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

In the Matter of	)	
	)	
Call Authentication Trust Anchor	)	WC Docket No. 17-97
	)	
Implementation of the TRACED Act Section 6(1)—	)	WC Docket No. 20-67
Knowledge of Customers by Entities with Access	)	
To Numbering Resources	)	

Comments of the Montana Telecommunications Association

The Montana Telecommunications Association (MTA) respectfully submits the following comments in response to the Federal Communications Commission's (Commission) above-captioned Further Notice of Proposed Rulemaking (FNPRM).

MTA represents locally-owned rural telecommunications providers operating in Montana. MTA members' incumbent service territories encompass more than 70 percent of Montana's landmass, while serving an average population density of fewer than three households per square mile. These companies have deployed over 25,000 miles of fiber optic infrastructure throughout Montana and have implemented IP-enabled switching infrastructure capable of carrying voice and broadband traffic using Internet Protocol (IP) technology. In fact, a consortium owned by MTA member companies, Vision Net, has provided a fully IP-based 911 network (ESInet) to the State of Montana for more than ten years.[1]

[1] Vision Net, in partnership with CenturyLink, operates the State's 911 network. There are 61 public safety answering points (PSAPs) in Montana, 43 of which are served by Vision Net's IP MPLS network. These PSAPs are emergency service Internet (ESInet) capable. Eighteen Montana PSAPs remain on the Qwest legacy network and are not ESInet capable.

MTA commends the Commission's efforts to bring an end to unwanted robocalls. In this regard, the Commission's FNPRM seeks comments regarding implementation of the STIR/SHAKEN authentication protocols. The benefits of implementing STIR/SHAKEN are many, including among other things, ensuring that rural business and residential consumers can obtain relief from unwanted calls and the scams perpetrated by "spoofers" that have eroded trust in caller-ID. These standards further will assist in "reducing costs for voice service providers by eliminating unwanted network congestion and decreasing the number of complaints," as the Further Notice points out.[2]

For these benefits to be realized, implementing the STIR/SHAKEN call authentication protocols requires an all-IP transmission path.[3] However, "major voice service providers have failed to meet the goal of achieving full implementation by the end of 2019."[4]

Accordingly, MTA's comments focus on the costs and consequences of implementing STIR/SHAKEN in the current environment which is characterized by uneven adoption of IP networks capable of end-to-end IP transmission of calls.

I. The Benefits of STIR/SHAKEN Call Authentication Are Lost without an All-IP Call Path

Because STIR/SHAKEN "operates only on the IP portions of a voice provider's network,"[5] the usefulness of this framework disappears as soon as the call leaves an IP network and connects to a non-IP network upstream, either at an end-office switch or at an agreed-upon

[2] FNPRM, ¶25
[3] Id., ¶7
[4] Id., ¶27. See footnote 117. CenturyLink, which operates in Montana, has "shown little to no progress in upgrading their networks to be STIR/SHAKEN capable."
[5] Op cit. ¶7

meet point, usually at or near the network edge. Not only do the consumer benefits of call authentication technology disappear when a call leaves an IP network, but the considerable investment that rural telecom companies like MTA's members have undertaken, also becomes meaningless as soon as a call originating on an IP network meets a non-IP transmission circuit.[6] In Montana, that means any call leaving an MTA member's IP network will likely interconnect with a non-IP CenturyLink tandem switch, erasing the intent and benefit of implementing STIR/SHAKEN.

In short, the investment a provider makes to defend its consumers from the scourge of robocalling is wasted whenever a call connects with a non-IP upstream network. And, from the consumer's perspective, the so-called benefits of call authentication never are realized.

Thus, any requirement to install STIR/SHAKEN is premature until and unless there is a 100% end-to-end IP call path. MTA therefore urges the Commission to delay the deadline for MTA members and other small and rural carriers to adopt STIR/SHAKEN as proposed in Section II below. Further, the Commission should acknowledge that a delay of a year or two or even three will not obviate the fact that implementing STIR/SHAKEN is meaningless without end-to-end IP call transmission. The inability of rural carriers to pass STIR/SHAKEN call authentication information due to the presence of non-IP facilities owned by upstream carriers will not magically go away. Only Commission action can spur the availability of IP voice interconnection agreements for rural carriers under reasonable terms and conditions. Thus, any Commission deadline applicable to these carriers must be specifically tied to resolution of this issue, and

[6] MTA members are in various stages of implementing STIR/SHAKEN. Preliminary cost estimates for implementing STIR/SHAKEN range from $36,000 to $81,000 a year. MTA members are exploring options including shared services, out-of-band call authentication, and other alternatives.

rural carriers should not be mandated to adopt this standard unless and until the IP interconnection rules proposed below are adopted.

In addition, even once such rules are in place, MTA members and similarly situated small operators should be granted at least until June 2023 to adopt STIR/SHAKEN. It is not clear that vendor equipment will be available to these small entities even by the end of 2020, and in any case these providers should be given more than a one-year delay beyond that granted to the nation's largest carriers.

II. The Benefits of STIR/SHAKEN Are Lost without Network-Edge Interconnection Rules

Even if we could flip a switch and cut the entire nation over to 100% IP transmission for purposes of implementing call authentication protocols, the effectiveness of STIR/SHAKEN or other nationwide all authentication could be lost if rural providers cannot sustain operations under such an environment. As NTCA—The Rural Broadband Association submitted on January 29, 2020,[7] national providers have made no secret of their intent to transition their IP networks, once deployed, to include only a few regional interconnection points, which will be hundreds or even thousands of miles away from rural providers' networks. The national providers are likely to require rural local providers to transport traffic—at the rural carriers' expense—to and from the national carriers' distant interconnection points, imposing

[7] In the Matter of Advanced Methods to Target and Eliminate Unlawful Robocalls, and Call Authentication Trust Anchor. CG Docket No. 17-59; WC Docket No. 1-97. January 29, 2020. P. 9. https://ecfsapi.fcc.gov/file/10129158723939/1.29.20_NTCA_Comments_Robocalls_blocking_PN_17-59_and_17-97.pdf

substantial additional expense on rural providers in violation of both the letter and spirit of universal service comparable service and rate principles.

NTCA proposes a "narrow, simple and straightforward fix." Specifically, NTCA requests a "hold harmless" requirement that "maintains existing interconnection points and transport responsibilities for voice calls between operators, regardless of whether a call is exchanged in TDM or IP."[8] NTCA cites precedent for such a rule in the Commission's "rural transport rule" from the 2011 Transformation Order. MTA fully endorses NTCA's recommendation and urges the Commission to adopt such a hold harmless rule as an integral part of any final call authentication rulemaking. As the Commission found in 2011, the intent of the rural transport rule, like a hold harmless rule in the context of this rulemaking, was to ensure that rural providers would not be forced to incur unrecoverable transport costs.

III. The Benefits of STIR/SHAKEN Will Be Lost if Implementation Results in Reverse Call Completion.

NTCA also discusses the potentially significant harm that can befall rural consumers if uneven implementation of STIR/SHAKEN results in "false positives" accompanying calls originating from rural areas. For example, if a call originates on a rural IP network, but meets a non-IP network along the call path, the terminating provider may misinterpret the lack of call authentication as a robocall and decide not to terminate the call, when in fact the call is perfectly legitimate. The result is a sort of "reverse call completion" problem, where rural calls are not terminated on urban networks, contrary to the call completion issues that took so many years to resolve where urban-originated calls were not completed to rural areas. At the very

[8] Id. P.10.

least, calls from rural consumers will go unanswered at much higher rates and thus rural consumers and businesses will suffer.

NTCA recommends reasonable rules to help ensure that legitimate calls make it to their intended destination without terminating networks inappropriately blocking their delivery. Such reasonable recommendations include attaching an "intercept message" to calls that are blocked, thereby notifying the caller that his/her call was blocked. Further, NTCA proposes a "rapid redress" process for consumers to resolve any call blocking problem to which they may be subjected with minimal burden imposed on either the caller or the provider.

That said, the simplest path toward preventing "false positive" blocking of legitimate calls from rural areas is the adoption of IP voice interconnection rules as discussed above. This will ensure that rural operators can bring the benefits of the STIR/SHAKEN standards to as many rural consumers as possible and in short order.

IV. Conclusion

MTA fully supports the intent of Congress and the Commission to eliminate the nuisance and harmful effects of robocalls. Not only do robocalls waste consumers' time, they tie up networks with unnecessary traffic, and undermine the trustworthiness of our communications ecosystem.

In implementing a solution, the Commission must be mindful that providers are investing significant resources to protect and enhance consumers' communications integrity. With regard to call authentication, this investment is ineffective without an end-to-end IP call path and reasonable interconnection rules. Moreover, the expectations of consumers for a junk-free voice communications environment, will be lost without a 100 percent IP call path. It

is therefore premature to implement STIR/SHAKEN until at least 2023 or one year following implementation by the nation's largest providers.

Respectfully submitted,

_____/s/_____
Geoffrey Feiss, General Manager
Montana Telecommunications Association
208 North Montana Avenue, Suite 105
Helena, Montana. 59601
406.442.4316
gfeiss@telecomassn.org

May 15, 2020