In accordance with the provisions of Executive Order 12866, this regulation was reviewed by OMB.

List of Subjects in 42 CFR Part 412

Administrative practice and procedure, Health facilities, Medicare, Puerto Rico, Reporting and recordkeeping requirements.

For the reasons set forth in the preamble, the Centers for Medicare & Medicaid Services proposes to amend 42 CFR chapter IV as set forth below:

PART 412—PROSPECTIVE PAYMENT SYSTEMS FOR INPATIENT HOSPITAL SERVICES

■ 1. The authority citation for part 412 continues to read as follows:

Authority: 42 U.S.C. 1302 and 1395hh.

■ 2. Section 412.622 is amended—
■ a. By revising paragraphs (a)(3)(ii) and (iv) and (a)(4)(i)(B) and (D);
■ b. By removing paragraph (a)(4)(ii);
■ c. By redesignating paragraph (a)(4)(iii) as paragraph (a)(4)(ii); and
■ d. In paragraph (c) by adding the definition of ''Week'' in alphabetical order; and
■ e. By adding paragraph (d).

The revisions and addition read as follows:

§ 412.622 Basis of payment.

(a) * * *

(3) * * *

(ii) Generally requires and can reasonably be expected to actively participate in, and benefit from, an intensive rehabilitation therapy program. Under current industry standards, this intensive rehabilitation therapy program generally consists of at least 3 hours of therapy (physical therapy, occupational therapy, speech-language pathology, or prosthetics/orthotics therapy) per day at least 5 days per week. In certain well-documented cases, this intensive rehabilitation therapy program might instead consist of at least 15 hours of intensive rehabilitation therapy per week. Benefit from this intensive rehabilitation therapy program is demonstrated by measurable improvement that will be of practical value to the patient in improving the patient's functional capacity or adaptation to impairments. The required therapy treatments must begin within 36 hours from midnight of the day of admission to the IRF.

* * * * *

(iv) Requires physician supervision by a rehabilitation physician. The requirement for medical supervision means that the rehabilitation physician must conduct face-to-face visits with the patient at least 3 days per week throughout the patient's stay in the IRF to assess the patient both medically and functionally, as well as to modify the course of treatment as needed to maximize the patient's capacity to benefit from the rehabilitation process, except that during a Public Health Emergency, as defined in § 400.200 of this chapter, such visits may be conducted using telehealth services (as defined in section 1834(m)(4)(F) of the Act).

(4) * * *

(i) * * *

(B) It includes a detailed and comprehensive review of each patient's condition and medical history, including the patient's level of function prior to the event or condition that led to the patient's need for intensive rehabilitation therapy, expected level of improvement, and the expected length of time necessary to achieve that level of improvement; an evaluation of the patient's risk for clinical complications; the conditions that caused the need for rehabilitation; the treatments needed (that is, physical therapy, occupational therapy, speech-language pathology, or prosthetics/orthotics); expected frequency and duration of treatment in the IRF; anticipated discharge destination; and anticipated post-discharge treatments.

* * * * *

(D) It is used to inform a rehabilitation physician who reviews and documents his or her concurrence with the findings and results of the preadmission screening prior to the IRF admission.

* * * * *

(c) * * *

Week means a period of 7 consecutive calendar days beginning with the date of admission to the IRF.

(d) *Non-physician practitioners.* For purposes of this section, a non-physician practitioner who is determined by the IRF to have specialized training and experience in inpatient rehabilitation may perform any of the duties that are required to be performed by a rehabilitation physician, provided that the duties are within the non-physician practitioner's scope of practice under applicable state law.

Dated: March 24, 2020.

Seema Verma,

Administrator, Centers for Medicare & Medicaid Services.

Dated: April 9, 2020.

Alex M. Azar II,

Secretary, Department of Health and Human Services.

[FR Doc. 2020–08359 Filed 4–16–20; 4:15 pm]

BILLING CODE 4120–01–P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 64

[WC Docket Nos. 17–97, 20–67; FCC 20–42; FRS 16632]

Call Authentication Trust Anchor; Implementation of TRACED Act—Knowledge of Customers by Entities with Access to Numbering Resources

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: In this document, the Commission seeks comment on proposals to further efforts to promote caller ID authentication and implement Section 4 of the Pallone-Thune Telephone Robocall Abuse Criminal Enforcement and Deterrence (TRACED) Act. In addition, the Commission also seeks comment in this document on implementing section 6(a) of the TRACED Act, which concerns access to numbering resources. The Commission concurrently adopted a Report and Order mandating that all originating and terminating voice service providers implement the STIR/SHAKEN caller ID authentication framework in the internet Protocol (IP) portions of their networks by June 30, 2021.

DATES: Comments are due on or before May 15, 2020. Reply Comments are due on or before May 29, 2020.

ADDRESSES: Comments and reply comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998). Interested parties may file comments or reply comments, identified by WC Docket Nos. 17–97, 20–67, by any of the following methods:

- *Electronic Filers:* Comments may be filed electronically using the internet by accessing the ECFS: *https://www.fcc.gov/ecfs/*
- *Paper Filers:* Parties who choose to file by paper must file an original and one copy of each filing.

Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- U.S. Postal Service first-class, Express, and Priority mail must be

addressed to 445 12th Street, SW, Washington, DC 20554.

Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID–19. See FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy, Public Notice, DA 20–304 (March 19, 2020). *https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy.*

During the time the Commission's building is closed to the general public and until further notice, if more than one docket or rulemaking number appears in the caption of a proceeding, paper filers need not submit two additional copies for each additional docket or rulemaking number; an original and one copy are sufficient.

In addition to filing comments with the Secretary, a copy of any comments on the Paperwork Reduction Act information collection requirements contained herein should be submitted to the Federal Communications Commission via email to *PRA@fcc.gov* and to Nicholas A. Fraser, Office of Management and Budget, via email to *Nicholas_A._Fraser@omb.eop.gov* or via fax at 202–395–5167.

FOR FURTHER INFORMATION CONTACT: For further information, please contact Mason Shefa, Competition Policy Division, Wireline Competition Bureau, at *Mason.Shefa@fcc.gov.* For additional information concerning the Paperwork Reduction Act information collection requirements contained in this document, send an email to *PRA@fcc.gov* or contact Nicole Ongele at (202) 418–2991.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Further Notice of Proposed Rulemaking in WC Docket Nos. 17–97, 20–67; FCC 20–42, adopted and released on March 31, 2020. The full text of this document is available for public inspection during regular business hours, when FCC Headquarters is open to the public, in the FCC Reference Information Center, Portals II, 445 12th Street, SW, Room CY–A257, Washington, DC 20554 or at the following internet address: *https://docs.fcc.gov/public/attachments/FCC-20-42A1.pdf.* The Report and Order that was adopted concurrently with this Further Notice of Proposed Rulemaking is published elsewhere in the **Federal Register**. To request materials in accessible formats for people with disabilities (*e.g.,* braille, large print, electronic files, audio format, etc.) or to request reasonable accommodations (*e.g.,* accessible format documents, sign language interpreters, CART, etc.), send an email to *fcc504@fcc.gov* or call the Consumer & Governmental Affairs Bureau at (202) 418–0530 (voice) or (202) 418–0432 (TTY).

Synopsis

I. Further Notice of Proposed Rulemaking

1. Building on the important steps we take in the concurrently adopted Report and Order, we offer proposals and seek comment on further efforts to promote caller ID authentication and implement section 4 of the TRACED Act. We also seek comment on implementing section 6(a) of the TRACED Act, which concerns access to numbering resources.

A. Caller ID Authentication Requirements Definitions and Scope

2. In the accompanying Report and Order, we adopted a definition of ''STIR/SHAKEN authentication framework'' that aligns with the statutory language of the TRACED Act. We believe the definition we adopted of the ''STIR/SHAKEN authentication framework'' is sufficient for our implementation of the TRACED Act. We seek comment on this view.

3. We also adopted a definition of ''voice service'' in the Report and Order that aligns with the statutory language of the TRACED Act. In section 4(a)(2) of the TRACED Act, Congress provided a definition of ''voice service'' that is similar, but not identical, to the preexisting definition found in section 64.1600(r) of our rules, which adopts the definition Congress provided in Section 503 of the RAY BAUM'S Act. Both provisions define voice service as ''any service that is interconnected with the public switched telephone network and that furnishes voice communications to an end user using resources from the North American Numbering Plan or any successor to the North American Numbering Plan adopted by the Commission under section 251(e)(1) of the [Act].'' In the TRACED Act, Congress included a similar definition but added a provision that ''without limitation, any service that enables real-time, two-way voice communications, including any service that requires [I]nternet [P]rotocol-compatible customer premises equipment (commonly known as 'CPE') and permits out-bound calling, whether or not the service is one-way or two-way voice over [I]nternet [P]rotocol.'' We seek comment on how, if at all, the scope of the TRACED Act definition varies from the section 64.1600(r) definition on the basis of the foregoing language. Should we provide further guidance on the meaning of the ''without limitation'' language in the TRACED Act, or is it clear as written? Looking at the two definitions as a whole, we seek comment on whether Congress intended to create two distinct definitions with different scopes or whether the similarity between the definitions means that we should harmonize our interpretations of the two definitions. Additionally, we seek comment on whether the TRACED Act's definition of ''voice service'' should cause us to revisit our decision in the accompanying Report and Order to exempt from our rules providers that lack control of the network infrastructure necessary to implement STIR/SHAKEN.

4. Congress directed many of the requirements in the TRACED Act to ''providers of voice service.'' On one reading, an entity is a provider of voice service only with respect to calls that meet the definition of ''voice service,'' *i.e.,* ''provider'' is defined on a call-by-call basis. On another reading, an entity that provides any voice service is always a ''provider of voice service,'' *i.e.,* ''provider'' is defined on an entity-by-entity basis. We propose adopting the former interpretation. Based on this interpretation, a provider is not subject to the TRACED Act for all services simply because some fall under the TRACED Act definition of ''voice service''; instead, only those services that meet the TRACED Act definition of ''voice service'' are subject to TRACED Act obligations. We propose this interpretation because it gives meaning to Congress's inclusion of a definition for ''voice service'' and appears to best comport with the TRACED Act's allocation of duties on the basis of call technology, *e.g.,* differentiating duties between calls over IP and non-IP networks. Further, we have previously used a call-by-call understanding of intermediate providers in our rules. We seek comment on this interpretation. Should we instead read the TRACED Act to establish a status-based approach, thus capturing a provider's entire network if some parts of its network meet the statutory definition?

B. Extending the STIR/SHAKEN Implementation Mandate to Intermediate Providers

5. To further help ensure that caller ID authentication information reaches call recipients, we propose extending our STIR/SHAKEN mandate to intermediate providers. We seek comment on this proposal, in general, and on the specific

implementing measures we propose below for authenticated and unauthenticated calls that intermediate providers receive. In each case, we propose applying the obligations we establish for IP calls both to calls that an intermediate provider passes to a terminating voice service provider and to calls that it passes to a subsequent intermediate provider. We seek comment on this proposed scope. We further propose adopting these rules pursuant to our authority under the Communications Act. We seek comment on this proposal, as well as whether we have independent authority under either the TRACED Act or the Truth in Caller ID Act.

6. *Authenticated Calls.* We propose to require intermediate providers to pass any Identity header they receive to the subsequent intermediate or voice service provider in the call path. Technically, this proposal would require that the Identity header be forwarded downstream in the SIP INVITE transmitted by the intermediate provider. This proposal is consistent with the NANC's recommendation ''that all carriers that route calls between originating and terminating carriers, such as long-distance providers and least-cost routers, maintain the integrity of the required SHAKEN/STIR signaling.'' We anticipate that imposing such a mandate on intermediate providers is necessary to ensure that calls transmitted in IP retain authentication information across the entire call path. If any of the intermediate providers in the call path are unable or unwilling to transmit the Identity header through their network, the terminating voice service provider will be unable to verify the caller ID information. If fully implemented, the STIR/SHAKEN framework creates an ''end-to end'' system for authenticating the identity of the calling party. The component SHAKEN standard specifically addresses the reality that call paths often involve voice service providers that do not connect directly with each other, but rather connect indirectly through one or more third party networks. Indeed, a framework like STIR/SHAKEN that identifies the true origination of calls is expressly required because voice service providers do not have direct peering relationships with all other voice service providers. We therefore anticipate that adopting our proposal will be essential to preventing gaps that would undermine the value of STIR/SHAKEN implementation by voice service providers that originate and terminate calls that may transit over intermediate provider networks. We seek comment on this preliminary view. What are the benefits or drawbacks to imposing this obligation on intermediate providers? What, if any, are the technical barriers preventing intermediate providers from complying with this obligation? Are market forces alone sufficient to drive intermediate providers to implement STIR/SHAKEN, making regulatory action unnecessary? If we were to adopt our proposal, should we create any limitations or exceptions? In addition to this proposed requirement, should we require intermediate providers to append to the SIP INVITE their own additional Identity header to more accurately and easily support traceback to each provider in the call path? Are there any other actions reasonably necessary for implementation of STIR/SHAKEN that we should require of intermediate providers?

7. Additionally, we propose to require intermediate providers to pass the Identity header *unaltered,* thereby prohibiting the manipulation of STIR/SHAKEN Identity header information by intermediate providers when transmitting this information along with a SIP call. This prohibition would prevent a downstream provider from altering or stripping the caller ID authentication information in the Identity header and ensure such providers do not tamper with authenticated calls after they leave the originating voice service provider's network. Based on comments filed earlier in this proceeding, we anticipate that such a prohibition would be beneficial because it would better ensure the integrity of authentication information that reaches the terminating voice service provider and call recipient. We seek comment on our proposal. Are there legitimate reasons, technical or otherwise, for an intermediate provider to alter or strip STIR/SHAKEN header information? Would establishing this prohibition impact the ability of intermediate providers to complete calls if, for instance, a terminating voice service provider is unable to accept the STIR/SHAKEN header information for a technical reason? If so, how can we distinguish between malicious or negligent manipulation and manipulation done for legitimate technical reasons? In the absence of a Commission prohibition, could the practice of malicious or negligent manipulation of the Identity header be adequately policed by participating providers or the industry through the STI–GA? We do not propose prohibiting a terminating voice service provider from altering or stripping the Identity header for a call that it receives before attempting to verify it. We regard this scenario as unlikely since terminating voice service providers need to verify the Identity header information in order for their subscribers to receive the benefits of STIR/SHAKEN, and we do not believe our rules need to address it. Do commenters agree? Is there any reason we should extend this prohibition to terminating voice service providers?

8. *Unauthenticated Calls.* We propose that when an intermediate provider receives an unauthenticated call that it will exchange with another intermediate or voice service provider as a SIP call, it must authenticate such a call with a ''gateway'' or ''C'' attestation. Such attestation conveys that the provider has no relationship with the initiator of the call, but it records the entry point of the call into its IP network. This action is already contemplated in the industry standards. We propose requiring it because, although this attestation level lacks any assertion of the calling party's identity, we understand from the record developed thus far that it would provide a useful data point to inform analytics and allow for traceback of the call to the gateway source. We seek comment on this proposal. What are the benefits of or drawbacks to imposing this obligation on intermediate providers? Would the widespread use of ''C'' attestation negatively impact the utility of attestation information to terminating voice service providers and their subscribers? What, if any, are the technical barriers preventing intermediate providers from complying with this obligation? Should we create any limitations or exceptions to a rule requiring gateway attestation? Are there any circumstances where an originating voice service provider would need to be subject to this requirement? Multiple commenters support imposing STIR/SHAKEN requirements on gateway providers as a way to identify robocalls that originate abroad and to identify which provider served as the entry point for these calls to U.S. networks. Is this an effective way to use STIR/SHAKEN to combat illegal calls originating outside the United States? ATIS has been working on technical standards intended as potential mechanisms for implementing STIR/SHAKEN for internationals calls. The first technical report addresses how calls authenticated in one country can be verified in a second country through bilateral arrangements between the two countries. A second draft technical report under current consideration

addresses how the SHAKEN trust environment could be extended to full international deployment in the absence of bilateral arrangements. Both approaches are intended to support caller ID authentication and traceback for cross-border calls. Are there other rules involving STIR/SHAKEN that we should consider regarding intermediate providers to further combat illegal calls originating abroad? In response to our questions in the *2019 Robocall Declaratory Ruling and Further Notice* regarding the use of STIR/SHAKEN to combat illegally spoofed calls originating abroad, Verizon suggests that we impose an obligation to use STIR/SHAKEN on any provider, regardless of its geographic location, if it intends to allow its customers to use U.S. telephone numbers. Verizon suggests, however, that the STIR/SHAKEN rules need only apply to calls to U.S. consumers that involve the use of numbers from the U.S. portion of the NANP. According to Verizon, U.S.-inbound international calls originating from foreign carriers only with numbers from their countries' numbering plans do not materially contribute to the robocall problem. And USTelecom suggests that we consider obligating gateway providers to pass international traffic only to downstream providers that have implemented STIR/SHAKEN. USTelecom notes that the Commission implemented a similar framework with respect to intermediate providers in the rural call completion context and argues that a similar approach adopted in the SHAKEN context would ensure a heightened degree of transparency and accountability. They argue that such an obligation would help ensure that any gateway attestation is not stripped out downstream by a provider's network that does not have STIR/SHAKEN capability and consequently frustrate efforts to trace calls originating abroad back to the gateway provider. Should we consider adopting either of these ideas instead of, or in addition to, our proposed rules? Beyond imposing obligations on gateway and intermediate providers, are there other actions we could take to promote caller ID authentication implementation to combat robocalls originating abroad?

9. *Limiting Intermediate Provider Requirements to IP Networks.* As with the rules adopted in the Report and Order, we propose to limit the application of these obligations to calls that an intermediate provider receives in SIP and will exchange with another intermediate or voice service provider in SIP. We preliminarily believe this is an appropriate scope given that STIR/SHAKEN is limited to SIP calls. We seek comment on this proposal. Is there any reason to require intermediate providers to implement caller ID authentication solutions in the non-IP portions of their networks? In this regard, we specifically invite comment on whether out-of-band STIR, a potential STIR/SHAKEN solution for non-IP networks, will include a role for intermediate providers as it develops.

10. We further seek comment on how to prevent the use of non-IP intermediate providers as a way to circumvent our rules. How can we prevent a gateway or originating voice service provider from concealing its identity as the source of a call by purposefully routing that call through an intermediate provider that uses non-IP technology? By doing so, the provider could both fool terminating providers—who otherwise may have seen that the caller ID verification failed—and stymie traceback efforts. We also seek comment on the seriousness of this threat. Are there technical or economic reasons why this is not likely to occur? Would call pattern analysis minimize the effectiveness of this conduct? And would the ability to trace a call back to the gateway provider allow sufficient traceback to identify the originating provider? Or is this threat credible such that we should take action to prevent it? If so, what action should we take?

11. *Definition of Intermediate Provider.* We propose using the definition of ''intermediate provider'' found in section 64.1600(i) of our rules. This section provides that an ''intermediate provider'' is ''any entity that carries or processes traffic that traverses or will traverse the [PSTN] at any point insofar as that entity neither originates nor terminates that traffic.'' The broad scope of this definition seems well-suited to further the goal of widespread implementation of the STIR/SHAKEN framework. We seek comment on this proposal. Are there alternative formulations to the definition of ''intermediate provider'' that more accurately capture its role and characteristics for the purpose of STIR/SHAKEN implementation? In the context of rural call completion, the Commission's rules use a slightly narrower definition to exclude from their scope intermediate providers that may only incidentally transmit voice traffic, such as internet Service Providers. Is this narrower definition a better fit for STIR/SHAKEN, or does the broader definition we propose better support the goal of ubiquitous deployment?

12. *Legal Authority.* We propose relying on our authority under section 251(e) of the Act to apply these rules to intermediate providers. We concluded in the Report and Order that our exclusive jurisdiction over numbering policy provides authority to require voice service providers to implement STIR/SHAKEN in order to prevent the fraudulent abuse of NANP resources. We preliminarily believe that this same analysis extends to intermediate providers. Just as with calls displaying a falsified or spoofed caller ID on an originating or terminating voice service provider's network, calls with illegally spoofed caller ID that transit intermediate providers' networks are exploiting numbering resources to further illegal schemes. By imposing these requirements on intermediate providers, we would protect consumers and prevent bad actors from abusing NANP resources. We seek comment on this proposal. Consistent with our conclusion in this document's Report and Order, we propose concluding that the section 251(e)(2) requirements do not apply in the context of our establishing STIR/SHAKEN requirements. Alternatively, even if section 251(e)(2) does apply, we propose that competitive neutrality is satisfied in this instance because each carrier is responsible for bearing its own implementation costs. We seek comment on these proposals.

13. We also seek comment on two potential additional sources of authority. First, we seek comment on whether the TRACED Act provides us with authority to impose the obligations we propose for intermediate providers. In the TRACED Act, Congress directs the Commission to require voice service providers to implement STIR/SHAKEN in the IP portions of their networks. Section 4(a)(2) defines ''voice service'' in part as any service that ''that furnishes voice communications to an end user using resources from the North American Numbering Plan.'' We do not preliminarily read this definition to include intermediate providers. Is this a correct interpretation, or can we rely on the TRACED Act to reach intermediate providers? At the same time, we propose concluding that we are not foreclosed by the limited definition of ''voice service'' from imposing STIR/SHAKEN requirements on intermediate providers. We propose reaching this conclusion for two independent reasons. First, section 4(d) of the TRACED Act states that ''[n]othing in this section shall preclude the Commission from initiating a rulemaking pursuant to its existing statutory authority.'' Second, the STIR/SHAKEN framework creates a chain of

trust between the originating and terminating voice service providers. Each intermediate provider operating between the originating and terminating voice service provider in the call path must transmit the call's Identity header unaltered in order to successfully provide end-to-end caller ID authentication. We believe that in directing us to require providers of voice service to implement the ''STIR/SHAKEN authentication framework'' as defined in the TRACED Act, Congress intended to refer to the standards created by the information and communications technology industry. These standards are designed to enable caller ID authentication through an end-to-end chain of trust. Intermediate providers play a critical role in ensuring the success of such a system. We believe Congress intended for the STIR/SHAKEN framework, as mandated in section 4 of the TRACED Act, to be an effective means of battling unlawful robocalls, and we therefore propose concluding that Congress took this aspect of STIR/SHAKEN into account in enacting the TRACED Act and allowed us latitude to impose requirements on intermediate providers in support of its direction to require voice service providers to implement the STIR/SHAKEN authentication framework. We also believe that our proposals lie within the Commission's statutory authority to adopt rules ''necessary in the execution of its functions.'' We seek comment on this proposed analysis.

14. Second, we seek comment on whether our authority under the Truth in Caller ID Act allows us to impose the rules described above. In the Truth in Caller ID Act, Congress charged us with prescribing rules to make unlawful the spoofing of caller ID information ''in connection with any telecommunications service or IP-enabled voice service . . . with the intent to defraud, cause harm, or wrongfully obtain anything of value.'' Does imposing STIR/SHAKEN implementation obligations on intermediate providers fit within this directive? We also seek comment on what other sources of authority we have to apply STIR/SHAKEN obligations on intermediate providers.

15. *Alternatives.* To the extent that commenters believe we cannot or should not apply such obligations to intermediate providers, we seek comment on alternative measures we could take to ensure that STIR/SHAKEN information traverses the entire call path. In the *Second Rural Call Completion Report and Order,* the Commission required larger originating long-distance providers to monitor the performance of downstream intermediate providers with regard to call completion. Should we impose a comparable requirement here? For instance, should we require originating voice service providers to ensure, by contract and/or through periodic monitoring, that all intermediate providers in the call path transmit STIR/SHAKEN information? Should we require originating voice service providers to take remedial measures where necessary because of intermediate provider failures, as in the rural call completion context? What are the benefits and drawbacks of this approach compared to our proposal? We expect that the same sources of authority that we rely on in the Report and Order to impose direct STIR/SHAKEN obligations on originating voice service providers would allow us to impose a monitoring duty on them as well. We seek comment on this view and, in general, on sources of authority we may have for any alternatives that commenters propose.

C. Assessment of Burdens or Barriers to Implementation

16. The TRACED Act directs the Commission, not later than December 30, 2020 ''and as appropriate thereafter,'' to assess any burdens and barriers to (1) voice service providers that use time-division multiplexing network technology (TDM), a non-IP network technology; (2) small voice service providers; and (3) rural voice service providers. It further directs us to assess burdens and barriers created by the ''inability to purchase or upgrade equipment to support the call authentication frameworks . . . or lack of availability of such equipment.''

17. To this end, we seek comment on the burdens and barriers to implementation for the classes of providers identified, particularly the burdens presented by equipment availability and cost. In comments previously filed, parties contended that small and rural providers, and operators of TDM networks, may incur substantial costs upgrading their networks, and updating or replacing service agreements. Do commenters agree with this position? What are other burdens and barriers to implementation for such voice service providers? Does cost and/or the availability of necessary equipment and equipment updates pose barriers to implementation for voice service providers that are not small, rural, or operators of TDM networks?

18. We also seek comment on how we should interpret the TRACED Act's direction to assess burdens and barriers to implementation ''as appropriate thereafter.'' Should we coordinate this assessment with our revision of any granted extensions in compliance? Or should we do so on a specific schedule or as-needed basis, separate from our extension review process?

D. Extension of Implementation Deadline

19. The TRACED Act includes two provisions for extension of the June 30, 2021 implementation date for caller ID authentication frameworks. First, in connection with an assessment of burdens or barriers to implementation, the Commission ''may, upon a public finding of undue hardship, delay required compliance'' with the June 30, 2021 date for caller ID authentication framework implementation. Second, we ''shall grant a delay of required compliance'' with the June 30, 2021 implementation date ''to the extent that . . . a provider or class of providers of voice services, or type of voice calls, materially relies on a non-[IP] network for the provision of such service or calls.'' Under either provision, an extension may be provider-specific or apply to a ''class of providers of voice service, or type of voice calls.'' We must annually reevaluate any granted extension for compliance. When granting an extension of the implementation deadline under either provision, we must require that provider to ''implement an appropriate robocall mitigation program to prevent unlawful robocalls from originating on the network of the provider.'' Based on these directives, we propose granting a one-year implementation extension to small, including small rural, voice service providers due to undue hardship; and propose granting an extension for the parts of a voice service provider's network that rely on technology that cannot initiate, maintain, and terminate SIP calls. We seek comment on these proposals, whether to grant additional extensions, and related issues below.

20. *Extensions for Undue Hardship by Category of Provider.* The TRACED Act grants us the discretion to delay a provider's obligation to comply with the June 30, 2021 call authentication framework implementation date upon a public finding of hardship. It states that the extension may be ''for a reasonable period of time . . . as necessary . . . to address the identified burdens and barriers.''

21. The first category of voice service providers identified by the TRACED Act for a potential extension due to undue hardship is voice service providers that use TDM network technology. Because the TRACED Act includes a separate

extension for voice service providers that ''material[ly] rely'' on non-IP technology, we propose to grant the same extension to voice service providers that use TDM technology under the undue hardship standard as we grant to providers that materially rely on non-IP technology. We believe that such a solution minimizes complexity and aligns the compliance requirements for similarly-situated voice service providers. We seek comment on this proposal. To give meaning to each provision from Congress, should we instead distinguish an undue hardship extension on the basis of TDM technology from the extension for providers that materially rely on non-IP technology, and if so how?

22. The second category of voice service providers identified by the TRACED Act for a potential extension due to undue hardship is small voice service providers. We propose granting a one-year implementation extension for such providers and we seek comment on this proposal. According to NTCA, small voice service providers face numerous burdens and barriers to implementation, including the inability to ''procure ready-to-install solutions on the same timeframe as the nation's largest carriers.'' It contends that a delayed compliance date would allow small voice service providers to ''obtain solutions from vendors,'' and benefit from the competition among vendors which, over time, will likely ''drive down prices and improve the quality of SHAKEN/STIR offerings for smaller providers.'' We tentatively conclude that granting such an extension to small voice service providers addresses the concerns in the record, such as vendor availability, and grants sufficient time for them to implement STIR/SHAKEN on their IP networks. Do commenters agree? Alternatively, would granting such an extension to small voice service providers compromise the efficacy of the STIR/SHAKEN framework unduly? Given the TRACED Act's implementation deadline of June 30, 2021, is it necessary to grant small voice service providers an implementation extension? Or does this deadline already provide small voice service providers with sufficient time to implement STIR/SHAKEN on their IP networks? Some commenters claim that a ''hosted'' solution to implement STIR/SHAKEN currently exists and suggest that providers to whom this solution is available would not need an extension to comply with the implementation mandate.

23. We propose to define ''small providers of voice service'' for the purposes of our assessment of burdens and barriers and of our implementation extension as those that have 100,000 or fewer voice subscriber lines (counting the total of all business and residential fixed subscriber lines and mobile phones and aggregated over all of a provider's affiliates). In the *First Rural Call Completion Order,* the Commission determined that the 100,000-subscriber-line threshold ensured that many subscribers would continue to benefit from our rules while also limiting the burden on smaller voice service providers. We seek comment on this proposal. What are the benefits and drawbacks of establishing an 100,000 subscriber-line threshold? Is there an alternative measure the Commission should use to define ''small providers of voice service''? How should we distinguish small providers that must overcome significant technical challenges to implement STIR/SHAKEN from those that are able to implement it without hardship? Do commenters agree that a class-based extension for small providers is appropriate, or should we review each small provider seeking an implementation extension on a case-by-case basis?

24. The third category of voice service providers identified by the TRACED Act for a potential extension due to undue hardship is rural voice service providers. We believe it is unnecessary to grant a separate implementation extension for rural voice service providers as the challenges faced by these providers are already addressed by either the small voice service provider extension or the extension for voice service providers that materially rely on a non-IP network. We seek comment on this view. Alternatively, by using the separate terms ''small'' and ''rural,'' did Congress intend to create two distinct extensions for rural and small voice service providers? Are there rural voice service providers that face unique challenges not addressed by either proposed extension and, if so, what definition of ''rural'' should we adopt to appropriately capture those entities?

25. We seek comment on whether we should grant an implementation extension for any other voice service providers or classes of voice service providers, or types of voice calls. We specifically seek comment on Congress's direction to consider whether to grant an extension on the basis of ''the inability to purchase or upgrade equipment to support the call authentication frameworks under this section, or lack of availability of such equipment.'' Are there entities, or a class of entities, that should receive an extension on this basis? Are there voice service providers other than small voice service providers who face a burden due to the inability to purchase or unavailability of equipment necessary to participate in caller ID authentication? Are there other specific voice service providers or classes of voice service providers, or types of voice calls, for which we should grant an extension of the implementation deadline? On what basis would we grant such an extension? What would constitute a sufficient burden or barrier to justify a finding of undue hardship? What type of evidence should the voice service provider or class of voice service providers be required to present to demonstrate undue hardship? And what is a reasonable length of time to extend the deadline for such voice service providers and why?

26. We also seek comment on whether we should grant an extension for undue hardship for enterprise calls. If we were to grant such an extension, should it apply to all enterprise calling cases or only to those that are most challenging? What types of enterprise calling cases should be considered particularly challenging for purposes of any extension? Would granting an extension for enterprise calls unduly limit the benefits offered by widespread implementation of STIR/SHAKEN? Additionally, would granting this extension decrease incentives for voice service providers to solve existing issues with enterprise calling quickly? Even assuming for the sake of argument that achieving ''A'' attestation may remain a challenge in some circumstances, why would it be preferable to allow enterprise calls to go unauthenticated rather than potentially receiving ''B'' (partial) or ''C'' (gateway) attestation?

27. We do not interpret the TRACED Act's extension provisions to extend to intermediate providers, because its definition of ''voice service'' refers to ''furnish[ing] voice communications to an end user.'' Should we nonetheless choose to provide an extension based on undue hardship for intermediate providers? On what basis would we grant such an extension, to whom should we grant it, and how long should any such extension last? Would granting an extension for some intermediate providers have unique negative impacts on the operation of STIR/SHAKEN across the voice network?

28. Furthermore, should we adopt an extension for voice service providers that have legal obligations to maintain extensive networks in high cost areas, such as eligible telecommunications carriers and carriers of last resort that bear particularly extensive obligations? An eligible telecommunications carrier

must, throughout the service area for which the designation is received, ''offer the services that are supported by Federal universal service support mechanisms . . . either using its own facilities or a combination of its own facilities and resale of another carrier's services (including the services offered by another eligible telecommunications carrier).'' 47 U.S.C. 214(e)(1)(A). Carriers of last resort are ''required to fulfill all reasonable requests for service within [their] territory.'' *See, e.g.,* CA PUC 275.6. Or would we adequately address the burdens and barriers faced by such voice service providers by the other extensions we propose, including the extension for non-IP network technology?

29. *Extension for Undue Hardship Due to Challenges in Interconnecting in IP.* The record developed in response to the *2019 Further Notice* reflects that, for certain voice service providers, a barrier to the exchange of authenticated calls occurs at the interconnection point. Specifically, voice service providers reported that even if they were able to authenticate calls on their own network, they could not exchange authenticated calls with another voice service provider in certain instances because the interconnection point was not IP-enabled, even if the receiving voice service provider itself operates on an IP network. We seek comment on whether we should provide an implementation extension pursuant to TRACED Act section 4(b)(5)(A)(ii) to voice service providers that will not be able to carry authentication information to the next intermediate or voice service provider in the call path due to an inability to interconnect in IP. To what extent should a terminating or originating voice service provider's implementation extension on this basis depend on the actions of the intermediate or voice service provider with which it is seeking IP interconnection in order to exchange authenticated calls? Although the accompanying Report and Order requires transmission of authenticated calls by originating voice service providers only where technically feasible, it requires authentication of all SIP calls. Under what circumstances would challenges in interconnecting in IP constitute an ''undue hardship'' such that the voice service provider should be excused from authentication? Would it be appropriate to limit any such extension to rural local exchange carriers or some other subset of small and/or rural voice service providers? Is such an extension an appropriate way to avoid requiring voice service providers to invest in network upgrades that they cannot make use of? Or would such an extension discourage voice service providers from coming to a negotiated resolution and transitioning to IP? We also seek comment on ways to address this issue and to encourage the voluntary adoption of IP interconnection agreements between voice service providers. We also seek comment on barriers to end-to-end STIR/SHAKEN transmission, including the degree to which barriers to IP interconnection hinder end-to-end caller ID authentication.

30. *Extension for Certain Non-IP Networks.* The TRACED Act specifically directs that ''the Commission shall grant a delay'' ''for any provider or class of providers of voice service, or type of voice calls, only to the extent that such a provider or class of providers of voice service, or type of voice calls, materially relies on a non-[I]nternet [P]rotocol network for the provision of such service or calls . . . until a call authentication protocol has been developed for calls delivered over non-[IP] networks and is reasonably available.'' We propose to grant such an extension only for those portions of a voice service provider's network that rely on technology that cannot initiate, maintain, and terminate SIP calls. Do commenters agree with this approach? Under this reading of the statute, we would interpret ''material[]'' to mean ''important or having an important effect''; and, consistent with our call-by-call interpretation of the TRACED Act, we would read ''reli[ance]'' with reference to the particular portion of the network in question. Altogether, under this reading, we would treat reliance on a non-internet Protocol network as material if that portion of the network is incapable of using SIP. We seek comment on whether, within the framework we propose, we should adopt a different interpretation of ''non-[I]nternet [P]rotocol network.''

31. We also seek comment on other approaches to this statutory provision. For instance, should we grant an extension for a voice service provider's entire network if that voice service provider materially relies on non-IP technology? On this view, how should we interpret ''materially relies''? Would we find that a voice service provider ''materially relies on a [non-IP] network'' if its network substantially relies on non-IP technology, and on that reading what portion of a network must be non-IP for reliance to be substantial? Would we measure that percentage by a technical measure, such as the percentage of non-IP switches in the network? Alternatively, should we consider gauging substantial reliance by the percentage of a voice service provider's subscriber base served by non-IP network technology?

32. Additionally, we seek comment on how the Commission should determine if a caller ID authentication protocol developed for calls delivered over non-IP networks is ''reasonably available'' under section 4(b)(5)(B) such that this extension period would end. For example, should we conclude that reasonable availability varies by voice service provider, *e.g.,* based on size and cost, and if so, how? Should we conclude that reasonable availability depends on whether an effective protocol can be purchased or otherwise obtained by a certain percentage of providers with non-IP networks? While some commenters have referred to out-of-band STIR as a framework that could potentially allow non-IP voice service providers to participate in STIR/SHAKEN, it is our understanding that this framework is still in its infancy and is not readily available to be implemented. We seek comment on this understanding. Are there other available technologies to enable legacy networks to participate in caller ID authentication for which we should consider encouraging development and, ultimately, mandate implementation? If so, what are they, how do they operate, and how might they best be implemented? What efforts, if any, are currently underway to develop such technologies, and how near are they to viability?

33. The TRACED Act further provides that we should limit or terminate an extension of compliance if we determine in a future assessment that a voice service provider ''is not making reasonable efforts to develop the call authentication protocol'' for non-IP networks. We propose to interpret the ''reasonable efforts'' requirement as being satisfied so long as a voice service provider is actively working to develop a caller ID authentication protocol for non-IP networks. We also propose that a voice service provider satisfies this obligation if it is able to provide the Bureau upon request documented proof that it is participating, either on its own or through a representative, as a member of a working group or consortium that is working to develop a non-IP solution, or actively testing such a solution. We propose that the Bureau would have authority to determine whether the provider is meeting the standard we establish. We seek comment on this approach. Should we impose a different standard on larger voice service providers that have more resources available to invest in technology development and network upgrades?

Should we impose a stricter standard for the steps voice service providers must take to develop a non-IP solution? If so, what should we require as part of this more stringent standard? Should we adopt our proposed standard initially but shift to a more stringent standard if we find that the voice service provider in question, or industry as a whole, is not making sufficient progress toward implementation of caller ID authentication on non-IP networks?

34. *Extensions Based on Type of Voice Call.* We seek comment on Congress's direction that extensions may be voice service provider-specific or apply to a class of voice service providers or type of voice calls. Are there any interpretive issues we should consider with respect to this provision? Would it be practical to grant an extension based on a type of voice call, or would that be unnecessarily complicated for voice service providers?

35. *Reevaluating Granted Extensions.* We propose directing the Bureau to reevaluate any extensions annually after the first extension is granted, as required by the TRACED Act, and revise or extend them as necessary. We seek comment on this proposal. Should we direct the Bureau to consider any specific criteria beyond the statutory criteria? We propose directing the Bureau to issue a Public Notice seeking comment on its annual review and consider the comments it receives before issuing a Public Notice of its decision. Are there other specific administrative steps that we should direct the Bureau to include in the reevaluation process? Should the Bureau be able to expand or only contract the scope of entities that are entitled to a class-based or other extension?

36. *Robocall Mitigation During Extension Period.* The TRACED Act directs us to require any voice service provider that has been granted an extension to, during the time of an extension, ''implement an appropriate robocall mitigation program to prevent unlawful robocalls from originating on the network of the provider.'' We propose interpreting this requirement to apply to both voice service providers that receive an extension on the basis of undue hardship and voice service providers that materially rely on a non-internet Protocol network, and we seek comment on this proposal. The TRACED Act states that extensions for material reliance on a non-IP network are ''grant[ed] . . . under subparagraph (A)(ii),'' and that the robocall mitigation program applies ''during the time of a delay of compliance granted under subparagraph (A)(ii).'' TRACED Act 4(b)(5)(B), 4(b)(5)(C)(i). Further, the TRACED Act states that extensions for material reliance on a non-IP network are ''[s]ubject to subparagraphs (C) through (F),'' and paragraph (C)(i) sets forth the robocall mitigation program requirement. TRACED Act 4(b)(5)(B), 4(b)(5)(C)(i). We seek comment on the requirements we should adopt for a robocall mitigation program. Should we prescribe specific robocall mitigation practices for these voice service providers? If so, what practices should we prescribe and why? Should we implement a system, proposed by Verizon, where a voice service provider that originates traffic but does not participate in STIR/SHAKEN certifies that ''it takes appropriate measures to ensure that it is not contributing to the robocall problem''? Similar to Verizon, USTelecom proposes that ''[t]he Commission should require every provider of voice service to register with the Commission and certify that all of its traffic is either (i) signed with STIR/SHAKEN or (ii) subject to a robocall mitigation program.'' It adds that the Commission should ''establish a public database identifying every 499 filer that has issued its certification, along with appropriate rules requiring transit service providers to confirm that their customers have such certifications on file and are in good standing.'' We seek comment on USTelecom's proposal. Would adopting a public certification requirement meet the TRACED Act robocall mitigation program requirement? According to USTelecom's proposal, the certification should be ''non-prescriptive'' and, instead, the Commission ''should require the service provider to confirm that it (i) takes reasonable steps to avoid originating illegal robocall traffic and (ii) that it is committed to cooperating with law enforcement and the industry traceback consortium in investigating and stopping any illegal robocallers that it learns are using its service to originate calls.'' What are the benefits or drawbacks to this approach? Is this an appropriate means to allow for some voice service provider discretion to create a program that is workable while ensuring an effective robocall mitigation program? Conversely, does this form of certification allow too much discretion for voice service providers to determine the scope of the robocall mitigation program? If we require a certification, should we specify minimum standards that a certifying voice service provider must meet, and should we require the certification to be made in a public registry? Further, should call analytics be part of any robocall mitigation program? How could voice service providers with non-IP networks make use of analytics when caller ID authentication is not available?

37. *Alternative Methodologies During an Extension.* The TRACED Act directs us to ''identify, in consultation with small providers of voice service, and those in rural areas, alternative effective alternative effective methodologies to protect consumers from unauthenticated calls during any delay of compliance.'' Accordingly, we ask such voice service providers to share the most effective alternative methodologies. Have small and rural voice service providers already developed any effective methods to protect their subscribers from illegal robocalls on their networks? Or are any small or rural voice service providers in the process of developing such methodologies? If so, at what stage in development are these potential solutions and when could they be deployed? What are the specific challenges to such development? Is there any other information on this issue that small and rural voice service providers would like to share? How can the Commission and other voice service providers support the efforts of small and rural voice service providers to develop alternative effective methodologies to protect their subscribers from unauthenticated calls? For instance, would it be helpful for us to convene small and rural voice service providers to identify potential solutions? Alternatively, should voice service providers that receive an extension be required to participate in industry-led traceback efforts?

38. *Preventing Abuse of Extension Process.* We also seek comment on ways to combat potential evasion of our caller ID authentication rules using the extension process. For instance, how can we prevent a voice service provider from avoiding participating in STIR/SHAKEN by purposefully using non-IP network technology to avoid our mandate for the duration of the extension granted to voice service providers that materially rely on non-IP network technology? We seek comment on the seriousness of this threat. Are there economic or technological reasons why this is unlikely to occur? Does the TRACED Act's requirement that the Commission limit an extension if it determines a voice service provider ''is not making reasonable efforts to develop'' a non-IP caller ID authentication protocol give us leverage to prevent such conduct? Should we take specific further action to prevent this behavior? If so, what action should we take? And how can we distinguish between a voice service provider with

genuine reasons to use non-IP technology and a voice service provider doing so to avoid participating in STIR/SHAKEN?

39. *Full Participation.* Section 4(b)(5)(D) of the TRACED Act requires us to ''take reasonable measures'' to address any issues observed in our assessment of the burdens and barriers to the implementation of caller ID authentication frameworks, and to ''enable as promptly as reasonable full participation of all classes of providers of voice service and types of voice calls to receive the highest level of trust.'' According to the legislation, such measures ''shall include, without limitation, as appropriate, limiting or terminating a delay of compliance granted to a provider'' under section 4(b)(5)(B) of the TRACED Act if we determine in our assessment that the voice service provider is not making reasonable efforts to develop the required caller ID authentication protocol for non-IP networks. We seek comment on this requirement and how best to fulfill the ''full participation'' element of this provision beyond the existing proposals contained herein. Are there further steps we might take, beyond those already proposed, to enable full participation of all classes of voice service providers in a caller ID authentication framework? If so, what are they and how would any such steps be implemented?

E. Caller ID Authentication in Non-IP Networks

40. Because STIR/SHAKEN is a SIP-based solution, those portions of a voice service provider's network that are not capable of initiating, maintaining, and terminating SIP calls cannot authenticate or verify calls under that framework. The TRACED Act directs us, not later than June 30, 2021, to require voice service providers to take ''reasonable measures'' to implement an effective caller ID authentication framework in the non-IP portions of their networks. We propose to interpret the TRACED Act's requirement that a voice service provider take ''reasonable measures'' to implement an effective caller ID authentication framework in the non-IP portions of its network as being satisfied only if the voice service provider is actively working to implement a caller ID authentication framework on those portions of its network, either by upgrading its non-IP networks to IP so that the STIR/SHAKEN authentication framework may be implemented, or by working to develop a non-IP authentication solution. Consistent with our proposed approach to assessing whether a provider is making ''reasonable efforts'' to develop a call authentication protocol in the context of determining whether to limit or terminate an extension of compliance granted under section 4(b)(5)(B) for non-IP networks, we propose that a provider satisfies the ''reasonable measures'' requirement under section 4(b)(1)(B) if it is able to provide the Commission upon request documented proof that it is participating, either on its own or through a representative, as a member of a working group or consortium that is working to develop a non-IP solution, or actively testing such a solution.

41. Although some commenters have referred to out-of-band STIR as a framework that could potentially allow non-IP voice service providers to participate in STIR/SHAKEN, our preliminary view is that out-of-band STIR is still in its infancy and is not sufficiently widespread or readily available to be implemented. Indeed, the TRACED Act itself acknowledges that no viable non-IP solution currently exists insofar as it directs us to grant an extension for voice service providers that ''materially rel[y] on a non-[I]nternet [P]rotocol network . . . until a call authentication protocol has been developed for calls delivered over non-[I]nternet [P]rotocol networks and is reasonably available.'' Given this, we believe the best approach is to continue to promote the transition to IP while simultaneously encouraging voice service providers to develop a non-IP solution that may benefit those legacy networks that are not yet in transition

42. We seek comment on this approach. Is our proposed approach an appropriate interpretation of the TRACED Act's ''reasonable measures'' requirement? Should we implement a different standard? If we adopt the standard we propose, do commenters agree with our proposals on how to evaluate whether a company is ''actively working'' toward developing an authentication framework? Should the standard be the same for all voice service providers, or should this standard vary according to the size or resources of a voice service provider? If commenters believe this standard should be variable, how should it vary across different types or classes of voice service providers? How should voice service providers be separated out under such a variable standard—according to size, resources, cost, or some other metric? How should the obligations of this requirement vary between the different classes of voice service providers?

43. We also seek comment on our preliminary view that out-of-band STIR is not yet sufficiently developed or widespread to form the basis of a specific implementation requirement at present. Do commenters anticipate that it will be technologically possible for voice service providers to have the capability to implement this framework on a widespread basis by June 30, 2021? Are there reasons we should or should not encourage its development and, in turn, implementation?

44. We encourage voice service providers to transition their networks to IP, and one of the many benefits of the IP transition is the ability to implement STIR/SHAKEN. We wish to ensure that the framework we develop in this proceeding is consistent with our efforts in other proceedings to promote the transition to IP. We believe that our proposed approach balances encouraging the transition to IP with Congress's goal of promoting an effective caller ID authentication solution for non-IP networks. Do commenters agree with this assessment? Does our proposed approach appropriately account for the technological limits of legacy networks and the challenges of upgrading those networks while simultaneously encouraging the transition to IP? Is there an alternative approach or additional steps we should take to better promote the IP transition in this case? If so, what alternative approach or steps should we take?

45. We further propose to revisit our approach to the TRACED Act's ''reasonable measures'' requirement for non-IP networks and the extension for non-IP networks if industry fails to make sufficient progress in overcoming this barrier to the ubiquitous implementation of caller ID authentication through either transitioning to IP or implementing a non-IP authentication solution. We seek comment on this proposal. At what point should we reconsider this issue? If the Commission finds, at a later date, that insufficient progress in developing a non-IP solution has been made, should we impose a more stringent requirement as to the steps that voice service providers must take to develop and implement such a solution? What kinds of stricter requirements should we impose? Should we require voice service providers to either deploy a non-IP solution or upgrade their network technology to participate in STIR/SHAKEN?

F. Voluntary STIR/SHAKEN Implementation Exemption

46. Although the TRACED Act directs us to require each voice service provider to implement STIR/SHAKEN in its IP

network, section 4(b)(2) of the TRACED Act frees a voice service provider from this requirement if we determine, by December 30, 2020, that ''such provider of voice service'': (A) ''in [I]nternet [P]rotocol networks''—(i) ''has adopted the STIR/SHAKEN authentication framework for calls on the [I]nternet [P]rotocol networks of the provider of voice service; (ii) has agreed voluntarily to participate with other providers of voice service in the STIR/SHAKEN authentication framework; (iii) has begun to implement the STIR/SHAKEN authentication framework; and (iv) will be capable of fully implementing the STIR/SHAKEN authentication framework'' not later than June 30, 2021; and (B) ''in non-[I]nternet [P]rotocol networks''—(i) ''has taken reasonable measures to implement an effective call authentication framework; and (ii) will be capable of fully implementing an effective call authentication framework'' not later than June 30, 2021. We seek comment on the substantive standards and appropriate processes by which to implement this forward-looking exemption.

47. *Relationship of IP Network and Non-IP Networks Provisions.* We propose to read section 4(b)(2) of the TRACED Act as creating two exemptions: One for IP calls and one for non-IP calls. Thus, in our proposal, a provider may seek the exemption for its ''IP networks'' if it meets all four criteria for all calls it originates or terminates in SIP, and a provider may seek the exemption for its ''non-IP networks'' if it meets both of the criteria for all non-SIP calls it originates or terminates. We seek comment on this proposal and any alternative approaches.

48. We believe that our proposal best implements Congress' policy and is consistent with principles of statutory construction when considering the statute as a whole. First, we believe our reading better limits the portion of the exemption that is at risk of being a nullity. Given the presence of the word ''and'' between the IP and non-IP networks criteria, we recognize that the exemption could potentially be read as applying only if the provider meets both the IP and non-IP networks criteria. Yet, practically speaking, such a reading would render the exemption an empty set or nearly so. As we have discussed, we believe that non-IP caller ID authentication solutions are not likely to be ready for widespread deployment in the near future. We therefore anticipate that few, if any, voice service providers will be able to claim that they will be capable of ''fully implementing'' an effective non-IP caller ID authentication framework by June 30, 2021. If we require any party seeking the exemption to attest to this requirement, we risk rendering the exemption in its entirety a near-nullity. We believe our proposed reading cabins the nullity risk more narrowly, thus better effectuating Congress's goal of creating a meaningful exemption. We seek comment on this interpretation, and again invite comment on the likely state of development of non-IP caller ID authentication solutions in the next year and a half. Must ''and'' be read as creating only one exemption, or are we correct in assuming that such a reading would essentially nullify the exemption, thus reading it out of the statute and negating Congress's intent?

49. Second, we believe our proposal encourages prompt deployment of STIR/SHAKEN. The statutory exemption rewards early progress in deployment. Therefore, by giving providers a path to exemption solely for their IP networks, we anticipate that we would encourage faster progress in STIR/SHAKEN deployment. We seek comment on this view.

50. Third, our proposal here would align our interpretation of the exemption with our proposal to read requirements in the TRACED Act applying to voice service providers as applying on a call-by-call basis. Because networks are often mixed and capable of transmitting both in IP and non-IP, we preliminarily believe that reading the word ''networks'' in the statute to refer to the transmission technology of a particular call is the best interpretation of the statute. We thus preliminarily believe we could distinguish the duty that applies to ''such provider of voice service in [I]nternet [P]rotocol networks'' and ''such provider of voice service in non-[I]nternet [P]rotocol networks'' on the basis of the call in question. We seek comment on this proposal and of our proposed reading of section 4(b)(2) as creating two distinct exemptions.

51. *Threshold for IP Networks Exemption.* To ensure that the exemption only applies where warranted and to provide parties with adequate guidance, we propose expanding on each of the four substantive prongs that a voice service provider must meet to obtain an exemption. With respect to prong (A)(i), we propose interpreting the phrase ''has adopted the STIR/SHAKEN authentication framework for calls on the [I]nternet [P]rotocol networks of the provider of voice service'' to mean that the voice service provider has publicly committed, via a certification, to complete implementation of STIR/SHAKEN by June 30, 2021. Because the exemption in section 4(b)(2)(A) requires a voice service provider to have ''adopted'' STIR/SHAKEN for calls on the IP portions of their networks prior to obtaining an exemption, but does not require full implementation of STIR/SHAKEN until not later than June 30, 2021, we believe that the best approach is to interpret section 4(b)(2)(A) as requiring a provider, prior to obtaining an exemption, to make a public commitment to completely implement STIR/SHAKEN by June 30, 2021. We seek comment on this proposed interpretation. What are the potential benefits and drawbacks to this approach? Does our proposed interpretation align with the language and intended purpose of the statute? Are there any plausible alternative interpretations of this subsection of the TRACED Act that would account for both the stated requirement that a voice service provider ''has adopted'' STIR/SHAKEN for calls on the IP portions of its network prior to receiving an exemption, with the later ''capable of fully implementing'' date? For example, should we consider prong (A)(i) to be satisfied to the extent a provider has undertaken network preparations necessary to operationalize the STIR/SHAKEN protocols on its network, including, but not limited to, by participating in test beds and lab testing or completing the commensurate network adjustments to enable the authentication and validation of calls on its network consistent with the STIR/SHAKEN framework?

52. We propose reading the phrase ''has agreed voluntarily to participate with other providers of voice service in the STIR/SHAKEN authentication framework'' in prong (A)(ii) to mean that the voice service provider has written, signed agreements with at least two other voice service providers to exchange calls with authenticated caller ID information. We seek comment on this approach. What are the potential benefits and drawbacks attendant in this interpretation? Does our proposed interpretation align with the language and intended purpose of the statute? Should we mandate that a voice service provider seeking to qualify for the exemption have agreements with more than two other voice service providers? If so, how many agreements should we require before a voice service provider may qualify for the exemption under section 4(b)(2)(A)? Should the ''other providers of voice service'' be unaffiliated with the provider seeking the exemption? Should voice service providers be required to establish such

agreements only with those voice service providers with which they interconnect directly? Must these agreements include specific terms? Should we go further and require voice service providers to have reached agreements with all others with which they directly interconnect? We preliminarily are disinclined to adopt such a stringent requirement because, pursuant to the statute, voice service providers will have time between December 30, 2020, and June 30, 2021, to complete full implementation. Are there consortia or industry groups that would allow voice service providers to reach agreements with numerous other voice service providers at once and, if so, should meeting prong (A)(ii) require participation in such an entity? Should we impose specific recordkeeping requirements so that we can verify that such agreements are in place? Should voice service providers be required to provide proof of such agreements directly to the Commission upon request? Are there any plausible alternatives to our proposed interpretation of prong (A)(ii)? For example, should we consider prong (A)(ii) to be satisfied if a service provider has registered with and been approved by the Policy Administrator? Why or why not?

53. We propose interpreting the phrase ''has begun to implement the STIR/SHAKEN authentication framework'' in prong (A)(iii) to mean that the voice service provider has completed the necessary network upgrades to at least one network element (*e.g.,* a single switch or session border controller) to enable the authentication and verification of caller ID information consistent with the STIR/SHAKEN standards. This proposal would require a voice service provider to make meaningful progress on implementation by the time of certification, while taking into account that voice service providers will have limited time between adoption of a Report and Order and the December 30, 2020 deadline for exemption determinations. We seek comment on this proposed interpretation and on potential alternatives. Is this proposed standard too lenient and, if so, what standard should we adopt? We recognize that the standard we propose may be more challenging for smaller voice service providers than larger voice service providers. Should we vary our expectations by voice service provider size and, if so, how? Alternatively, should we consider prong (A)(iii) to be satisfied if a provider has established the capability to authenticate originated traffic and/or validate such traffic terminating on its network?

54. Lastly, we propose interpreting the phrase ''will be capable of fully implementing the STIR/SHAKEN authentication framework'' in prong (A)(iv) to mean that the voice service provider reasonably foresees that it will have completed all necessary network upgrades to its network infrastructure to be able to authenticate and verify caller ID information for all SIP calls exchanged with STIR/SHAKEN-enabled partners, by June 30, 2021. We seek comment on this proposed interpretation. Are there any plausible alternatives to our proposed interpretation of this prong of the section 4(b)(2)(A) exemption? For example, should we interpret this prong to require only that a provider reasonably foresees that it will have the capability to fully implement STIR/SHAKEN by June 30, 2021? How would such a reading align with Congress's goal of broad STIR/SHAKEN deployment? Would a standard other than reasonable foreseeability be appropriate and, if so, how can we account for the statute's requirement that voice service providers must make a prediction about the future? Alternatively, should we consider prong (A)(iv) to be satisfied if a provider certifies only that its consumer VoIP and Voice over LTE networks are capable of authentication and verification, or will be so capable by June 30, 2021? What would be the benefits and drawbacks of such a narrower requirement, and one that does not require exchange of authenticated traffic? We encourage commenters to support any alternative interpretation of the implementation requirements in section 4(b)(2)(A) with reference not only to the statutory language of each provision, but specific technological and marketplace realities of how voice service providers can expect to foreseeably meet the qualifications that Congress has established.

55. *Threshold for Non-IP Networks Exemption.* A voice service provider is excused from the requirement to take reasonable measures to implement an effective caller ID authentication framework in the non-IP portions of its network if we find that it has: (1) Taken reasonable measures to implement an effective caller ID authentication framework in the non-IP portions of its network; and (2) will be capable of fully implementing an effective caller ID authentication framework in the non-IP portions of its network not later than June 30, 2021. As we have stated, we anticipate that in the non-IP context, few if any voice service providers will seek to take advantage of this exemption because of the difficulties in ''fully implementing'' an effective caller ID authentication framework. We seek comment on this view and whether there is an acceptable interpretation of the ''fully implementing'' prong that would make it more achievable for voice service providers to qualify for the exemption. What constitutes an ''effective'' call authentication framework? Must such a framework be comparable to STIR/SHAKEN? We also seek comment on how to interpret ''reasonable measures'' under prong (B)(i). How do ''reasonable measures'' under this prong differ from the ''reasonable measures'' required under section 4(b)(1)(B)?

56. *Compliance Certifications.* We propose to implement the TRACED Act exemption provision using a certification process. Specifically, we propose requiring a voice service provider that wishes to receive an exemption to submit a certification that it meets the criteria for the IP networks exemption that we propose to establish pursuant section 4(b)(2)(A); the criteria for the non-IP networks exemption that we propose to establish pursuant section 4(b)(2)(B); or both. Under this proposal, each voice service provider who wishes to qualify for the section 4(b)(2)(A) and/or (B) exemption must have an officer, as an agent of the voice service provider, sign a compliance certificate stating that the officer has personal knowledge that the company meets each of the stated criteria. We also propose requiring the voice service provider to submit an accompanying statement explaining, in detail, how the company is working to accomplish the four prongs of the exemption. We believe a certification process is necessary to allow us to meet Congress's deadline for completion of exemption determinations by December 30, 2020.

57. We propose requiring these certifications to be filed no later than December 1, 2020. We propose requiring all certifications and supporting statements to be filed electronically in a new docket established specifically for such filings in the Commission's Electronic Comment Filing System (ECFS). We propose directing the Bureau to provide additional directions and filing information regarding the certifications in the Public Notice announcing OMB approval. And we propose directing the Bureau to review the certifications and accompanying documents for completeness and to determine whether the certifying party has met the standard we establish. We further propose directing the Bureau to

issue a list of parties that have filed compliant certifications and thus receive the exemption(s) on or before December 30, 2020. Because of the limited time for review of certifications, we propose that any voice service providers that file inadequate certifications will not receive an opportunity to cure and will, instead, be subject to the general duty we establish in the Report and Order to implement STIR/SHAKEN by June 30, 2021. We preliminarily view this consequence as reasonable and appropriate because the purpose of the certification is merely to determine which voice service providers would, in the absence of the STIR/SHAKEN obligation, nonetheless be able to implement STIR/SHAKEN in a timely manner.

58. We seek comment on this proposed certification process. Are there ways that we can streamline the process without sacrificing certainty that an exemption is warranted? For instance, should we allow a less senior company official to sign the certification and, if so, who should be allowed to sign? Should we impose any additional requirements? Is there an additional or different way for voice service providers to demonstrate that they have met the implementation requirements in section 4(b)(2)(A) and/or (B) of the TRACED Act that would allow us to reach the determinations required by the statute by December 30, 2020? If so, how should we structure and implement any such process? Should we treat any of the information that voice service providers submit in their accompanying statement as presumptively confidential?

59. *Retrospective Review.* The section 4(b)(2)(A) and (B) exemptions are, by their nature, based on a voice service provider's prediction of its future ability to implement STIR/SHAKEN by June 30, 2021. We preliminarily believe that Congress intended for us to verify, after the fact, that voice service providers claiming the exemption completed full implementation in accordance with their commitments. We believe that such a review is consistent with the TRACED Act both because the broad structure of section 4 aims toward full implementation of caller ID authentication and because section 4(b)(2)(A)(iv) and (B)(ii) each state that a voice service provider may receive the exemption only if it ''will'' be capable of ''fully'' implementing a call authentication framework (STIR/SHAKEN or ''an effective call authentication framework,'' respectively). We seek comment on this view. We are concerned that, absent a look back at whether voice service providers that receive the exemption later fulfill their expectations, voice service providers may receive the exemption but later not implement STIR/SHAKEN or a non-IP call authentication framework completely in a timely manner. This would harm the public because it would create pockets of unauthenticated calls and give the voice service providers that claimed the exemption but fall short a significant loophole—a circumstance that would invite bad actors to claim the exemption without any intent of completing the obligation. We seek comment on this view and whether there are alternatives to looking back at voice service providers claiming the exemption after the compliance deadline that would address the risk of gaps and abusive claims of the exemption.

60. We specifically propose requiring a voice service provider that receives an exemption to file a second certification after June 30, 2021, stating whether it in fact achieved the implementation goal to which it committed. We propose requiring the certification to be filed in ECFS subject to the same allowance for confidentiality and requirements for sworn signatures and detailed support as the initial certifications. We propose directing the Bureau to issue a Public Notice setting a specific deadline no later than three months after June 30, 2021 and providing detailed filing requirements. We propose directing the Bureau to seek public comment on each certification and, following review of the certifications, supporting materials, and responsive comments, to issue a Public Notice identifying which voice service providers remain subject to the exemption. We seek comment on these proposals and on possible alternatives.

61. If a voice service provider cannot certify to full implementation upon retrospective review but demonstrates to the Bureau that it filed its initial certification in good faith and made good faith efforts to complete implementation, we propose that the consequence for such a shortcoming would be loss of the exemption and application of the general rule requiring full STIR/SHAKEN implementation, effective immediately. We believe an immediate effective date would be important to ensure that certain voice service providers do not receive an extension not granted to similarly situated providers simply because they filed a certification they later failed to meet. If the Bureau finds that a voice service provider filed its initial certification in bad faith or failed to take good faith steps toward implementation, we propose to require full implementation immediately and further to direct the Bureau to refer the voice service provider to the Enforcement Bureau for possible enforcement action based on filing a false certification and/or other possible violations. We believe we have legal authority to adopt the foregoing proposals under the TRACED Act, and that we have independent authority to do so under section 251(e). We seek comment on these proposals and on other possible alternatives.

62. *Providers Eligible for Exemption.* We preliminarily do not interpret the TRACED Act's exemption process to include intermediate providers, because its definition of ''voice service'' refers to ''furnish[ing] voice communications to an end user.'' We seek comment on whether and how we should extend the exemption process to intermediate providers, in addition to originating and terminating voice service providers. What would be the benefits and drawbacks of such an approach?

G. Prohibiting Line Item Charges for Caller ID Authentication

63. The TRACED Act explicitly directs us to ''prohibit providers of voice service from adding any additional line item charges to consumer or small business customer subscribers for the effective call authentication technology'' mandated by that Act. Accordingly, we propose prohibiting voice service providers from imposing additional line item charges on consumer or small business subscribers for caller ID authentication. We believe this proposal is a straightforward implementation of Congress's clear direction. We propose to interpret ''consumer'' as used in the TRACED Act to refer to residential mass-market subscribers, and we propose to interpret ''small business'' to refer to business entities that meet the Small Business Administration (SBA) definition of ''small business.'' We note that the record developed in response to the *2019 Robocall Declaratory Ruling and Further Notice* reflects support for such a prohibition. We seek comment on our proposal and proposed interpretation of this section of the TRACED Act. Should we adopt different definitions? For instance, should we define ''small business'' with respect to line count, and if so, what line count limitation is appropriate? We recognize that a line count-based definition would be easier for providers to administer, but would it leave out small businesses that Congress intended to protect from line item charges?

64. To provide additional clarity regarding the prohibition on line item charges, we specifically propose to

prohibit voice service providers from imposing a line-item charge on consumers or small businesses for the cost of upgrading network elements as necessary to implement STIR/SHAKEN, for any recurring costs associated with the authentication and verification of calls, or for any display of STIR/SHAKEN verification information on their subscribers' phones. ITTA argues that ''SHAKEN/STIR implementation costs should be fully recoverable via . . . any line item that recovers government-mandated charges . . . .'' We disagree and propose to reject this suggestion with respect to consumer and small business subscribers, on the basis that Congress directly addressed this issue in the TRACED Act. We seek comment on whether we should extend our prohibition to other types of subscribers. We additionally seek comment on our proposal and whether it has the correct scope. Are there other caller ID authentication-related costs or services we should specifically address in our prohibition? Should we list all categories of prohibited charges, or should our list merely provide examples of the types of charges barred by the general prohibition on line-item charges? Should we address whether voice service providers may recover caller ID authentication costs from consumers and small businesses through rate increases, and if so how and on what legal basis?

H. Call Labeling

65. We seek comment on whether and how to address any risks of consumer confusion or competitive issues stemming from call labeling. Some commenters have expressed concern that terminating voice service providers that have implemented STIR/SHAKEN caller ID authentication may display caller ID authentication information on their subscribers' phones in a manner detrimental to callers whose originating voice service provider has not yet implemented STIR/SHAKEN or is unable to provide the caller with ''full'' or ''A'' level attestation. These commenters assert that displaying when caller ID information has been successfully verified on a subscriber's device may lead subscribers to believe that calls which lack such a display are illegal calls, and that such a result is especially problematic before widespread implementation of STIR/SHAKEN. These commenters similarly identify the lack of a standard approach to displaying caller ID verification results—including whether to treat all attestation levels similarly or provide special treatment for ''A'' level attestation—as creating the potential for discriminatory or anticompetitive labeling. Commenters also express concern about mislabeling. While we decline in the accompanying Report and Order to mandate at this time any specifications that voice service providers must use if they choose to display STIR/SHAKEN verification results, we now seek comment on whether and how to address these concerns related to call labeling. What authority do we possess to regulate call labeling? Would section 10 of the TRACED Act, which establishes redress mechanisms for blocking, provide us authority as one commenter suggests? One group of commenters suggests we should require a voice service provider to provide notice to the caller when it places a ''derogatory'' label on the caller's number; require that a voice service provider offer an effective and prompt redress mechanism for callers whose calls have been mislabeled by the provider; obligate a voice service provider to share information about mislabeled numbers with other providers; and require voice service providers to track and report to us how many lawful calls they are mistakenly mislabeling. Should we adopt any or all of these suggestions? What constitutes a derogatory label? Do commenters have alternative proposals? Further, is existing antitrust law sufficient to address any competitive issues, and if not why?

I. Benefits and Costs

66. The proposals in this Further Notice generally reflect mandates from the TRACED Act, and we have no discretion to ignore such congressional direction. To the extent that we are seeking comment on multiple possible options to implement any given mandate, we urge commenters, where possible, to include an assessment of relative costs and benefits for competing options. We found in the accompanying Report and Order that widespread deployment of STIR/SHAKEN will increase the effectiveness of the framework for both voice service providers and their subscribers. Among the considerable and varied benefits identified in the Report and Order are the reduction in nuisance calls, protection from illegally spoofed calls, and restoration of confidence in incoming calls. The proposals in this Further Notice are intended to, consistent with the TRACED Act, encourage further deployment of this technology and thus expand these benefits. We thus propose to reaffirm our finding of considerable benefit to widespread caller ID authentication implementation, and we propose to conclude that implementation of the TRACED Act provisions and other proposals discussed above will make considerable progress in unlocking those benefits, and that those benefits far exceed the costs. We seek comment on this proposal. We further seek detailed comments on the costs of the proposals in this Further Notice. What are the upfront and recurring costs associated with each? Will these costs vary according to the size of the voice service provider? What costs would specifically burden intermediate providers? We preliminarily believe that intermediate providers would be faced with similar upfront costs as originating and terminating voice service providers, but will not have the recurring costs related to STIR/SHAKEN authentication and verification service. Is this view accurate? Do the benefits of our proposals outweigh the costs in each case?

J. Access to Numbering Resources

67. Section 6(a) of the TRACED Act directs us to examine whether and how our policies regarding access to both toll free and non-toll free numbering resources can be modified to help reduce access to numbers by potential perpetrators of illegal robocalls, and it directs us to prescribe regulations to implement any such policy modifications. In addition, section 6(b) provides a forfeiture penalty, pursuant to section 503(b) of the Act, for a knowing violation of any regulation we prescribe pursuant to section 6(a). Our obligation to examine and implement policy modifications does not extend to the forfeiture provision of section 6(b). In light of this distinction, as well as the forfeiture procedures that the Commission already has in place, *see* 47 CFR 1.80, we do not consider it necessary to seek comment on how section 6(b) of the TRACED Act would be implemented.

68. *Background.* Currently, voice service providers that are telecommunications carriers access non-toll free numbers through the NANP Administrator (NANPA) and the Pooling Administrator (collectively, the ''Numbering Administrators''). Applicants for numbering resources must comply with Commission rules and with guidelines from the Alliance for Telecommunications Industry Solutions (ATIS) Industry Numbering Committee (INC) and the Numbering Administrators. We require the Numbering Administrators to follow ATIS INC guidelines, which, in turn, provides additional requirements for voice service providers accessing numbering resources. *See* 47 CFR

52.13(b)(3). These rules and guidelines require such voice service providers to provide contact information, provide Operating Company Number information, disclose the primary type of business for which the numbers will be used, file a NANP Numbering Resource Utilization/Forecast (NRUF) Report with the NANPA, and disclose the states for which they will request numbering resources. Applicants for initial numbering resources must also include evidence that the applicant is capable of providing service within 60 days of the numbering resources activation date (facilities readiness requirement). Voice service providers must also maintain internal records of numbering resources for reporting purposes.

69. While traditionally only telecommunications carriers were permitted to request and receive numbers from the Numbering Administrators, in 2015 the Commission adopted rules establishing a process for interconnected VoIP providers to request numbers directly from the Numbering Administrators. Direct access to telephone numbers by interconnected VoIP providers is restricted to only those interconnected VoIP providers that can demonstrate that they are authorized to provide service by a state-level certification in a given area for which they are requesting numbers or by a Commission-level authorization. To apply for Commission authorization for direct access to numbers, applicants for direct access authorization must submit applications through the Commission's Electronic Comment Filing System, interconnected VoIP providers must provide contact information; agree to comply with Commission rules, numbering authority delegated to the states, and industry guidelines and practices regarding numbering as applicable to telecommunications carriers; provide 30-day notice to relevant state commission(s) before requesting numbering resources from Numbering Administrators; provide proof of facilities readiness; and certify that the applicant possesses the requisite expertise to provide reliable service, that key personnel are not being nor have been investigated for failure to comply with any law, rule, or order, that the applicant complies with its Universal Service Fund (USF), Telecommunications Relay Services, NANP and local number portability administration contribution obligations, its regulatory fee obligations, and its 911 obligations, and that no party to the application is subject to denial of Federal benefits pursuant to section 5301 of the Anti-Drug Abuse Act. All voice service providers, including interconnected VoIP providers, must comply with a number of obligations in order to maintain their authorization to access numbers, including USF reporting and contributions, 911 service obligations, and maintaining sufficient and auditable data to demonstrate compliance with applicable guidelines, among other obligations in the Commission's rules and industry guidelines.

70. A Responsible Organization (RespOrg) obtains toll free numbers, on a toll free subscriber's behalf, by reserving and assigning a number from the SMS/800 Toll Free Number Registry (TFN Registry). The Commission-designated Toll Free Numbering Administrator (TFNA) manages the TFN Registry and certifies RespOrgs. To access the TFN Registry, RespOrgs must complete a Service Establishment Application; obtain a logon identification code from the TFNA requiring the disclosure of information including general contact information, type of access sought, and the interexchange carrier providing the connection; demonstrate that one or more employees possess adequate TFN Registry training; and pass a TFN Registry certification test. RespOrgs must also follow the *ATIS Toll Free Guidelines,* adhere to agreements established through the ATIS industry forum process, and acknowledge that the RespOrg is bound by the terms and conditions contained in TFN Registry Functions Tariff. RespOrgs have sole responsibility for the accuracy of subscriber records and information in the TFN Registry. Toll free numbers must be available to RespOrgs and subscribers on an equitable basis, and typically are assigned first-come, first-served. The Commission may use competitive bidding and/or other alternative assignment methodologies for toll free numbers. In 2019, the TFNA held an auction of toll-free numbers in the 833 code for which there were two or more requests for assignment. Individual bidders and RespOrgs bid on specific numbers through a competitive bidding process and, unlike other toll free numbers, are able to sell those numbers won at auction in a secondary market.

71. *Discussion.* We seek comment on whether and how we should modify our policies regarding access to toll free and non-toll free numbering resources to help reduce illegal robocallers' access to numbering resources. Specifically, we seek comment on whether any new or modified registration and compliance obligations would be appropriate to help reduce illegal robocallers' access to numbering resources. We ask commenters to identify specific modifications to our rules and Numbering Administrator policies. For example, should we require applicants for numbering resources to provide a certification that they ''know their customers'' through some sort of customer identity verification, perhaps explaining the steps that they take to do so? Should we require voice service providers to provide information about their customers to the Numbering Administrators? Should we modify our NRUF reporting requirements concerning carriers that assign numbering resources to intermediate providers, and if so, in what way? Should we impose U.S. residency requirements for access to U.S. telephone numbers? Would imposing U.S. residency requirements reduce the likelihood of bad actors generating large-scale robocall campaigns beyond the reach of U.S. law enforcement? Further, would U.S. residency requirements increase accuracy and efficiency regarding attestation levels under the STIR/SHAKEN protocols? If we did impose U.S. residency requirements, would it reduce the number of voice service providers in the international voice market, thus reducing downward competitive pressure on international voice calling rates? Would imposing residency requirements harm domestic voice communications? Should we require minimal state contacts to obtain numbering resources in a particular state? Should we delegate enforcement of any modifications to our policies to the states, at least in the first instance? We invite parties to comment on these or other potential policy modifications that might limit illegal robocalling.

72. We seek comment on the potential costs that would be imposed by any changes that commenters recommend to our policies regarding access to numbering resources. What costs do specific changes impose on entities that use numbers, Numbering Administrators, and consumers? Would any modifications to our policies unreasonably increase the difficulty for consumers and businesses (and their voice service providers) that are not perpetrators of illegal robocalling to obtain U.S. telephone numbers? We seek specific comment on the burdens of imposing potential certification requirements on applicants for numbering resources, particularly on small businesses. Additionally, we seek comment on how we can ensure that

any ''know your customer'' requirements do not harm consumer privacy.

73. We also seek comment on the effects that any proposed modifications to our policies for access to numbering resourcing could have on competition and innovation in the voice marketplace. Could any market-distorting differential effects on voice service providers result? We seek comment on whether any suggested modifications could provide an unreasonable advantage to one type of technology or business model over another. For example, would modifications such as ''in-person presentation of documents or identity verification tend to favor non-internet-based companies or those with physical lines over those who do business via the internet or use newer technologies?'' How could we minimize any negative ramifications for competition in the voice services market?

74. We recognize that any potential modifications to our rules and policies may need to be uniquely tailored to particular industry segments in order to reduce access to numbers by bad actors while avoiding undesirable consequences. How could modifications be tailored to providers of toll free service, voice service providers that are telecommunications carriers, and interconnected VoIP providers in order to effectively prevent bad actors from accessing numbering resources while avoiding undesirable consequences? For example, would adding a ''know your customer'' certification to the application for numbering resources work better for one industry than another (such as, for example, non-toll-free versus toll-free service)? Should we require that subscriber information be included in the TFN Registry, as opposed to RespOrg information alone? Should rules for any future Commission auctions of toll-free numbers also include these requirements? Further, are there specific policy modifications that we can adopt in the voice services wholesale market that will achieve the Commission's goal to reduce access to numbers by potential perpetrators of illegal robocalls?

II. Procedural Matters

75. *Paperwork Reduction Act.* This document contains proposed new or modified information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, will invite the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104–13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198, we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

76. *Ex Parte Rules.* This proceeding shall be treated as a ''permit-but-disclose'' proceeding in accordance with the Commission's *ex parte* rules. Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (*e.g.,* .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

77. *Initial Regulatory Flexibility Analysis.* As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in this *Further Notice of Proposed Rulemaking* (*Further Notice*). The Commission requests written public comments on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments provided on the first page of the *Further Notice.* The Commission will send a copy of the *Further Notice,* including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).

A. Need for, and Objectives of, the Proposed Rules

78. The *Further Notice* continues the Commission's efforts to combat illegal spoofed robocalls. Specifically, the *Further Notice* proposes to require intermediate providers to pass unaltered any STIR/SHAKEN Identity header they receive to the subsequent provider in the call path., and authenticate caller ID information for all SIP calls it receives for which the caller ID information has not been authenticated and which it will exchange with another provider as a SIP call. The *Further Notice* also proposes implementing provisions of section 4 of the Pallone-Thune Telephone Robocall Abuse Criminal Enforcement and Deterrence (TRACED) Act as follows: Prohibiting providers from imposing additional line item charges on consumer and small business subscribers for caller ID authentication technology; granting an exemption from our implementation mandate for providers which have certified that they have reached certain implementation goals; granting an extension in compliance with our implementation mandate for small providers; and requiring providers to take ''reasonable measures'' to implement an effective caller ID authentication framework in their non-IP networks by either upgrading non-IP networks to IP or by actively working to develop a non-IP authentication solution. The *Further Notice* seeks comment on all of these proposals, and on how we should implement section 6(a) of the TRACED Act. The proposals in the *Further Notice* will help promote effective caller ID authentication and fulfill our obligations under the TRACED Act.

B. Legal Basis

79. The *Further Notice* proposes to find authority for these proposed rules under section 251(e) of the Communications Act of 1934, as amended (the Act), and section 4 of the TRACED Act. Section 251(e) gives us exclusive jurisdiction over numbering policy and the TRACED Act directs us to make rules to ensure the implementation of caller ID authentication frameworks by all voice

service providers. We propose that section 251(e) grants us the authority to require intermediate providers to pass STIR/SHAKEN information unaltered because such an action would prevent the fraudulent abuse of North American Numbering Plan resources by callers making calls which transit intermediate providers' networks. We propose that the TRACED Act authorizes the remaining proposed rules because they implement the TRACED Act's language. We solicit comment on these proposals, and whether section 227(e) of the Act, as amended by the Truth in Caller ID Act, or the TRACED Act, would provide additional authority for our proposal to extend our mandate to intermediate providers.

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply

80. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules and by the rule revisions on which the Notice seeks comment, if adopted. The RFA generally defines the term ''small entity'' as having the same meaning as the terms ''small business,'' ''small organization,'' and ''small governmental jurisdiction.'' In addition, the term ''small business'' has the same meaning as the term ''small-business concern'' under the Small Business Act. A ''small-business concern'' is one which: (1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.

1. Wireline Carriers

81. *Wired Telecommunications Carriers.* The U.S. Census Bureau defines this industry as ''establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.'' The SBA has developed a small business size standard for Wired Telecommunications Carriers, which consists of all such companies having 1,500 or fewer employees. U.S. Census Bureau data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees. Thus, under this size standard, the majority of firms in this industry can be considered small.

82. *Local Exchange Carriers (LECs).* Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. The closest applicable NAICS Code category is Wired Telecommunications Carriers. Under the applicable SBA size standard, such a business is small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2012 show that there were 3,117 firms that operated for the entire year. Of that total, 3,083 operated with fewer than 1,000 employees. Thus under this category and the associated size standard, the Commission estimates that the majority of local exchange carriers are small entities.

83. *Incumbent LECs.* Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The closest applicable NAICS Code category is Wired Telecommunications Carriers. Under the applicable SBA size standard, such a business is small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2012 indicate that 3,117 firms operated the entire year. Of this total, 3,083 operated with fewer than 1,000 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by our actions. According to Commission data, one thousand three hundred and seven (1,307) Incumbent Local Exchange Carriers reported that they were incumbent local exchange service providers. Of this total, an estimated 1,006 have 1,500 or fewer employees. Thus, using the SBA's size standard the majority of incumbent LECs can be considered small entities.

84. *Competitive Local Exchange Carriers (Competitive LECs), Competitive Access Providers (CAPs), Shared-Tenant Service Providers, and Other Local Service Providers.* Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate NAICS Code category is Wired Telecommunications Carriers and under that size standard, such a business is small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2012 indicate that 3,117 firms operated during that year. Of that number, 3,083 operated with fewer than 1,000 employees. Based on these data, the Commission concludes that the majority of Competitive LECS, CAPs, Shared-Tenant Service Providers, and Other Local Service Providers, are small entities. According to Commission data, 1,442 carriers reported that they were engaged in the provision of either competitive local exchange services or competitive access provider services. Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees. In addition, 17 carriers have reported that they are Shared-Tenant Service Providers, and all 17 are estimated to have 1,500 or fewer employees. Also, 72 carriers have reported that they are Other Local Service Providers. Of this total, 70 have 1,500 or fewer employees. Consequently, based on internally researched FCC data, the Commission estimates that most providers of competitive local exchange service, competitive access providers, Shared-Tenant Service Providers, and Other Local Service Providers are small entities.

85. We have included small incumbent LECs in this present RFA analysis. As noted above, a ''small business'' under the RFA is one that, *inter alia,* meets the pertinent small-business size standard (*e.g.,* a telephone communications business having 1,500 or fewer employees) and ''is not dominant in its field of operation.'' The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not ''national'' in scope. We have therefore included small incumbent LECs in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

86. *Interexchange Carriers (IXCs).* Neither the Commission nor the SBA has developed a small business size standard specifically for Interexchange Carriers. The closest applicable NAICS Code category is Wired Telecommunications Carriers. The applicable size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2012 indicate that 3,117 firms operated for the entire year. Of that number, 3,083 operated with fewer than 1,000 employees. According to internally developed Commission data, 359 companies reported that their primary telecommunications service activity was the provision of interexchange services.

Of this total, an estimated 317 have 1,500 or fewer employees. Consequently, the Commission estimates that the majority of interexchange service providers are small entities.

87. *Cable System Operators (Telecom Act Standard).* The Communications Act of 1934, as amended, also contains a size standard for small cable system operators, which is ''a cable operator that, directly or through an affiliate, serves in the aggregate fewer than one percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed $250,000,000.'' As of 2018, there were approximately 50,504,624 cable video subscribers in the United States. Accordingly, an operator serving fewer than 505,046 subscribers shall be deemed a small operator if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed $250 million in the aggregate. We note that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed $250 million. Therefore we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under *the* definition in the Communications Act.

2. Wireless Carriers

88. *Wireless Telecommunications Carriers (except Satellite).* This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular services, paging services, wireless internet access, and wireless video services. The appropriate size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees. For this industry, U.S. Census Bureau data for 2012 show that there were 967 firms that operated for the entire year. Of this total, 955 firms employed fewer than 1,000 employees and 12 firms employed of 1,000 employees or more. Thus under this category and the associated size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities.

89. The Commission's own data—available in its Universal Licensing System—indicate that, as of August 31, 2018 there are 265 Cellular licensees that will be affected by our actions. The Commission does not know how many of these licensees are small, as the Commission does not collect that information for these types of entities. Similarly, according to internally developed Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service (PCS), and Specialized Mobile Radio (SMR) Telephony services. Of this total, an estimated 261 have 1,500 or fewer employees, and 152 have more than 1,500 employees. Thus, using available data, we estimate that the majority of wireless firms can be considered small.

90. *Satellite Telecommunications.* This category comprises firms ''primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications.'' Satellite telecommunications service providers include satellite and earth station operators. The category has a small business size standard of $35 million or less in average annual receipts, under SBA rules. For this category, U.S. Census Bureau data for 2012 show that there were a total of 333 firms that operated for the entire year. Of this total, 299 firms had annual receipts of less than $25 million. Consequently, we estimate that the majority of satellite telecommunications providers are small entities.

3. Resellers

91. *Local Resellers.* The SBA has not developed a small business size standard specifically for Local Resellers. The SBA category of Telecommunications Resellers is the closest NAICs code category for local resellers. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure. Mobile virtual network operators (MVNOs) are included in this industry. Under the SBA's size standard, such a business is small if it has 1,500 or fewer employees. U.S. Census Bureau data from 2012 show that 1,341 firms provided resale services during that year. Of that number, all operated with fewer than 1,000 employees. Thus, under this category and the associated small business size standard, the majority of these resellers can be considered small entities. According to Commission data, 213 carriers have reported that they are engaged in the provision of local resale services. Of these, an estimated 211 have 1,500 or fewer employees and two have more than 1,500 employees. Consequently, the Commission estimates that the majority of local resellers are small entities.

92. *Toll Resellers.* The Commission has not developed a definition for Toll Resellers. The closest NAICS Code Category is Telecommunications Resellers. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure. MVNOs are included in this industry. The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees. 2012 Census Bureau data show that 1,341 firms provided resale services during that year. Of that number, 1,341 operated with fewer than 1,000 employees. Thus, under this category and the associated small business size standard, the majority of these resellers can be considered small entities. According to Commission data, 881 carriers have reported that they are engaged in the provision of toll resale services. Of this total, an estimated 857 have 1,500 or fewer employees. Consequently, the Commission estimates that the majority of toll resellers are small entities.

93. *Prepaid Calling Card Providers.* Neither the Commission nor the SBA has developed a small business definition specifically for prepaid calling card providers. The most appropriate NAICS code-based category for defining prepaid calling card providers is Telecommunications Resellers. This industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households.

Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure. Mobile virtual networks operators (MVNOs) are included in this industry. Under the applicable SBA size standard, such a business is small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2012 show that 1,341 firms provided resale services during that year. Of that number, 1,341 operated with fewer than 1,000 employees. Thus, under this category and the associated small business size standard, the majority of these prepaid calling card providers can be considered small entities. According to Commission data, 193 carriers have reported that they are engaged in the provision of prepaid calling cards. All 193 carriers have 1,500 or fewer employees. Consequently, the Commission estimates that the majority of prepaid calling card providers are small entities that may be affected by these rules.

4. Other Entities

94. *All Other Telecommunications.* The ''All Other Telecommunications'' category is comprised of establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Establishments providing internet services or voice over internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry. The SBA has developed a small business size standard for ''All Other Telecommunications'', which consists of all such firms with annual receipts of $35 million or less. For this category, U.S. Census Bureau data for 2012 show that there were 1,442 firms that operated for the entire year. Of those firms, a total of 1,400 had annual receipts less than $25 million and 15 firms had annual receipts of $25 million to $49,999,999. Thus, the Commission estimates that the majority of ''All Other Telecommunications'' firms potentially affected by our action can be considered small.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

95. The *Further Notice* seeks comment on a proposed requirement that, in order to receive a voluntary exemption from our implementation mandate, a provider must file a certification reflecting that it is in a reasonably foreseeable position to meet certain implementation goals; and that, in order to maintain that exemption, a provider must make a later filing reflecting its achievement of those goals it stated it was in a reasonably foreseeable position to meet. If the Commission were to move forward with this proposal, providers would have new reporting, recordkeeping, and other compliance requirements with regard to these certifications. Specifically, we propose that each voice service provider that wishes to qualify for the exemption must have an officer, as an agent of the voice service provider, sign a compliance certificate stating that the officer has personal knowledge that the company meets each of the stated criteria. We also propose requiring the voice service provider to submit an accompanying statement explaining, in detail, how the company is working to accomplish the four prongs of the exemption. We also propose requiring these certifications to be filed no later than December 1, 2020. Finally, we propose requiring all certifications and supporting statements to be filed electronically in a new docket established specifically for such filings in the Commission's Electronic Comment Filing System (ECFS). We seek comment on these proposed requirements.

E. Steps Taken To Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

96. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rules for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities.

97. We seek comment on our proposal in the *Further Notice* to extend the STIR/SHAKEN implementation deadline for small voice service providers to June 30, 2022 and on other ways our proposed rules would impact such voice service providers; and on proposals to lessen that impact. We expect to take into account the economic impact on small entities, as identified in comments filed in response to the *Further Notice* and this IRFA, in reaching our final conclusions and promulgating rules in this proceeding.

F. Federal Rules That May Duplicate, Overlap, or Conflict With the Proposed Rules

98. None.

III. Ordering Clauses

99. *It is ordered*, pursuant to sections 4(i), 4(j), 227(e), 227b, 227b–1, 251(e), and 303(r), of the Act, 47 U.S.C. 154(i), 154(j), 227(e), 227b, 227(b)–1, 251(e), and 303(r), that that this *Further Notice of Proposed Rulemaking is adopted*.

100. *It is further ordered* that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this *Report and Order,* including the Final Regulatory Flexibility Analysis (FRFA), and *Further Notice of Proposed Rulemaking,* including the Initial Regulatory Flexibility Analysis (IRFA), to the Chief Counsel for Advocacy of the Small Business Administration.

List of Subjects in 47 CFR Part 64

Carrier equipment, Communications common carriers, Reporting and recordkeeping requirements, Telecommunications, Telephone.

Federal Communications Commission.

Cecilia Sigmund,

Federal Register Liaison Officer, Office of the Secretary.

Proposed Rules

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 CFR part 64 as follows:

PART 64—MISCELLANEOUS RULES RELATING TO COMMON CARRIERS

■ 1. The authority citation for part 64 is revised to read as follows:

Authority: 47 U.S.C. 154, 201, 202, 217, 218, 220, 222, 225, 226, 227, 227b, 228, 251(a), 251(e), 254(k), 262, 403(b)(2)(B), (c), 616, 620, 1401–1473, unless otherwise noted; Pub. L. 115–141, Div. P, sec. 503, 132 Stat. 348, 1091.

■ 2. Amend § 64.6300 by redesignating paragraphs (b) through (g) as paragraphs (c) through (h) and adding new paragraph (b) to read as follows:

§ 64.6300 Definitions.

* * * * *

(b) *Caller identification authentication information.* The term ''caller identification authentication information'' refers to the information

transmitted along with a call that represents the originating voice service provider's attestation to the accuracy of the caller identification information.

* * * * *

■ 3. Amend § 64.6301 by revising the introductory text of paragraph (a) and adding paragraphs (b) through (f) to read as follows:

§ 64.6301 Caller ID authentication.

(a) *STIR/SHAKEN implementation by voice service providers.* Except as provided in paragraphs (d) and (e) of this section, not later than June 30, 2021, a voice service provider shall fully implement the STIR/SHAKEN authentication framework in its internet Protocol networks. To fulfill this obligation, a voice service provider shall:

* * * * *

(b) *STIR/SHAKEN implementation by intermediate providers.* Not later than June 30, 2021, an intermediate provider shall fully implement the STIR/SHAKEN authentication framework in its internet Protocol networks. To fulfill this obligation, a voice service provider:

(1) Shall pass unaltered to subsequent providers in the call path any caller identification authentication information it receives with a SIP call; and

(2) Shall authenticate caller identification information for all SIP calls it receives for which the caller identification information has not been authenticated and which it will exchange with another provider as a SIP call.

(c) *Call authentication in non-IP networks.* Except as provided in paragraph (e) of this section, not later than June 30, 2021, a voice service provider shall either:

(1) Upgrade its entire network to allow for the initiation, maintenance, and termination of SIP calls and fully implement the STIR/SHAKEN framework as required in paragraph (a) of this section throughout its network; or

(2) Maintain and be ready to provide the Commission on request documented proof that it is participating, either on its own or through a representative, as a member of a working group or consortium that is working to develop a non-IP call authentication solution, or actively testing such a solution.

(d) *Extension of implementation deadline.* (1) Small providers are exempt from the requirements of paragraph (a) of this section until June 30, 2022.

(i) For purposes of this paragraph, ''small provider'' means a provider that has 100,000 or fewer voice service subscriber lines (counting the total of all business and residential fixed subscriber lines and mobile phones and aggregated over all of the provider's affiliates).

(ii) Reserved.

(2) The Wireline Competition Bureau may, upon a public finding of undue hardship, provide an extension for compliance with paragraph (a) of this section, for a reasonable period of time, for a voice service provider or class of voice service providers, or type of voice calls, as necessary for that voice service provider or class of voice service providers or type of calls to address identified burdens and barriers to implementation of caller ID authentication technology.

(3) The Wireline Competition Bureau shall annually review the scope of any extension and, after notice and an opportunity for comment, may extend it or terminate it and may expand or contract the scope of entities subject to the extension.

(4) During the period of extension, any provider subject to such extension shall implement an appropriate robocall mitigation program to prevent unlawful robocalls from originating on the network of the provider.

(e) *Exemption.* (1) A voice service provider may seek an exemption from the requirements of paragraph (a) of this section by, before December 1, 2020, certifying that for those portions of its network served by technology that allows for the transmission of SIP calls, it:

(i) Has adopted the STIR/SHAKEN authentication framework for calls on the internet Protocol networks of the voice service provider, by publicly committing to complete implementation of the STIR/SHAKEN authentication framework by June 30, 2021;

(ii) Has agreed voluntarily to participate with other voice service providers in the STIR/SHAKEN authentication framework, by having written, signed agreements with at least two other voice service provides to exchange SIP calls with authenticated caller ID information;

(iii) Has begun to implement the STIR/SHAKEN authentication framework, by completing the necessary network upgrades to at least one network element to enable the authentication and verification of caller ID information for SIP calls; and

(iv) Will be capable of fully implementing the STIR/SHAKEN authentication framework not later than June 30, 2021, because it reasonably foresees that it will have completed all necessary network upgrades to its network infrastructure to enable the authentication and verification of caller ID information and authenticate and verify all SIP calls exchanged with STIR/SHAKEN-enabled partners by June 30, 2021.

(2) A voice service provider may seek an exemption from the requirements of paragraph (c) of this section by, before December 1, 2020, certifying that for those portions of its network that do not allow for the transmission of SIP calls, it:

(i) Has taken reasonable measures to implement an effective call authentication framework; and

(ii) Will be capable of fully implementing an effective call authentication framework not later than June 30, 2021.

(3) All certifications shall be filed in ECFS in WC Docket No. 20–68, shall be signed by an officer in conformity with section 1.16 of the Commission's rules, and shall be accompanied by detailed support as to the assertions in the certification.

(4) The Wireline Competition Bureau shall determine whether to grant or deny timely requests for exemption on or before December 30, 2020.

(5) All voice service providers granted an exemption under paragraph (e)(1) of this section shall file an additional certification on or before a date specified by the Wireline Competition Bureau, and consistent with the requirements of paragraph (e)(3) of this section, attesting to whether the voice service provider fully implemented the STIR/SHAKEN authentication framework not later than June 30, 2021. The Wireline Competition Bureau, after notice and an opportunity for comment on the certifications, will determine whether to revoke the exemption for each certifying voice service provider based on whether it completed implementation.

(f) *Line-item charges.* Providers of voice service are prohibited from adding any additional line item charges to consumer customer subscribers or small business customer subscribers for the effective call authentication technology required by paragraphs (a) and (c) of this section.

(1) For purposes of this paragraph, ''consumer customer subscribers'' means residential mass-market subscribers.

(2) For purposes of this paragraph, ''small business customer subscribers'' means subscribers that are business entities that meet the size standards established in 13 CFR part 121, subpart

A, as they currently exist or may hereafter be amended.

[FR Doc. 2020–07629 Filed 4–20–20; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 622

[Docket No. 200408–0104]

RIN 0648–BI81

Fisheries of the Caribbean, Gulf of Mexico, and South Atlantic; Snapper-Grouper Fishery of the South Atlantic Region; Regulatory Amendment 29

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; request for comments.

SUMMARY: NMFS proposes to implement management measures described in Regulatory Amendment 29 to the Fishery Management Plan for the Snapper-Grouper Fishery of the South Atlantic Region (Snapper-Grouper FMP), as prepared and submitted by the South Atlantic Fishery Management Council (Council). If implemented, this proposed rule would require descending devices be on board vessels and require the use of specific fish hook types while fishing for or possessing snapper-grouper species. The proposed rule would also allow the use of powerheads in Federal waters off South Carolina to harvest snapper-grouper species. The purpose of this proposed rule is to modify fishing gear requirements to promote best fishing practices and to ensure consistent regulations for the dive component of the snapper-grouper fishery.

DATES: Written comments on the proposed rule must be received by May 6, 2020.

ADDRESSES: You may submit comments on the proposed rule, identified by ''NOAA–NMFS–2020–0008,'' by either of the following methods:

- *Electronic submission:* Submit all electronic comments via the Federal e-Rulemaking Portal. Go to *http://www.regulations.gov/docket?D=NOAA-NMFS-2020-0008, click the* ''*Comment Now!*'' icon, complete the required fields, and enter or attach your comments.
- *Mail:* Submit all written comments to Frank Helies, NMFS Southeast Regional Office, 263 13th Avenue South, St. Petersburg, FL 33701.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on *www.regulations.gov* without change. All personal identifying information (*e.g.,* name, address, etc.), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter ''N/A'' in required fields if you wish to remain anonymous).

Electronic copies of Regulatory Amendment 29 may be obtained from *www.regulations.gov* or the Southeast Regional Office website at *https://www.fisheries.noaa.gov/action/regulatory-amendment-29-gear-requirements-south-atlantic-snapper-grouper-species* includes an environmental assessment, regulatory impact review, and Regulatory Flexibility Analysis (RFA).

FOR FURTHER INFORMATION CONTACT: Frank Helies, NMFS Southeast Regional Office, telephone: 727–824–5305, or email: *frank.helies@noaa.gov.*

SUPPLEMENTARY INFORMATION: NMFS and the Council manage the snapper-grouper fishery under the Snapper-Grouper FMP. The Snapper-Grouper FMP was prepared by the Council and is implemented by NMFS through regulations at 50 CFR part 622 under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (16 U.S.C. 1801 *et seq.*).

Background

Commercial and recreational fishermen have expressed concern to the Council at their public meetings about regulations that result in released snapper-grouper species that do not survive, particularly South Atlantic red snapper. Fishermen have reported that some released fish die due to foul-hooking, *e.g.,* when hooked in the stomach or outside of the mouth, or through barotrauma, which is injury caused by internal gas expansion when reeled up from depth. To improve the survivorship of released snapper-grouper species, the Council considered measures that would encourage the use of best fishing practices that aim to reduce the negative impacts to live fish released after capture. An example of a best fishing practice considered by the Council includes utilizing a barotrauma mitigation device such as a descending device or venting tool. Though venting tools may be faster to use than descending devices, venting tools have the potential to damage vital organs because they penetrate the abdomen of the fish, and therefore because it could cause additional stress to fish if not used correctly, the Council chose not to require venting tools in Regulatory Amendment 29.

Regulatory Amendment 29 proposes measures that would apply to any commercial or recreational fishermen fishing for or possessing South Atlantic snapper-grouper, and include requiring that descending devices be on board vessels and encouraging their use when appropriate, as well as requiring the use of fish hooks that reduce or minimize gut-hooking or foul-hooking and increase the survivability of fish after release.

As described in Regulatory Amendment 29, studies have shown that if properly used and maintained, descending devices relieve symptoms of barotrauma, and can decrease potential discard mortality of released fish. The proposed rule would not require the use of a descending device because it may not be needed every time; however, the gear would be required to be readily available on a vessel for use when fishing for or possessing snapper-grouper species. It is the Council's intent that fishermen use a descending device only when a fish may be experiencing barotrauma.

Currently, fishermen must use non-stainless steel circle hooks when fishing for snapper-grouper species with hook-and-line gear and natural baits north of 28° N latitude, which is the latitude line running east to west approximately 25 miles south of Cape Canaveral, Florida; fishermen are allowed to use either offset or non-offset circle hooks (50 CFR 622.188(a)(2)). A fish hook is offset if the front of the hook, which includes the hook point and barb, is not in-line with the hook shank. A non-offset hook has the point and barb in-line with the hook shank. The existing regulations require that circle hooks must be made of non-stainless steel, but other hook types, such as J-hooks, may be either stainless steel or non-stainless steel. Non-offset circle hooks can reduce the occurrence of hooking-related mortality (when compared to offset circle hooks and J-hooks) and can improve survivorship of released fish. Requiring their use as opposed to just requiring them to be on board ensures that full potential benefits of using this gear type are realized. Also, non-stainless steel hooks degrade faster than stainless steel hooks, so any fish released with an