

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Advanced Methods to Target and Eliminate)	CG Docket No. 17-59
Unlawful Robocalls)	
)	
Call Authentication Trust Anchor)	WC Docket No. 17-97

**COMMENTS OF
NCTA – THE INTERNET & TELEVISION ASSOCIATION**

July 24, 2019

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NCTA – The Internet & Television Association (“NCTA”) submits these comments in response to the Third Further Notice of Proposed Rulemaking (“*Third FNPRM*”) in the above-captioned dockets.¹

Introduction and Summary

Cable operators provide state-of-the-art competitive voice service to more than 30 million customers,² and they are continually working to improve their customers’ experience, including by protecting them from harmful and illegal calling practices. NCTA therefore applauds the Commission’s recent decisions in these proceedings (i) clarifying that voice service providers may offer call blocking services by default,³ and (ii) authorizing providers to block calls from unassigned, unallocated, or invalid numbers, as well as calls purporting to originate from numbers that are not used by their subscribers to originate calls.⁴

¹ See *Advanced Methods to Target and Eliminate Unlawful Robocalls; Call Authentication Trust Anchor*, Declaratory Ruling and Third Further Notice of Proposed Rulemaking, FCC 19-51 (2019) (“*Third FNPRM*”).

² See *Industry Data*, NCTA – THE INTERNET AND TELEVISION ASS’N, <https://www.ncta.com/industry-data> (last accessed July 16, 2019) (“NCTA Industry Data”).

³ See *Third FNPRM* ¶ 34.

⁴ See *Advanced Methods to Target and Eliminate Unlawful Robocalls*, Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd. 9706 (2017) (“*Call Blocking Report and Order*”).

In the *Third FNPRM*, the Commission seeks comment on additional steps to promote the deployment of beneficial call authentication and call blocking technologies, focusing in particular on Caller ID authentication based on the SHAKEN/STIR framework.⁵ Cable operators have been actively involved in developing the SHAKEN/STIR framework, which has the potential to improve the accuracy of Caller ID information and, consequently, consumer confidence in the calls they receive. Cable operators and other voice providers have strong incentives to protect their customers from illegal and unwanted calls, and many of them—including NCTA member companies Comcast, Charter, and Cox—have already made significant strides in implementing the SHAKEN/STIR framework.

As a general matter, the Commission should continue to monitor the rollout of SHAKEN/STIR and consider alternatives to imposing mandates at this time. To be sure, the full potential of the SHAKEN/STIR framework cannot be realized until it is implemented industry-wide—by large and small providers. Although there currently does not appear to be a need for the Commission to impose a mandate, to ensure the effectiveness of SHAKEN/STIR the Commission should continue to encourage carriers using TDM technology to voluntarily transition to IP interconnections as soon as possible so that they can participate in SHAKEN/STIR, and it should retain the option to consider methods for expediting the IP transition if it becomes clear that certain providers are declining to implement SHAKEN/STIR. The Commission should also decline to adopt a uniform display requirement at this time and instead allow voice providers to determine how best to present call warnings to their customers based on real-world experience as authentication technologies are implemented.

⁵ The SHAKEN/STIR framework establishes a method for voice providers to digitally verify that a call is actually from the number listed on the Caller ID.

There are, however, affirmative steps the Commission should take now to encourage the deployment of programs for blocking unwanted or illegal calls, thereby maximizing the benefits of these programs for consumers. Specifically, the Commission should adopt a broad safe harbor for voice service providers who block calls in good faith and with a reasonable level of confidence that the blocked calls are illegal or unwanted. Further, to protect emergency services and other critical calls from unintentional or erroneous blocking, the Commission should establish a centrally compiled and maintained Critical Calls List of numbers that voice providers may not block. A broad safe harbor and a clear Critical Calls List would help ensure that voice providers have the regulatory certainty they may need to implement robust call blocking programs and would therefore advance the Commission's efforts to forcefully combat illegal and unwanted calls.

I. The Cable Industry Is Committed to Protecting Its Customers from Illegal Calls

As leading providers of voice services, NCTA's members are greatly concerned about illegal calls and the impact they have on consumers. These calls are not only a nuisance; they are, as the Commission states, a threat to public safety and a vehicle for fraud and identity theft.⁶ Protecting consumers from these illegal calls is therefore vital to maintaining consumer trust in voice services.

NCTA's members are at the forefront of industry efforts to curtail illegal robocalls, and they have a history of strong leadership regarding Caller ID authentication. Charter, Cox, and Comcast, for instance, have been deeply involved in the industry's development of the SHAKEN/STIR framework through their participation in the North American Numbering Council Call Authentication Trust Anchor working group and various Alliance for

⁶ See *Third FNPRM* ¶¶ 11-12.

Telecommunications Industry Solutions activities, among other things.⁷ Moreover, as reported to the Commission earlier this month, the cable industry continues to work with other stakeholders to implement SHAKEN/STIR and to further develop solutions to combat illegal robocalls. NCTA is therefore pleased to offer the suggestions below for encouraging industry-wide implementation of SHAKEN/STIR and for maximizing the deployment of beneficial call blocking programs.

II. Voice Providers Have Strong Incentives to Implement SHAKEN/STIR on a Timely Basis, But the Commission Should Afford Providers Flexibility to Ensure the Full Industry Participation Needed for the Framework’s Success

In the *Third FNPRM*, the Commission notes that the high volume of illegal calls consumers receive “reduc[es] the value of telephony” and is “leading some people to give up voice telephony altogether.”⁸ These are outcomes that no voice provider desires. Voice providers therefore have strong incentives to timely implement the SHAKEN/STIR framework to curb illegal calls and bolster customer confidence in voice services.

Indeed, as the Commission acknowledges, major providers—including many of NCTA’s members—have made significant strides in their SHAKEN/STIR implementation efforts.⁹ These major providers are on track to further deploy SHAKEN/STIR solutions by the end of

⁷ See Letter from Thomas M. Rutledge, Chairman and Chief Executive Officer, Charter Communications, to Ajit Pai, Chairman, Federal Communications Commission, WC Dkt. No. 17-97, at 1-2 (Nov. 19, 2018); Letter from Jennifer Hightower, Senior Vice President and General Counsel, Cox Communications, to Ajit Pai, Chairman, Federal Communications Commission, WC Dkt. No. 17-97, at 1 (Nov. 19, 2018); Letter from Tony Werner, President of Technology and Product, Comcast Cable, to Ajit Pai, Chairman, Federal Communications Commission, WC Dkt. No. 17-97, at 3-4 (Nov. 19, 2018).

⁸ *Third FNPRM* ¶ 2.

⁹ *Id.* ¶ 71 (describing the SHAKEN/STIR implementation of major service providers, including Comcast, Cox, and Charter).

2019,¹⁰ in keeping with Chairman Pai’s call to action.¹¹ Given the strong market-based incentives to deploy and the steady progress that the industry continues to make on implementation, there does not appear to be a need for the Commission to impose a rigid and likely redundant SHAKEN/STIR regulatory mandate on voice providers at this time.¹²

That said, the Commission should continue to monitor and promote SHAKEN/STIR implementation. It is not enough for any individual voice provider to implement the SHAKEN/STIR framework on its own network. As the Commission suggests, for the promise of SHAKEN/STIR to be fully realized, the framework must be implemented *across* voice networks, and there must eventually be universal industry participation.¹³

The need for industry-wide participation is a function of how SHAKEN/STIR works. SHAKEN/STIR Caller ID authentication requires that, for each call, (i) the originating provider has implemented SHAKEN/STIR and can sign calls by adding a SIP header containing attestation information, (ii) each intermediate provider has the capability to accurately pass on this information, and (iii) the terminating provider has the capability to verify the attestation

¹⁰ See, e.g., Letter from Thomas M. Rutledge, Chairman and Chief Executive Officer, Charter Communications, to Geoffrey Starks, Commissioner, Federal Communications Commission, at 1 (Jul. 10, 2019) (noting that Charter has “committed to the Commission that [it] will be able to sign and verify calls on [its] network by the end of this year”); Letter from Jennifer Hightower, Senior Vice President and General Counsel, Cox Communications, to Geoffrey Starks, Commissioner, Federal Communications Commission, at 1 (Jul. 10, 2019) (reiterating Cox’s “commitment to implementing a robust call authentication framework for its residential customers in 2019”); Letter from Eric Schaefer, Senior Vice President and General Manager, Broadband, Automation and Communications, Comcast Cable, to Geoffrey Starks, Commissioner, Federal Communications Commission, at 3-4 (Jul. 10, 2019) (noting that Comcast has “implemented the capability to verify calls that contain a STIR/SHAKEN-compliant signature for the company’s entire residential subscriber base” and that, in addition to exchanging authenticated calls with T-Mobile and AT&T, “Comcast expects to exchange authenticated calls with more providers” in the coming months).

¹¹ See, e.g., Press Release, Federal Communications Commission, Chairman Pai Calls on Industry to Adopt Anti-Spoofing Protocols to Help Consumers Combat Scam Robocalls (Nov. 5, 2018), <https://docs.fcc.gov/public/attachments/DOC-354933A1.pdf>.

¹² See *Third FNPRM* ¶ 71 (proposing to require implementation of SHAKEN/STIR)

¹³ See also *id.* ¶ 72 (“Implementation of the SHAKEN/STIR framework across voice networks is important in the fight against unwanted, including illegal, robocalls.”).

information. As a result, full realization of the benefits of SHAKEN/STIR for consumers—*i.e.*, authentication of every call—cannot be achieved until *all* voice providers are able to insert, transmit, and receive headers in keeping with the SHAKEN/STIR standards.

To be sure, accomplishing this goal may require significant network upgrades for some legacy voice providers. As the Commission acknowledges, SHAKEN/STIR can only be used if the call is in IP; it is less effective for calls that are handed off in TDM or transit in TDM—a significant amount of voice traffic today.¹⁴ Thus, even if it were possible for SHAKEN/STIR to be immediately implemented on all IP interconnections, a substantial number of calls would still lack full authentication. Moreover, some providers using TDM technology have thus far been unwilling to install IP gateways or exchange traffic in IP format. The Commission has been considering the implications of the IP transition for years,¹⁵ and yet many LECs are still lagging in upgrading their networks to all IP or IP-interconnections. To ensure the effectiveness of SHAKEN/STIR for all consumers, it is essential that this gap be closed. The Commission should therefore continue to encourage carriers to voluntarily transition to IP interconnection as soon as possible.

In addition, the Commission should preserve the option to consider adopting a SHAKEN/STIR mandate if it later becomes clear that certain providers are declining to implement SHAKEN/STIR. Should some voice providers fail to deploy the framework—or fail to deploy it fully—it could constrain the framework’s utility for all voice providers and their customers, making a mandate more necessary to ensure that the benefits of SHAKEN/STIR can be fully realized. The Commission should also consider applying any such future mandate to all

¹⁴ See *Third FNPRM* at n.43.

¹⁵ See generally *Technology Transitions*, GN Docket No. 13-5.

providers—not just the major ones—for the same reasons.¹⁶ Providers should be responsible for their own network costs in meeting any such mandate.

The Commission should also decline to adopt a requirement at this time for a uniform display for showing consumers whether a call has been authenticated or what the level of attestation is.¹⁷ While there may be significant benefits to uniformity across providers in how authentication information is presented to consumers, a Commission mandate would be premature. At present, many of the calls consumers receive are simply not capable of being authenticated under the SHAKEN/STIR framework, as providers are not yet working at scale for SHAKEN/STIR traffic exchange between networks and traffic that transits in TDM will lack proper authentication until those networks transition to IP interconnection.

Due to the volume of traffic that *cannot* be authenticated, a Commission-mandated display of authentication information could lead to customer confusion. For instance, customers could wrongly conflate unauthenticated calls—which could be legal and wanted—with illegal calls. A test completed by call management service Hiya, in fact, showed that people whose incoming calls included an authentication indicator were far less likely to pick up calls that lacked an authentication stamp, even though those calls may have been legitimate.¹⁸ Consumers may also mistakenly assume that if a call is authenticated, it could not be spam or have been placed by an unscrupulous caller—failing to understand that Caller ID authentication does not guarantee a caller’s good intentions. Given the above risks, the Commission should refrain from

¹⁶ The Commission could consider adopting varying implementation timelines based on provider size or other characteristics. For instance, the Commission could assess major voice providers’ progress at the end of 2019, and if needed, consider then whether to move ahead with a mandate for *all* providers, with an earlier deadline for major providers.

¹⁷ See *Third FNPRM* ¶ 77 (seeking comment on a uniform display requirement).

¹⁸ See Kelcee Griffis, *Carriers Racing to Improve Caller ID Before FCC Deadline*, Law360 (Jul. 11, 2019), <https://www.law360.com/telecom/articles/1177172/carriers-racing-to-improve-caller-id-before-fcc-deadline>.

mandating a uniform display at this time and instead allow voice providers, individually and as an industry, to evaluate how best to present call warnings to their customers based on real-world experience.

III. The Commission Should Adopt a Broad Safe Harbor for Call Blocking Programs to Promote Greater Use

The Commission correctly tentatively concludes that a safe harbor would facilitate voice providers' reasonable use of call blocking technologies.¹⁹ The safe harbor the Commission proposes is a productive starting point, but the Commission should strongly consider expanding the safe harbor to cover a wider range of reasonable, good faith call blocking initiatives. Such an approach would maximize the benefits of call blocking programs for consumers and provide voice providers the flexibility they need to innovate in this arena.

In the *Third FNPRM*, the Commission proposes to adopt a safe harbor for voice providers who block calls that fail Caller ID authentication under the SHAKEN/STIR framework.²⁰ Under the Commission's proposal, a blocked call would qualify for the safe harbor if the originating carrier participates in SHAKEN/STIR, each intermediate provider in the call path accurately passes authentication information to the terminating provider, and the call then fails authentication.²¹ While this proposed safe harbor is a step in the right direction, the Commission should expand its scope or adopt additional safe harbors to better advance the Commission's goal of curtailing illegal calls.

As the Commission's prior decisions in these proceedings make clear, unauthenticated calls are not the only calls that a voice provider could reasonably determine are likely illegal.

¹⁹ See *Third FNPRM* ¶ 59.

²⁰ See *id.* ¶ 51.

²¹ See *id.* ¶ 53.

For instance, in the 2017 *Call Blocking Report and Order*, the Commission expressly authorized voice providers to block the following categories of calls because they are highly likely to be illegal: calls purporting to originate from unassigned, unallocated, or invalid numbers; and calls purporting to originate from numbers that are valid and in service but that are not used by their subscribers to originate calls.²² In the *Declaratory Ruling* issued with the *Third FNPRM*, the Commission clarified that voice providers may offer on an opt-out basis call blocking programs “based on any reasonable analytics designed to identify unwanted calls.”²³ Although the Commission has stated that these practices do not violate certain Commission rules relating to call blocking,²⁴ the lack of an express safe harbor may lead to uncertainty as to the scope of possible liability for calls that a provider may erroneously identify as illegal or unwanted.²⁵

To best promote the benefits to consumers that the Commission’s recent rules and clarifications are intended to provide, the Commission should adopt a broad safe harbor that protects voice service providers who block calls in good faith and with a reasonable level of confidence that the blocked calls are illegal or unwanted. At a minimum, the Commission should make clear that the safe harbor protects providers who block the following types of calls:

- calls that fail Caller ID authentication under the SHAKEN/STIR framework;
- unsigned calls that originate with, and are transported by, providers that are known to be participating in the SHAKEN/STIR framework;

²² See *Call Blocking Report and Order* ¶¶ 10, 18, 23, 32.

²³ *Third FNPRM* ¶ 34.

²⁴ See *Call Blocking Report and Order* ¶¶ 9, 60; *Third FNPRM* ¶¶ 31, 47.

²⁵ See also Letter from Charles W. McKee, Vice President – Government Affairs, Sprint, to Commissioner Geoffrey Starks, Federal Communications Commission, at 2 (Jul. 10, 2019) (stating that the Commission should adopt a broader safe harbor because “SHAKEN/STIR data will likely be only one factor of many in deciding whether a given call is illegal or unwanted” and arguing that “[b]ecause it is inevitable that legal calls will occasionally be falsely identified as illegal robocalls, carriers must have some form of liability protection in those circumstances”).

- calls blocked on an opt-out basis based on any reasonable analytics—including other STIR/SHAKEN-based analytics—designed to identify unwanted calls, subject to the limitations in the *Declaratory Ruling*;
- calls purporting to originate from unassigned, unallocated, or invalid numbers; and
- calls purporting to originate from numbers that are valid and in service but that are not used by their subscribers to originate calls.

To help ensure that legitimate calls are not blocked, voice providers should be required to provide as part of the safe harbor (i) a point of contact for legitimate callers to report what they believe to be erroneous blocking, and (ii) a mechanism for complaints to be resolved. This would grant providers sufficient flexibility to tailor solutions to the needs and circumstances of potentially erroneously blocked callers as call blocking programs are rolled out.²⁶ Adopting any additional or more specific conditions for taking advantage of the safe harbor would be premature, as many of the call blocking programs approved by the Commission have not yet been implemented and their full effect is not yet known. The Commission should allow real world experience to inform any additional measures—such as returning a specific SIP or Integrated Services Digital Network User Part response code—that may be necessary in the future.

IV. The Commission Should Create a Central List for Protected Critical Calls

The Commission also seeks comment on possible protections for critical calls, such as establishing a “Critical Calls List” containing numbers that should not be blocked.²⁷ NCTA’s

²⁶ Indeed, call blocking complaints and solutions will likely be varied in nature. While it may be possible for voice providers to resolve some instances of erroneous blocking internally—for instance if the blocking was based on specific calling patterns that the provider identified—blocking based on SHAKEN/STIR will likely need to be resolved much differently. For SHAKEN/STIR-based blocking, the source of the authentication issue will often be on the originating provider’s network—such as in the case of an unsigned or improperly signed call—but the blocking would happen on the terminating provider’s network. In these instances, a terminating provider may need to refer the caller to his or her own provider.

²⁷ See *Third FNPRM* ¶¶ 63-70.

members agree that it is vital that voice providers avoid blocking emergency calls. A Critical Calls List would help ensure that consumers continue to receive these and other important calls.

The Commission should therefore facilitate the creation of a Critical Calls List that includes, at a minimum, PSAP outbound, callback, and transfer numbers;²⁸ Government Emergency Telecommunications Service numbers; and other federal, state, and local government emergency outbound numbers. The list should also include a mechanism for other trusted entities – such as schools, doctors, and alarm companies – to add themselves to the list.

The Critical Calls List should be compiled and maintained centrally by the Commission or an authority designated by the Commission. Establishing a single, central compilation process would be much more efficient than requiring each voice provider to create and maintain its own critical calls list and would reduce the possibility that a number may be unintentionally excluded from protection by an individual voice provider. To decrease the risk that an unscrupulous caller could gain access to the Critical Calls List, it should be kept non-public, and it should be made available to voice providers and their vendors upon certification that the list will be used solely to protect the numbers on the list from call blocking.

The Commission should not adopt its proposal to limit the Critical Calls List protections to only those calls for which Caller ID is authenticated.²⁹ Calls from numbers on the Critical Calls List should be granted white list protection even where the Caller ID is *not* authenticated. As discussed above, some providers with legacy networks have been reluctant to install IP gateways or exchange traffic in IP format, which decreases the overall effectiveness of SHAKEN/STIR authentication. Therefore, until the SHAKEN/STIR framework has been

²⁸ The fact that PSAPs sometimes use invalid numbers to transfer calls between each other heightens the importance of including these numbers on the Critical Calls List.

²⁹ See *Third FNPRM* ¶¶ 63, 67.

deployed by all voice providers across their entire networks, limiting the Critical Calls List protections to only authenticated calls could create a risk that valid emergency calls could be unintentionally blocked, particularly in the near term.

The Commission should also adopt a safe harbor for voice providers that rely on the Critical Calls List, should they inadvertently block an emergency number while engaging in otherwise permissible blocking if the emergency number is not included on the list. Without such a safe harbor, voice providers may be reluctant to deploy call blocking practices out of concern that they could incur liability for unintentionally blocking calls from numbers they were not aware were used for emergency services.

V. The Commission Should Not Adopt Further Requirements for Measuring the Effectiveness of Robocall Solutions at This Time

Although voice providers are continuing to work diligently to reduce the burdens on consumers from illegal and unwanted calls, full implementation of SHAKEN/STIR authentication and call blocking programs based on SHAKEN/STIR or other analytics will take time. As these practices are in their early stages, it would be premature for the Commission to impose reporting requirements on voice providers or adopt specific metrics for measuring the effectiveness of these and other robocall solutions.³⁰

Moreover, even without reporting requirements, the Commission will still receive data on illegal calls and call blocking solutions. The Commission has already directed the Consumer and Governmental Affairs Bureau (“CGB”) to submit two reports studying the implementation and effectiveness of call blocking tools and technologies—one in June 2020, and the other in June

³⁰ See *id.* ¶ 83 (seeking comment on creating “a mechanism to provide information to consumers about the effectiveness of various voice service providers’ robocall solutions”).

2021.³¹ These reports will provide the Commission and the public with exactly the type of effectiveness data the Commission seeks. The Commission should wait until these CGB reports are released and, if needed, reevaluate additional effectiveness measures at that time.

Conclusion

NCTA appreciates the opportunity to provide comment on additional ways industry and the Commission can help protect consumers from illegal and unwanted calls. To best promote deployment of Caller ID authentication and call blocking technologies, the Commission should (i) continue to support voice provider efforts to implement SHAKEN/STIR, including by encouraging carriers using TDM to voluntarily transition to IP interconnections; (ii) adopt a broad safe harbor for good faith call blocking programs; and (iii) establish a centrally compiled and maintained Critical Calls List.

Respectfully submitted,

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³¹ See *id.* ¶¶ 87-89.