Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of

Advanced Methods to Target and Eliminate Unlawful Robocalls Call Authentication Trust Anchor

CG Docket No. 17-59
WC Docket No. 17-97

COMMENTS OF INCOMPAS

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INCOMPAS, by its undersigned counsel, hereby submits these comments in response to the Federal Communications Commission’s (“Commission” or “FCC”) Declaratory Ruling and Third Further Notice of Proposed Rulemaking on rule changes intended to protect consumers from illegal robocalls.¹

I. INTRODUCTION & SUMMARY

INCOMPAS, the internet and competitive networks association, represents members that provide communications services across a variety of technological platforms and to a variety of customers, including residential, enterprise, and anchor institutions in rural, suburban, and urban areas. The association also represents members offering wholesale and VoIP services, as well as technology companies that provide solutions and products integrated into the nation’s voice service networks. Our members are committed to working with the Commission as well as the Secure Telephone Identity – Governance Authority (“STI-GA”) Board of Directors to eliminate illegal robocalls. As the STI-GA representative for national competitive local exchange carriers

 (“CLECs”), INCOMPAS has dedicated time and financial resources to ensuring that all technologies and communications business models can achieve the highest levels of attestation under this industry-led effort to implement the SHAKEN/STIR call authentication framework.

In the Third Further Notice of Proposed Rulemaking (“Further Notice”), the Commission seeks comment on various proposals that would provide safe harbor protections for voice service providers that block calls that lack call authentication under the SHAKEN/STIR framework or that are unsigned from particular categories of voice service providers. In these comments, INCOMPAS argues that consideration of a safe harbor, while industry is still setting the standards for SHAKEN/STIR, is premature, and urges the Commission to defer this proposal until such time as the framework has widespread implementation and the Commission has an opportunity to examine the results of the framework. At the outset, among other potential unintended fallout, the industry should demonstrate that the occurrence of “false positive” blocking has been appropriately minimized before a call blocking safe harbor is approved. Additionally, INCOMPAS urges the Commission to expand its Critical Calls List to include vital notification services that convey critical information to consumers, and recommends that the Commission consider the size of the provider if it feels compelled to mandate SHAKEN/STIR.

II. THERE MUST BE WIDESPREAD ADOPTION OF THE SHAKEN/STIR FRAMEWORK BEFORE THE COMMISSION CONSIDERS A SAFE HARBOR FOR CALL-BLOCKING PROGRAMS BASED ON POTENTIALLY SPOOFED CALLS.

The telecommunications industry has responded to consumer and regulatory complaints about illegal robocalls by developing call authentication standards and tools that, when widely implemented and applied in a competitively neutral manner, should mitigate the threat that unlawful robocalls pose to subscribers of voice services. INCOMPAS has been an active participant in the development of the standards associated with SHAKEN/STIR, and in its role as
the representative for national competitive local exchange carriers ("CLECs") on the STI-GA Board of Directors has advocated for policies that will ensure that all technologies and communications platforms can achieve the highest levels of attestation under this industry-supported effort. And while there is a great deal of enthusiasm for the SHAKEN/STIR framework and its eventual adoption, the Commission’s recent Robocall Summit demonstrated that industry still has meaningful hurdles that must be overcome.²

For instance, the STI-GA continues to discuss and seek solutions as to precisely how the SHAKEN/STIR framework will apply to different technologies. Although small voice providers might experience more financial strain in implementing the changes needed for SHAKEN/STIR, this is not simply a large versus small carrier issue. The difficulty involved in SHAKEN/STIR implementation also is affected by the type of technology that a provider is using, how network interconnections are established, and whether the standards will accommodate differences in technology adequately. SHAKEN/STIR-based solutions are not yet generally available in the marketplace, and it remains to be seen whether the framework can be implemented consistently and uniformly across the industry. Providers that are preparing their networks for implementation need to be sure that their legitimate traffic will consistently qualify for “full attestation” and that major voice service providers and other SHAKEN/STIR users will recognize such treatments. A non-uniform implementation is likely to increase the difficulty for service providers building a system to accommodate varying networks’ interaction with the framework and may inhibit broad adoption. Furthermore, it raises the possibility of consumer confusion about call authentication when their calls receive different levels of attestation or are

blocked. Voice service providers are already considering additional algorithmic modeling to their implementation of SHAKEN/STIR that could degrade the level of attestation of some competitive providers’ traffic.

Additionally, the STI-GA and the industry are actively considering how to effectively delegate certificate authority to enterprise and reseller providers to allow these companies to sign calls for common scenarios—like telecommunications relay—where legitimate calling models may utilize numbers from third-parties or multiple underlying carriers. This issue impacts a number of INCOMPAS members and must be resolved as the CLECs involved in certificate delegation are integral to the interconnected PSTN and have business relationships with dozens of companies that may not otherwise be able to sign calls originating on their networks.

Industry also needs to sufficiently address issues related to “gateway attestation,” “international gateways,” and legitimately spoofed calls before providers will be comfortable adopting the framework and before a call blocking safe harbor would be appropriate. Gateway attestation—one of the three levels of attestation provided by SHAKEN/STIR—will be important for small carriers that do not have IP networks and that still use TDM. Without it, these providers would be unable to authenticate traffic and would likely have that traffic blocked absent assurances from industry that call-blocking programs will not interfere with it. Gateway attestation also impacts carriers that deliver VoIP service through “international gateways.” Providers must have confidence that lawful international calls will receive gateway attestation without the risk that they will be blocked simply based on the fact that they originated outside the United States. Finally, several INCOMPAS members offer notification services—such as

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medical notifications—that allow their customers to spoof their numbers. Industry must do its best to ensure that these callers—who offer legitimate business or public safety reasons for spoofing their number—are eligible for SHAKEN attestation.

**a. It is premature to offer a safe harbor to voice service providers that block calls that are unauthenticated under the SHAKEN/STIR framework.**

Despite the significant progress that has already been made to develop a call authentication solution, considerable work remains to ensure that SHAKEN/STIR is implemented as ubiquitously as possible and in a competitively neutral and non-discriminatory manner. INCOMPAS therefore contends that it would be premature to create a safe harbor until such time as there is widespread adoption of SHAKEN/STIR and the framework is sufficiently tested to ensure that all interconnected communications platforms can achieve, where appropriate, full attestation of the legitimate voice traffic being exchanged. In the current environment, a safe harbor that would allow for voice service providers to block calls that lack authentication under their own “local policies” of SHAKEN/STIR would raise significant anticompetitive risks and reduce the incentive of voice service providers to work cooperatively to improve the framework.

Our members indicate that there are several instances where authentication could fail and consumers could be negatively affected. For examples, in the absence of a standardized method for certificate delegation or a similar mechanism, the resale community, which utilizes numbers from third-party providers, would be unable to sign their own outgoing calls and their underlying carriers may also be unable to sign their calls on their behalf. Further, TDM providers (either small carriers that have not upgraded their networks or large carriers with TDM properties) would not be eligible to authenticate their calls without gateway attestation. With questions about international gateways and a focus on bad actors outside the United States, some
international calls will be assigned gateway attestation, but others may run the risk of being blocked. Similarly, businesses that lawfully spoof calls or calls with zero attestation may also fail authentication. Finally, even SHAKEN/STIR authentication on IP-originating, IP-terminating calls could be stripped by TDM transit or facilities used along the route of the call, rendering those legitimate calls susceptible to blocking on the terminating end. In short, the system is not sufficiently equipped or built-out to safely or reasonably permit call blocking on the basis of a lack of SHAKEN/STIR authentication due to the high likelihood of harm to legitimate calling.

In fact, adopting a safe harbor to enable widespread call blocking in advance of the adoption of SHAKEN/STIR may create disincentives to adopt the framework rather than incentives. If, for many competitive providers, the result of adopting SHAKEN/STIR is that they are subject to greater call blocking of valid traffic without recourse, then what incentives do voice service providers have to expend the financial and engineering resources to adopt the framework in the first place? Before a safe harbor is created as addressed in the Further Notice, INCOMPAS urges the FCC to commission an independent study of the effects of call blocking and authentication and to make eligibility for future safe harbors dependent on a rapid and commercially reasonable process to resolve mistaken and inappropriate blocking of wanted calls.

INCOMPAS has previously suggested that the Commission require providers to offer a readily discoverable challenge mechanism as well as an expedited complaint or appeals process that would ensure that remedies are in place for cases of “false positives.” This commercial process would require providers to offer a challenge mechanism on their website that gives consumers or other providers the ability to submit a request seeking to unblock erroneously

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blocked calls. Through this web portal, callers and their service providers should be able to quickly submit requests to the blocking provider to address false positives or concerns over attestation. Additionally, the Commission should make an expedited complaint process available to the industry, which would give carriers an additional option for relief in the event they are unable to come to a satisfactory resolution with a blocking provider. INCOMPAS proposes that a Wireline Competition Bureau staff person be identified as the ombudsperson to help resolve disputes between carriers in an expeditious timeframe.

b. The Commission’s proposal to create a safe harbor for blocking unsigned calls would penalize voice service providers that may not be allowed or otherwise have the resources to interoperate using SHAKEN/STIR with larger carriers, but who are foundational to the interconnected PSTN.

The Commission also seeks comment on creating a safe harbor for blocking unsigned calls from particular categories of voice service providers. While the Commission is clearly concerned about “voice service providers that are most likely to facilitate unlawful robocallers,” INCOMPAS urges the agency to balance its attempts to stamp out bad actors with the efforts of small and competitive providers to marshal the resources necessary to participate in the SHAKEN/STIR ecosystem. There continues to be a need to aggregate and route traffic through transit arrangements and least cost routing. These arrangements may not allow these providers to achieve “full attestation” within the framework, but they are foundational to the interconnected PSTN. Additionally, SHAKEN/STIR is dependent upon IP traffic exchange, however, ubiquitous IP interconnection is still lacking. Therefore, it would be premature to allow default call blocking with a safe harbor that would discriminate against these providers.

Furthermore, INCOMPAS urges the Commission to reject its proposal to use failure to participate in USTelecom’s Industry Traceback Group (“ITG”) as valid criteria for the

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5 Further Notice at ¶ 55.
application of a safe harbor. There are a variety of reasons why some providers do not participate in the ITG, despite their willingness to cooperate in these efforts to identify fraudulent calls and the group’s success in eliminating barriers to locate bad actors. Some providers lack the time or resources to participate, while others are concerned that the group’s traceback efforts are not competitively neutral. Our members also indicate that there is a general reluctance on the part of USTelecom to increase the size of the ITG. Some INCOMPAS members that are very active in the development of call authentication solutions are not participants in the group, thereby providing little justification for having failure to participate in the ITG serve as a proxy for a bad actor.

As there remains much work to be done in implementing SHAKEN/STIR and as many reasons why voice service providers may initially be unable to sign their calls until the framework is widely adopted, INCOMPAS urges the Commission to reject its proposal to create a safe harbor for blocking unsigned calls.

III. THE COMMISSION’S CRITICAL CALLS LIST SHOULD BE EXPANDED TO INCLUDE VITAL NOTIFICATION SERVICES THAT CONVEY CRITICAL INFORMATION.

As the Commission allows industry to engage in default call blocking of illegal robocalls, it is important that the agency preserve consumers’ ability to receive calls from emergency services as well as wanted robocalls that provide critical or time-sensitive information. In the Further Notice, the Commission proposes to require voice service providers to maintain a “Critical Calls List” of emergency numbers that may not be blocked so long as the calls are authenticated. INCOMPAS supports the Commission’s efforts to ensure that “genuine emergency calls”—including the outbound numbers of Public Safety Answering Points (“PSAP” or “911 call centers”) and government emergency outbound numbers—are not subject to call
blocking. Our members indicate that they are currently able to maintain lists of 911 call centers that will allow them to identify and, when SHAKEN/STIR is implemented, authenticate outbound calls that would be subject to the prohibition on call blocking. While INCOMPAS may not be well-positioned to define “government emergency outbound numbers,” voice service and solution providers would also benefit from the Commission taking an active role in gathering, distributing, and updating these numbers so that they can be combined with the list of PSAPs that our members already maintain.

The Commission also seeks comment on other important numbers that should be included in the Critical Calls List. In addition to numbers for emergency services, one of the most well known forms of wanted robocalls are notification services, which can be critical in nature. School messaging, medical notifications, valid conferencing, and similar important services may unfortunately fall under the “reasonable analytics” criteria for blocking adopted in the Declaratory Ruling. Since these calls are typically short in duration, done in bursts, and sent to large, local communities, they are likely to be flagged. This increases the likelihood that these services may be blocked or have their attestation degraded, despite the fact that they are clearly valued by consumers who depend on them for vital information. In the case of school messaging, these robocalls and robotexts are sent with parental permission, and in most cases, it is critical that these communications are permitted to pass through the network unadulterated. Several school districts that are customers of our members have had these calls blocked within

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6 Further Notice at ¶¶ 63-64.

7 See Declaratory Ruling at ¶ 35 (indicating that “large bursts of calls in a short timeframe, low average call duration, . . . [and] neighbor spoofing patterns” are factors that a call-blocking program based on reasonable analytics could use to identify unwanted calls).
the last two years by other service providers using current blocking tools. Without inclusion on the Commission’s Critical Calls List that trend will unfortunately continue.

With respect to limiting Critical Calls List protections to authenticated calls, there is considerable work that still needs to be done to deploy authentication technology across the industry. The Commission acknowledges in the Further Notice that “deployment of authentication technology may be delayed” to some voice service provider networks that are not IP-based.\(^8\) Therefore, limiting protections for emergency calls and notification services until industry achieves wider implementation of the SHAKEN/STIR framework may be unwise, and in some cases, life-threatening. Should the Commission adopt its authentication requirement for the Critical Calls List as proposed, then INCOMPAS urges the Commission to require providers, for the time being, to complete these emergency calls and wanted notifications regardless of their level of SHAKEN/STIR attestation.

As Numeracle recently pointed out, voice providers call blocking and analytics tools are inappropriately labeling emergency and vital notification services as “SPAM” in many instances, rendering voice service “a less effective means of communication because consumers will not receive voice communications, not just from companies they do business with, but also from vital service providers that have been entrusted to convey critical information.”\(^9\) Addressing SHAKEN/STIR, Numeracle notes that the framework’s purpose was to assist with traceback efforts to identify an originating carrier and that it “does not determine whether a call is legal or

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\(^8\) *Further Notice* at ¶ 67.

\(^9\) Letter from Rebekah Johnson, CEO, Numeracle, to Marlene H. Dortch, Secretary, Federal Communications Commission, CG Docket No. 17-59, WC Docket No. 17-97 (filed My 30, 2019), at 1 (reporting that military numbers were labeled as illegal and unwanted by a voice service providers’ call analytics).
illegal or wanted or unwanted.” Industry and the STI-GA are working diligently to ensure that different platforms will be able to achieve the highest levels of attestation, but until they are able to consistently do so, the Commission would be better served to ensure that all emergency numbers and numbers for relevant notification services cannot be blocked.

IV. INDUSTRY STILL HAS SIGNIFICANT CHALLENGES TO ADDRESS BEFORE THE COMMISSION MANDATES SHAKEN/STIR; HOWEVER, ANY MANDATE SHOULD BE BASED ON REASONABLE THRESHOLDS.

As a member of the STI-GA, INCOMPAS has witnessed firsthand the commitment of the entire industry to meeting the Chairman’s 2019 deadline for voluntary implementation by large providers of the SHAKEN/STIR Caller ID authentication framework. The Further Notice includes a list of the industry’s accomplishments including the STI-GA’s selection of iconectiv to serve as the policy administrator for the SHAKEN/STIR framework, the exchange of signed traffic between several carriers, and the commitments of other providers to deploy SHAKEN/STIR solutions during 2019. The governance authority continues to engage in weekly discussions about the issues associated with implementation and has gone to great lengths to encourage consensus-based decision-making amongst its members.

As noted above, however, there continues to be a series of issues that will require additional work and consensus by the STI-GA and by the industry as a whole. Managing certificate delegation to enterprise and resale providers and ensuring that all platforms are capable of achieving full attestation, where appropriate, are just two of the ongoing debates that must be addressed before the Commission is likely to see widespread implementation of SHAKEN/STIR as these issues impact VoIP and wholesale providers. Also, robocall legislation

10 Id. at 2.

11 See Further Notice at ¶ 71.
proposed in both chambers of Congress may add new call authentication requirements for the industry and our members to consider as it develops the framework.\textsuperscript{12}

The ability of providers to implement SHAKEN/STIR is based on the availability of resources, as well as whether or not a voice service provider’s current business model and technology are supported by the standards. To that end, while the technology employed by some small providers’ may support SHAKEN/STIR, the resources of the largest providers give them the ability and economies of scale to introduce and implement call authentication solutions by the end of 2019, with other providers adopting the framework throughout 2020.

Should the Commission feel compelled to mandate implementation of the SHAKEN/STIR framework, INCOMPAS agrees with the Commission’s suggestion to base any initial mandate on the number of voice subscribers and urges the Commission to set subscriber levels for retail, wholesale, and VoIP providers at reasonable thresholds. Based on the Commission’s own assessment, it appears that the providers that carry the majority of the voice traffic in the United States have already announced plans to implement SHAKEN/STIR, meaning this would be an appropriate group to examine if the Commission intends to pursue a mandate. Other carriers, regardless of their technical or resource concerns, would then have additional time to implement the framework.

V. CONCLUSION

For the reasons stated herein, INCOMPAS urges the Commission to consider the recommendations in its comments as it examines the issues raised in the Third Further Notice of Proposed Rulemaking.

\textsuperscript{12} See Telephone Robocall Abuse Criminal Enforcement and Deterrence (TRACED) Act, S.151, 116th Cong. (2019); Stopping Bad Robocalls Act, H.R.946, 116th Cong. (2019).
Respectfully submitted,

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