 3 month period as part of a health insurance robocall campaign. The Commission concluded that the respondents intended to exploit some of the “most vulnerable members of society” through their robocalling campaign) (“*Roesel NAL*”) available at [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2017/db0804/FCC-17-107A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0804/FCC-17-107A1.pdf). A related citation was issued against the same parties for violations of the Telephone Consumer Protection Act. See also, *Adrian Abramovich, Marketing Strategy Leaders, Inc., et al.*, Notice of Apparent Liability for Forfeiture, FCC 17-80 (June 22, 2017 (FCC proposed a \$120 million fine against an individual who apparently used “neighbor spoofing” while making nearly 100 million robocalls to sell timeshares) (“*Abramovich NAL*”).

in 2017 than they did in 2016. Just last month, Americans reportedly received nearly 2.6 billion robocalls, as compared to 2.4 billion monthly robocalls in 2016 – a 7.5% increase.<sup>5</sup> Like all voice service customers, ACA members' subscribers are susceptible to robocallers who may use spoofed caller ID information to entice them into scams or even identity theft.

ACA members see this as a particular problem, not simply because they pride themselves on providing exemplary service to their customers – or because it is good business – but because most ACA member company employees live and work in the communities they serve and thus have direct connections to their customers. For these operators, customers are more than account numbers on a spreadsheet – they are typically neighbors, friends, and family. Further, robocall campaigns not only result in real consumer harm but also harm network operators themselves in ways that can affect their bottom line. As the Commission correctly summarized in recent enforcement actions, illegal robocall campaigns harm telecommunications carriers by “(1) burdening...carriers' networks with illegal calls, and (2) enraging consumer recipients of the illegal robocalls – whose complaints add to the workload of customer service agents, decrease the perceived value of the service, and increase carrier costs.”<sup>6</sup>

As discussed above, ACA members take their customer service obligations seriously, which includes ensuring that their voice customers are not harassed or burdened by illegal and unwanted robocalls. Robocalling is a continuing problem for which there is no “silver bullet,” demanding multifaceted solutions and the concerted attention of all industry

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<sup>5</sup> “U.S. Phones Slammed by 2.6 Billion Robocalls in July”, <http://www.prnewswire.com/news-releases/us-phones-slammed-by-26-billion-robocalls-in-july-3-rise-over-june-300500965.html>; see also NOI at 1, para. 1 & n.2.

<sup>6</sup> *Roesel NAL* ¶ 22 quoting *Abramovich NAL*, ¶ 19 (“Extensive illegal robocalling can overwhelm a network’s capacity, and spoofing makes it harder for carriers to detect those calls and take remedial action.”). The latter issue is a particular problem for ACA members who, unlike large operators with massive customer service departments, often employ just ten or fewer staff members in total. Within these small organizations, every employee, up to and including Presidents and CEOs, serves multiple and overlapping roles within the company, including customer service responsibilities. Moreover, it is not uncommon for ACA members to have only one dedicated customer service telephone number, or even one single telephone line for the entire company that handles all incoming calls. In such cases, fielding numerous customer complaints about spoofing and robocalls takes valuable time and resources away from other aspects of the business.

segments and regulators. That is why the ACA supports the Commission's efforts to establish inclusive and comprehensive authentication standards that will protect customers from illegal robocallers. To do so most effectively, however, the Commission should take into account the role that small facilities-based VoIP providers play in the communications ecosystem, and minimize the challenges that such providers might face in implementing any new technical standards.

ACA, while applauding the efforts of all those who worked to develop the SHAKEN/STIR framework, is concerned that small interconnected VoIP providers have been inadequately represented on either the ATIS or SIP FORUM working groups or the Internet Engineering Task Force (IETF) that have developed these caller authentication standards.<sup>7</sup> Accordingly, small VoIP providers have not yet had an opportunity to: participate in the development of these standards; to test the call authentication digital certificate protocols; to verify the protocols' compatibility with their own and other carriers' networks; or to determine the time and expense required to implement the protocols network-wide.

As a result, it is important that the Commission, while pursuing the laudable goal of addressing illegal and undesired robocalls, take care not to overlook or underestimate the

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<sup>7</sup> Of the SIP FORUM's 19 full time members, membership is dominated by a few large CATV providers, a leading wireless trade association, an international wireless carrier, a leading Canadian telecom, and several telecom equipment and software companies. See, <https://www.sipforum.org/membership/full-member-listing/>. Similarly, ATIS, a "technology and solutions development organization" which developed the SHAKEN specification as part of the ATIS-SIP Forum Joint NNI Task Force, does not appear to include small interconnected VoIP providers. See [http://www.atis.org/01\\_strat\\_init/Robocalling/docs/Ex%20Parte-Strike-Force-Report-2017-04-28-FINAL.PDF](http://www.atis.org/01_strat_init/Robocalling/docs/Ex%20Parte-Strike-Force-Report-2017-04-28-FINAL.PDF) at 2. The "Industry Robocall Strike Force", which was formed one year ago in 2016 and has been working with ATIS to develop an industry solution to the robocall problem, also has no small VoIP provider members. Its 33 members are largely comprised of members of ACT, ATIS, CTIA and US Telecom, and include the largest U.S. wireless and wireline voice providers, Google, Microsoft, Samsung, Ericsson, LG, Blackberry, Nokia, Sirius XM, Syniverse, and Consumers Union. AT&T Blog: "FCC Hosts First Robocall Strike Force Meeting; AT&T's Stephenson to Chair Industry-Led Group" (Aug. 19, 2016), available at: <https://www.attpublicpolicy.com/fcc/fcc-hosts-first-robocall-strike-force-meeting-atts-stephenson-to-chair-industry-led-group/>; see also, April 28, 2017 Industry Robocall Strike Force Report at 1, available at: [http://www.atis.org/01\\_strat\\_init/Robocalling/docs/Ex%20Parte-Strike-Force-Report-2017-04-28-FINAL.PDF](http://www.atis.org/01_strat_init/Robocalling/docs/Ex%20Parte-Strike-Force-Report-2017-04-28-FINAL.PDF) ("April 2017 Robocall Strike Force Report").

challenges that smaller interconnected VoIP providers could have testing whether the SHAKEN/STIR framework is technically feasible and to verify that it is not disruptive or economically burdensome to implement. Thus far, only the largest interconnected VoIP providers have begun the process of participating in the Robocall Testbed.<sup>8</sup> Though ACA appreciates that this is a Notice of Inquiry proceeding and not a rulemaking, the Commission should recognize that small VoIP providers have had very little opportunity to evaluate the SHAKEN/STIR framework and thus cannot yet comment on many of the issues presented in the NOI.

In addition to the question of fundamental technical compatibility mentioned above, there is still considerable uncertainty regarding the costs of implementing the proposed authentication protocols. The NOI appropriately recognizes and seeks comment on the as yet undetermined and potentially significant financial costs associated with the initial implementation and continuing administration of any SHAKEN/STIR call authentication system.<sup>9</sup> Again, these questions are difficult to answer this early in the process, but ACA urges the Commission to be particularly sensitive to the fact that any such costs may pose a significant economic burden upon smaller providers. Because small and mid-sized interconnected VoIP providers have not participated in the development of the SHAKEN/STIR standards to date, there may be unforeseen and unknown one-time implementation costs and ongoing administrative costs that smaller VoIP providers will need to incur to support digital certificates and call authentication systems.

As part of its cost evaluation, the Commission should also look into ways that any burdens can be mitigated. Certainly, the costs to implement and administer such a system need to be manageable and not economically burdensome for smaller VoIP providers.

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<sup>8</sup> ATIS and the SIP Forum have developed standards to “verify and authenticate caller identification for calls carried over an Internet Protocol (IP) network using the Session Initiation Protocol (SIP). . . .” NOI, ¶¶5. However, the NOI’s discussion of the SHAKEN/STIR authentication model refers to “originating” and “terminating” service providers without defining what minimum IP network requirements these providers require to use it successfully. NOI, ¶¶ 8.

<sup>9</sup> NOI, ¶¶ 46-47.

Implementation and operational costs should also be reasonably proportionate to the number of customers that a VoIP provider serves, *i.e.* a small provider serving 1,000 voice customers should have to bear proportionately less implementation and operational costs as the large provider serving 500,000 voice customers or millions more. There should also be a cost recovery mechanism for small to mid-sized interconnected VoIP providers to ensure that one-time implementation and ongoing administrative costs are fully recoverable so that implementation of the SHAKEN/STIR framework does not create an economic burden on smaller VoIP providers.

To address the issues of both technical feasibility and costs, the Commission should find a way to obtain the feedback and input of a broader cross-section of voice providers regarding the proposed SHAKEN/STIR framework, including input from small to mid-sized interconnected VoIP providers, before adopting any authentication standards. This could be done by convening a working group that specifically includes small facilities-based VoIP providers to evaluate such standards. Alternatively, the Commission could offer incentives for small to mid-sized interconnected VoIP providers to participate in evaluating whether the SHAKEN/STIR framework is an authentication solution that is compatible with their networks and cost-effective to implement.<sup>10</sup> Reducing the implementation costs for smaller providers of any call authentication solution that the Commission may consider approving can only help to advance the Commission's goals by promoting the comprehensive adoption of a call

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<sup>10</sup> As of the April 28, 2017 Joint Strike Force Report, only 10 companies had fully executed the agreements for the Robocalling Testbed, and as of August 9, 2017, only 8 voice providers had executed the NDA, all or nearly all of whom are ATIS members. While ATIS membership is not a prerequisite for participation in SHAKEN testing, participation in the ATIS Robocalling Testbed will only be provided at "no cost" to the industry for another four (4) months, or "through the end of 2017." An extension of this "no cost" deadline in the Robocalling Testbed might attract broader provider participation than has occurred to date. See [http://www.atis.org/01\\_topsc/Docs/Testbeds\\_NDA\\_Signatories.pdf](http://www.atis.org/01_topsc/Docs/Testbeds_NDA_Signatories.pdf). Moreover, execution of a Neustar Robocalling Testbed Use Policy and an ATIS confidentiality agreement are required to participate. See "ATIS Robocalling Testbed" at: <https://www.neustar.biz/atis-testbed/index.php>. The Commission could encourage a relaxation of the contractual requirements, including allowing participants to share final test results with the Commission to enable it to engage in informed decision-making about what is an appropriate, technically feasible and non-economically burdensome call authentication framework for small to medium sized cable operators.

authentication solution among all industry segments and all operators, large and small. This could mean that the improved consumer experience and network benefits of an effective call authentication solution will not be delayed by “adoption gaps” that could prolong the spoofed robocall problem.

Additionally, if the Commission elects to formally adopt or endorse the ATIS/SIP Forum proposals in some way, it should recognize that smaller VoIP providers will likely require a longer glide path to implement the authentication protocols than their larger counterparts. The Commission has previously recognized the need for rolling adoption of new technologies as smaller entities “generally lack the market power and resources” to drive the development of technical solutions, and that larger providers “generally dictate equipment features to manufacturers and commonly get priority in the delivery of that equipment.”<sup>11</sup> Thus, in adopting technical mandates, the Commission has implemented a delayed compliance deadline for smaller MVPDs to “review the marketplace” following an earlier compliance deadline for larger MVPDs, to consider whether possible exemptions or alternative compliance methods are appropriate for smaller entities.<sup>12</sup> The Commission should be similarly open to a rolling adoption model for smaller VoIP providers, particularly when considering any mandatory call authentication regime in the future.

Finally, the Commission seeks comment on a variety of issues relating to selection of and criteria for a governance authority, policy administrator, and a certification authority. Active testing of SHAKEN by means of the ATIS Robocalling Testbed is still “underway.”<sup>13</sup> Until such testing is complete, there is no way of knowing for sure whether the SHAKEN/STIR authentication framework can effectively serve as a comprehensive industry call authentication solution that is technically feasible, cost-effective, and not economically

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<sup>11</sup> *Accessibility of User Interfaces, and Video Programming Guides and Menus*, Report and Order and Further Notice of Proposed Rulemaking, 28 FCC Rcd 17330, ¶ 114 (2013) (“*User Interfaces Order*”).

<sup>12</sup> *Id.*

<sup>13</sup> *April 2017 Industry Robocall Strike Force Report* at 6.

burdensome for small and mid-sized VoIP providers. While it is not inappropriate to consider these administrative issues within this NOI, the Commission should not lose sight of the need to obtain broader industry input and feedback concerning the technical feasibility, costs and burdens, and ease of access, for small to mid-sized interconnected VoIP providers to implement the SHAKEN/STIR call authentication framework. That said, with regard to governance, policy, and certification authorities for any new call authentication regime, the Commission should not foreclose consideration of any industry or market-based management, certification or governance solutions.

Respectfully submitted,

/s/

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