

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 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 RINGCENTRAL, INC.

RingCentral, Inc. (“RingCentral”) respectfully submits these comments in response to the Third Further Notice of Proposed Rulemaking (“*Third FNPRM*”) released by the Federal Communications Commission (“FCC” or “Commission”) seeking comment on issues related to the SHAKEN/STIR Caller ID authentication framework.¹ RingCentral supports the Commission’s efforts to stop illegal robocalls, and asks the Commission to ensure that the implementation of its policies sufficiently protects lawful voice traffic and competition in the voice service market.

I. INTRODUCTION

RingCentral is a global provider of cloud unified communications and collaboration solutions, including voice over internet protocol (“VoIP”) calling. As a provider of enterprise-grade unified communications solutions that both carries and delivers voice traffic, RingCentral is well positioned to provide insight into how the scourge of illegal robocalls is negatively impacting callers and called parties alike. RingCentral strongly supports the Commission’s

¹ *Advanced Methods to Target and Eliminate Unlawful Robocalls; Call Authentication Trust Anchor*, Declaratory Ruling and Third Further Notice of Proposed Rulemaking, CG Docket No. 17-59, WC Docket No. 17-97, FCC 19-51 (rel. June 7, 2019) (“*Declaratory Ruling*” or “*Third FNPRM*,” as appropriate).

efforts, and is committed to doing its part in the fight against unwanted and illegal robocalls and fraudulently spoofed Caller ID. Indeed, RingCentral has made significant investments to upgrade its network in order to implement the SHAKEN/STIR authentication framework by the end of next year.

RingCentral strongly supports the Commission's goal of stopping illegal robocalls and agrees that stopping illegal robocalls should be a top consumer protection priority.² The American public is clearly aggrieved by unwanted calls, with more than 232,000 complaints about unwanted calls in 2018.³ Nevertheless, the rush to stop illegal robocalls and to implement an effective Caller ID authentication framework should not ignore critical but still unresolved implementation questions around the SHAKEN/STIR framework. As the Commission moves forward, it must ensure that its policies and the industry's activities do not result in the blocking of wanted and legitimate calls, or leave callers and service providers without appropriate notice and opportunity for redress. Further, the Commission should be wary of inadvertently creating conditions that harm competition and reduce competitive offerings in the marketplace.

II. THE INDUSTRY IS MAKING STRIDES WITH SHAKEN/STIR, BUT THE COMMISSION MUST SET GUARDRAILS AND EXPECTATIONS

SHAKEN/STIR is going to be a game-changer: It has real potential to address fraudulent Caller ID and the illegal robocalls such fraudulent spoofing facilitates by enabling voice providers to authenticate Caller ID information and limit illegally spoofed calls.

SHAKEN/STIR and associated robocall blocking policies require careful implementation and clear Commission guidance. Otherwise, industry implementation may not

² *The FCC's Push to Combat Robocalls & Spoofing* (last visited July 21, 2019), <https://www.fcc.gov/about-fcc/fcc-initiatives/fccs-push-combat-robocalls-spoofing>.

³ *Third FNPRM* ¶ 4.

adequately protect legitimate calls, may create consumer confusion, and, in turn, may harm competition in the voice service market.

A. The Commission’s Leadership Is Essential to Ensuring that SHAKEN/STIR Is Effectively Deployed to Combat Illegal Spoofing and Robocalls

The Commission should address the industry’s concerns around the deployment and potential competitive harms of SHAKEN/STIR.⁴ SHAKEN/STIR’s success requires the FCC to be clear about its goals for SHAKEN/STIR implementation regardless of whether the framework is mandated, serves as a baseline for a blocking safe harbor, or otherwise is implemented entirely on a voluntary basis. The Commission is most effective at achieving policy goals that hinge on the development of new technology when it sets clear guidelines and guardrails. Here, the industry needs those guardrails, and must also have the flexibility and speed to develop standards and protocols that respond to real network and technical limitations, as well as to the moving target of illegal robocallers and other fraudsters. To support providers, the Commission should work closely with industry to facilitate important conversations to resolve remaining implementation issues concerning the framework. RingCentral agrees with other commenters that “the Commission [should] maintain an oversight role and serve as a ‘referee on the field’ to ensure that no provider is blocking lawful traffic under the auspices of addressing the problem of

⁴ See e.g., Comments of Noble Systems Corporation, CG Docket No. 17-49, WC Docket No. 17-97 at 18 (filed July 24, 2019) (noting that access to SHAKEN/STIR certificates will be critical for providers and carriers unable to sign calls will be “placed at a significant competitive disadvantage.”); Comments of the Massachusetts Department of Telecommunications and Cable, CG Docket No. 17-59, WC Docket No. 17-97 at 7 (filed July 24, 2019) (asking the FCC to protect consumers by ensure that calls are not blocked on anti-competitive or discriminatory grounds); Letter from Michael Romano, NTCA – The Rural Broadband Association to Marlene H. Dortch, FCC, CG Docket No. 17-59, et al. at 2 (filed July 18, 2019) (“NTCA Letter”) (expressing concern that smaller carriers “may not be able to interconnect with other voice service providers for the passage and exchange of SHAKEN/STIR certificates absent further Commission action”).

illegal robocalls.”⁵ A lodestar for the Commission must be ensuring that its rules and policies “encourage rather than impede new developments in Caller ID authentication and its uses.”⁶

The Commission must clearly define the purpose and capabilities of the new SHAKEN/STIR framework: what it should do and what it cannot do. An effective Caller ID authentication framework should support efforts to prevent illegal Caller ID spoofing, thereby removing a tool from the arsenal of illegal robocallers and make it easier to determine the originating carrier.⁷ But it is equally critical that the Commission make clear what Caller ID authentication must not do: the SHAKEN/STIR framework should not be designed or implemented in a way that disadvantages competitive providers, particularly where competitive providers are reselling numbering services;⁸ it should not impose high and anticompetitive costs to participate (beyond the upgrading of networks and infrastructure);⁹ and it should not prevent

⁵ See Letter from Christopher L. Shipley, Counsel to INCOMPAS, to Marlene H. Dortch, Secretary, FCC, CG Docket No. 17-59, WC Docket No. 17-97, at 3 (filed May 30, 2019) (“INCOMPAS Letter”).

⁶ *Third FNPRM* ¶ 77.

⁷ *Advanced Methods to Target and Eliminate Unlawful Robocalls*, 32 FCC Rcd 2306, 2307 ¶ 3 (“Although such call blocking [initiated by voice service providers in certain situations] is one tool for combatting illegal robocalls, a complementary and parallel task is to positively identify the bad actors making these calls. Malicious actors hide their true originating phone numbers, putting investigators, enforcers, and – most of all – consumers at a disadvantage.”) (“2017 *NOF*”).

⁸ See What Is STIR/SHAKEN and How Does It Impact Robocalling?, Bandwidth (last visited July 24, 2019), <https://support.bandwidth.com/hc/en-us/articles/360025664313-What-Is-STIR-SHAKEN-and-How-Does-It-Impact-Robocalling-> (explaining that one outstanding use case involves a customer purchasing a number from one provider, but originating the call with a different provider and noting that proposal such as certificate delegation must be adopted “to ensure that all legitimate customer calls are treated equitably”).

⁹ See NTCA Letter at 2 (explaining that “rural operators in need of IP interconnection agreements to implement SHAKEN/STIR could find themselves at the mercy of larger providers dictating new interconnection and transport terms”).

legitimate callers from legally using Caller ID substitution for legitimate purposes.¹⁰

Specifically, the FCC should require that the SHAKEN/STIR governing board establish a competitively-neutral mechanism for voice service providers that may not originate all of their calls on their own networks to obtain delegate certification or otherwise access the highest levels of attestation.¹¹

Competition in the voice communications market drives innovations in both technology and business models, and Commission action to address illegal robocalls must not jeopardize these important competitive offerings. With baseline rules-of-the-road, the Commission will protect innovative use cases as well as smaller providers as they do not have the same ability as larger providers to spread increased costs as they upgrade their networks.

B. Key Implementation Questions Remain Open

Rather than move aggressively to mandate the absolute, broad implementation of SHAKEN/STIR at this time,¹² Commission efforts should prioritize helping to resolve SHAKEN/STIR implementation challenges, including issues raised in the *2017 NOI*. The Commission should focus on these still-unresolved challenges regardless of whether it adopts a

¹⁰ See *2017 NOI*, 32 FCC Rcd at 2308 ¶ 5 (proving several examples of Caller ID substitution for legitimate purposes). The Truth in Caller ID Act recognized that there are legitimate uses for Caller ID substitution and limited the statutory prohibition of spoofing to the knowing transmission of misleading or inaccurate Caller ID information “with the intent to defraud, cause harm, or wrongfully obtain anything of value.” Pub. L. 111-331, 124 Stat. 3572 (2010), codified at 47 U.S.C. § 227(e).

¹¹ See Jonjie Sena, A Progress Report on SHAKEN/STIR: Insights from the FCC Robocall Summit, NEUSTAR (July 11, 2019), <https://www.home.neustar/blog/insights-from-the-fcc-robocall-summit> (highlighting that panelists at the recent SHAKEN/STIR summit confirmed the need for certificate delegation, and “[raised] the issue that enterprises and other providers want to get the ability for the highest-level (‘A’) attestation and/or to sign calls, but the current protocols as defined do not allow for this”).

¹² *Third FNPRM* ¶¶ 71, 75 (proposing to require all voice service providers to implement the SHAKEN/STIR framework).

SHAKEN/STIR mandate. As mentioned above, the Commission must ensure that there are effective mechanisms for all legitimate service providers to participate, particularly where competitive providers are reselling numbering services. As another example of legitimate service providers excluded under the framework are rural providers that still rely on legacy TDM networks and therefore may not be able to authenticate calls.¹³

The 2017 *NOI* also presented important questions about protections for legitimate callers, including those that engage in legitimate Caller ID substitution, including as an example call centers that substitute Caller ID of an outgoing call to utilize a business's in-bound toll-free number.¹⁴ As Congress and the Commission respectively recognized in the Truth-in-Caller ID Act and the FCC's implementing rules, there are many legitimate reasons to substitute Caller ID, and such use cases must be protected.¹⁵ But again, the *Declaratory Ruling and Third FNPRM* do not offer any answers.

The need for legitimate Caller ID substitution is growing as more and more workers are remote and mobile necessitating them to substitute Caller ID to appear as though they are calling from headquarters or other principle place of business. Leaving legitimately substituted Caller ID calls potentially unauthenticated risks important gains for the U.S. workforce – especially for aging adults who want to remain in the workforce but may not be able to drive as much or as often and for those in rural areas away from business centers – if their phone calls are potentially blocked because they cannot be authenticated. To that end, the Commission should require the

¹³ Letter from Andrew J. Dugan, CenturyLink to Commissioner Geoffrey Starks (submitted July 10, 2019), <https://docs.fcc.gov/public/attachments/DOC-358443A4.pdf>.

¹⁴ 2017 *NOI*, 32 FCC Rcd at 2308 ¶ 5.

¹⁵ See 47 U.S.C. § 227(e); 2017 *NOI*, 32 FCC Rcd at 2316 ¶ 37.

SHAKEN/STIR governing board to ensure there are mechanisms to facilitate these use cases in the near term.

Regardless of whether it adopts a mandate now or in the future, the FCC should encourage more focus on making sure Caller ID authentication standards provide an ecosystem-wide solution to illegal spoofing. Left unresolved, implementation gaps will impede the success of SHAKEN/STIR in the near-term and in the future.

III. THE PROPOSED “CRITICAL CALLS LIST” PRESENTS IMPLEMENTATION AND OPERATIONAL CHALLENGES

RingCentral agrees with the Commission that “[c]ertain emergency calls must never be blocked,” but cautions that the method to accomplish this goal, like with other aspects with this proceeding, is key.¹⁶ Unfortunately, the Commission’s proposal to require voice service providers “to maintain a ‘Critical Calls List’ of numbers it may not block” both highlights flaws with the overall proposed regime and raises practical challenges.

As an initial matter, even the notion of a “Critical Calls List” reveals the Commission’s acceptance that wanted, legitimate, lawful calls may be routinely blocked under its proposals. The development of a Critical Calls List serves as one proposed mitigation mechanism, but exposes the Commission’s indifference to protecting other wanted and lawful calls. As discussed below, it is essential that Commission policy seeks to protect *all* lawful calls, and therefore other methods of discouraging erroneous blocking are fundamental to ensuring lawful communications.

Further, the idea of a Critical Calls List, as proposed, raises numerous practical challenges. For instance, maintaining a list of all the emergency numbers in the country

¹⁶ *Third FNPRM* ¶ 63.

represents a huge and costly undertaking. The *Third FNPRM* recognizes that such a list must include, at minimum, every phone number used by the more than 5,000 Public Safety Answering Points throughout the country as well as “government emergency outbound numbers.”¹⁷ Moreover, the *Third FNPRM* correctly observes that “consumers value calls from schools, doctors, local governments, and alarm companies, as well as fraud and weather alerts,” yet adding these phone numbers would be administratively infeasible.¹⁸ If required on a per-provider basis, to the extent even feasible, this undertaking would be financially crippling for smaller voice service providers. If centrally maintained, questions loom large over who would be responsible for such a list, how it would be managed, and how much it would cost smaller providers to access the central list. The Commission must address these concerns before the Commission imposes such a requirement.

To the extent that the creation of a Critical Calls List can be made practical, the creation of such creates other concerns. For example, the Federal Trade Commission (“FTC”), industry groups, and consumer advocacy groups raise legitimate security concerns about a centralized white list.¹⁹ The FTC cautioned that even without a security compromise, “illegal robocallers will make every effort to infiltrate white lists.”²⁰ USTelecom notes that a white list would create “a de facto master key,” and if such a list were to be breached it would compromise the numbers of local police, fire, education, and public health agencies across the United States.²¹

¹⁷ *Id.*

¹⁸ *Id.* ¶ 66.

¹⁹ *Id.* ¶ 64.

²⁰ Comments of the Federal Trade Commission, CG Docket No. 17-59, at 5-6 (filed Jan. 23, 2018).

²¹ Comments of the USTelecom Association, CG Docket No. 17-59, at 18 (filed July 3, 2017).

Given the challenges of both a per-provider and centralized Critical Calls List, it is premature to mandate either variety. Instead, the Commission should focus its efforts on adopting policies that will minimize over blocking and provide rapid response when inadvertent blocking occurs.

IV. THE COMMISSION AND STAKEHOLDERS NEED TO ADDRESS QUESTIONS LEFT UNANSWERED BY THE *DECLARATORY RULING*

RingCentral commends the Commission for taking yet another step to stop illegal robocalls by authorizing network-based blocking by default in the *Declaratory Ruling*; however, the *Third FNPRM* does not sufficiently address the range of questions left unanswered by the *Declaratory Ruling*, especially with respect to transparency and redress. Ultimately, where service providers can block calls preemptively, there must be solutions to address erroneous blocking.

One issue the *Declaratory Ruling* fails to address is transparency for originating call providers and/or code holders around calls that have been blocked, so that they may take advantage of any opportunity report erroneous or unfair blocking.²² Legitimate callers and their providers may not even know that a third-party provider is blocking their calls at the network level. As the entities facilitating calls, providers must have some means to determine if their customers' numbers are being blocked. The Commission also does not suggest any mechanism or reporting to determine the rate of false positives by robocalling analytics providers.²³

²² *Declaratory Ruling* ¶ 38.

²³ INCOMPAS has suggested that carriers engaged in opt-out call blocking to be required to “notify and provide to affected originators an opportunity to cure instances of blocked calls or otherwise demonstrate the legitimacy of legal calls that they originate, and ensure the completion of such calls on an ongoing basis.” INCOMPAS Letter at 3. Although this proposal may not be the perfect solution, these are the types of solutions the Commission and industry must agree on to protect the integrity of America’s phone network.

Thus, the Commission and other stakeholders should address in more detail transparency and redress mechanisms associated with call blocking. Both callers and providers must have a means to obtain redress of over-blocking by analytics. Today Americans do not trust their Caller ID systems, but at least when they make a phone call, they know their call will go through. When a caller is caught on the wrong side of blocking analytics, that customer's faith in the American telephone infrastructure will be far from restored. The Commission should further investigate what should be done when call blocking goes awry.

V. CONCLUSION

The Commission's policies should seek to protect all lawful communications, discourage erroneous blocking, and limit blocking to illegal robocalls. The SHAKEN/STIR framework offers significant promise, but requires careful implementation. Accordingly, the Commission should focus its efforts on resolving outstanding gaps in the implementation of SHAKEN/STIR to ensure that it will be an effective tool across the voice calling ecosystem.

Respectfully submitted,

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