Background: In 2015, citing numerous public interest benefits, the Commission permitted interconnected voice over Internet Protocol (VoIP) providers to obtain numbers for their customers directly from the Numbering Administrator, rather than relying on a carrier partner. Since that time, the Commission has found that the proliferation of interconnected VoIP providers and entities originating calls today has resulted in the voice network becoming more vulnerable to bad actors. In 2019, Congress, via the TRACED Act, directed the FCC to examine whether and how to modify its policies to reduce access to numbers by potential perpetrators of illegal robocalls. In 2021, the Commission adopted a Further Notice of Proposed Rulemaking (Further Notice) seeking comment on proposed revisions to the Commission’s rules to better ensure that interconnected VoIP providers that obtain the benefit of direct access to numbers comply with existing legal obligations and do not facilitate illegal robocalls, pose national security risks, or evade or abuse intercarrier compensation requirements.

What the Second Report and Order Would Do:

- Take targeted steps to address the concerns raised in the Further Notice and enhance the Commission’s oversight of numbering resources by requiring applicants seeking direct access to numbering resources:
  - to make robocall-related certifications to help ensure compliance with our rules targeting illegal robocalls;
  - to disclose and keep current information about their ownership, including foreign ownership, to mitigate the risk of providing bad actors abroad with access to U.S. numbering resources;
  - to certify to their compliance with other Commission rules applicable to interconnected VoIP providers to bolster awareness and compliance with such rules, including certain public safety and access stimulation rules, and requirements to submit timely FCC Forms 477 and 499 filings;
  - to comply with state laws and registration requirements that are applicable to businesses in each state in which numbers are requested; and
  - to include a signed declaration that their applications are true and accurate.
- Codify the Wireline Competition Bureau’s direct access to numbering resources application review, application rejection, and authorization revocation processes.
- Direct the North American Numbering Council to study number use, resale, and reclamation to inform potential future Commission action in furtherance of its public interest goals.

What the Accompanying Second Further Notice of Proposed Rulemaking Would Do:

- Seek comment on proposals to further increase Commission oversight of entities with access to numbers by:
  - requiring existing direct access authorization holders whose authorizations predate the new application requirements to submit the new certifications, acknowledgments, and disclosures adopted in the Second Report and Order;
  - requiring direct access applicants to disclose a list of states in which they seek to provide initial service; and
  - requiring number resellers with direct access authorizations to obtain the same direct access application certifications, acknowledgments, and disclosures from their indirect access recipient partners.

* This document is being released as part of a “permit-but-disclose” proceeding. Any presentations or views on the subject expressed to the Commission or its staff, including by email, must be filed in WC Docket Nos. 13-97, 07-243, 20-67; IB Docket No. 16-155, which may be accessed via the Electronic Comment Filing System (https://www.fcc.gov/ecfs). Before filing, participants should familiarize themselves with the Commission’s ex parte rules, including the general prohibition on presentations (written and oral) on matters listed on the Sunshine Agenda, which is typically released a week prior to the Commission’s meeting. See 47 CFR § 1.1200 et seq.
Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of

Numbering Policies for Modern Communications WC Docket No. 13-97
Telephone Number Requirements for IP-Enabled Service Providers WC Docket No. 07-243
Implementation of TRACED Act Section 6(a) — Knowledge of Customers by Entities with Access to Numbering Resources WC Docket No. 20-67
Process Reform for Executive Branch Review of Certain FCC Applications and Petitions Involving Foreign Ownership IB Docket No. 16-155

SECOND REPORT AND ORDER AND SECOND FURTHER NOTICE OF PROPOSED RULEMAKING

Adopted: [] Released: []

Comment Date: [ ]
Reply Comment Date: [ ]

By the Commission:

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* This document has been circulated for tentative consideration by the Commission at its September open meeting. The issues referenced in this document and the Commission’s ultimate resolution of those issues remain under consideration and subject to change. This document does not constitute any official action by the Commission. However, the Chairwoman has determined that, in the interest of promoting the public’s ability to understand the nature and scope of issues under consideration, the public interest would be served by making this document publicly available. The FCC’s ex parte rules apply and presentations are subject to “permit-but-disclose” ex parte rules. See, e.g., 47 C.F.R. §§ 1.1206, 1.1200(a). Participants in this proceeding should familiarize themselves with the Commission’s ex parte rules, including the general prohibition on presentations (written and oral) on matters listed on the Sunshine Agenda, which is typically released a week prior to the Commission’s meeting. See 47 CFR §§ 1.1200(a), 1.1203.
While technological innovations such as VoIP calling capabilities have brought advanced communications services to the marketplace to the benefit of consumers, the proliferation of interconnected VoIP providers and entities originating calls today has resulted in the voice network becoming more vulnerable to bad actors.1 Yet illegal robocalls continue to expose millions of consumers to harmful risks. Today, we modify and strengthen our rules to reduce access to telephone numbers by potential perpetrators of illegal robocalls. We take this action in furtherance of Congress’ directive in the Pallone-Thune Telephone Robocall Abuse Criminal Enforcement and Deterrence (TRACED) Act to examine how to modify the Commission’s rules and policies regarding direct access to numbers by providers of interconnected Voice over Internet Protocol (VoIP) services.2 We also adopt important guardrails to protect national security and law enforcement, safeguard the nation’s finite numbering resources, reduce the opportunity for regulatory arbitrage, and further promote public safety.

1 The rising tide of robocalls and the emergence of VoIP go hand in hand. Driven in part by the rise of VoIP, the telecommunications industry has transitioned from a limited number of carriers that all trusted each other to provide accurate calling party origination information to a proliferation of vastly different voice service providers and entities originating calls, which allows consumers to enjoy the benefits of increased competition but also creates new ways for bad actors to undermine trust. Call Authentication Trust Anchor; Implementation of TRACED Act Section 6(a)—Knowledge of Customers by Entities with Access to Numbering Resources, WC Docket Nos. 17-97 and 20-67, Report and Order and Further Notice of Proposed Rulemaking, 35 FCC Rcd 3241, 3243-44, para. 4 (2020) (Caller ID Authentication First Report and Order); see also Call Authentication Trust Anchor, WC Docket No. 17-97, Sixth Report and Order and Further Notice of Proposed Rulemaking, FCC 23-18, at 19-20, para. 34 (rel. Mar. 17, 2023) (Caller ID Authentication Sixth Report and Order); S.C. Dep’t of Consumer Aff. Comments at 4 (SCDCA Comments) (“VoIP originated calls are the largest portion of unwanted calls.”).

2 Pallone-Thune Telephone Robocall Abuse Criminal Enforcement and Deterrence Act, Pub. L. No. 116-105 § 6(a) (2019) (TRACED Act). Section 6(a) requires the Commission to examine its policies regarding access to both toll free and non-toll free telephone numbers. Id. The Commission initially sought comment regarding its policies in March 2020. Caller ID Authentication First Report and Order, 35 FCC Rcd at 3492-96, paras. 123-30. While this Second Report and Order addresses numbering resources generally, the issue of changes to our toll free numbering policy specifically remains under advisement. For a definition of interconnected VoIP, see 47 CFR § 9.3; see also 47 CFR § 52.5(b); 47 U.S.C. § 153(25).
2. The Commission has worked diligently to encourage innovation and technology transition in the voice marketplace while striving to protect consumers from any negative effects of such new technologies. Over the last three years, we have strengthened and expanded the STIR/SHAKEN caller ID authentication framework, which protects consumers from illegally spoofed robocalls by verifying that the caller ID information transmitted with a particular call matches the caller’s telephone number.\(^3\) We have also expanded robocall mitigation requirements for all providers, and taken major enforcement action against bad actors.\(^4\)

3. We adopt this Second Report and Order to further stem the tide of illegal robocalls perpetrated by interconnected VoIP providers, to protect the nation’s numbering resources from abuse by foreign bad actors, and to advance other important public policy objectives tied to the use of our nation’s limited numbering resources. To that end, we strategically update the Commission’s direct access to numbering process. First, we require applicants seeking direct access to numbering resources to make robocall-related certifications to help ensure compliance with our rules targeting illegal robocalls. Second, we require applicants to disclose and keep current information about their ownership, including foreign ownership, to mitigate the risk of providing bad actors abroad with access to our numbering resources. Third, we require applicants to certify to their compliance with other Commission rules applicable to interconnected VoIP providers to bolster awareness and compliance with such rules. Fourth, we require applicants to comply with state laws and registration requirements that are applicable to businesses in each state in which numbers are requested. Fifth, we require applicants to include a signed declaration that their applications are true and accurate. Sixth, and finally, we codify the Wireline Competition Bureau’s (Bureau) application review, application rejection, and authorization revocation processes.

4. In the accompanying Second Further Notice of Proposed Rulemaking (Second Further Notice), we seek comment on the duties of existing direct access authorization holders whose authorizations predate the new application requirements we adopt today. We also seek comment on whether direct access applicants should disclose a list of states in which they seek to provide initial service. Finally, we seek comment on a proposal to minimize harms that may arise from bad actors that access numbering resources indirectly by holding their direct access authorization holder “partners” accountable for their actions.

\(^3\) See Caller ID Authentication Sixth Report and Order at 2, para. 2 n.5. STIR/SHAKEN stands for Secure Telephone Identity Revisited, and Signature-based Handling of Asserted information using toKENs.

II. BACKGROUND

5. Section 52.15(g)(2) of the Commission’s rules governs the application process for numbering resources.\(^5\) It limits access to telephone numbers to entities that demonstrate they are authorized to provide service in the area for which they are requesting numbers.\(^6\) The Commission has interpreted section 52.15(g)(2) to require evidence of either a state certificate of public convenience and necessity (CPCN) or a Commission license or authorization.\(^7\) Because only telecommunications carriers were able to provide this proof of authorization, in 2015, the Commission revised its numbering rules and adopted a process by which interconnected VoIP providers could satisfy this authorization requirement and thus obtain numbers directly from the Numbering Administrator.\(^8\) The Commission found that permitting interconnected VoIP providers to obtain telephone numbers directly from the Numbering Administrator would improve responsiveness in the number porting process and improve the visibility and accuracy of number utilization, which would in turn enable the Commission to more effectively protect our nation’s limited numbering resources.\(^9\) Moreover, the Commission found that this change to its authorization process would enhance its ability to enforce rules governing interconnected VoIP providers, and help stakeholders and the Commission identify the source of routing problems and take corrective actions.\(^10\)

6. The Commission’s rules now require interconnected VoIP providers obtaining numbering resources to comply with both the requirements applicable to telecommunications carriers seeking to obtain numbering resources\(^11\) and certain interconnected VoIP-specific requirements for applying for, and maintaining, a Commission authorization for direct access to numbering resources.\(^12\) Section 52.15(g) currently requires an interconnected VoIP applicant for direct access to numbering resources to:

- provide its company name, headquarters address, Operating Company Number (OCN), parent company’s OCN(s), and the primary type of business in which the numbering resources will be used;\(^13\)
- provide contact information for personnel qualified to address issues relating to regulatory requirements, numbering, compliance, 911, and law enforcement;\(^14\)

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\(^5\) 47 CFR § 52.15(g)(2).

\(^6\) Id. The North American Numbering Plan (NANP) is the basic numbering scheme for telecommunications networks located in the United States and its territories, Canada, and parts of the Caribbean. See id. § 52.5(c). NANP telephone numbers are ten-digit numbers consisting of a three-digit area code, followed by a three-digit central office code, followed by a four-digit line number.


\(^8\) Id. at 6848, para. 21. In this Second Report and Order, we refer to both the North American Numbering Plan Administrator and the Pooling Administrator as the Numbering Administrator. Although these functions are described separately in our rules, see, e.g., 47 CFR §§ 52.13, 52.20, they are currently combined under a single Commission contract. See Press Release, FCC, FCC Selects SomosGov as Next Telephone Number Administrator and Reassigned Numbers Database Administrator (Dec. 21, 2020), https://docs.fcc.gov/public/attachments/DOC-368493A1.pdf.

\(^9\) VoIP Direct Access Order, 30 FCC Rcd at 6840-41, para. 2.

\(^10\) Id.

\(^11\) Id. at 6844, para. 13; 47 CFR § 52.15(g)(1)-(2).

\(^12\) 47 CFR § 52.15(g)(3).

\(^13\) Id. § 52.15(g)(1).
comply with applicable Commission rules related to numbering, including, among others, numbering utilization and optimization requirements (in particular, filing Numbering Resource Utilization and Forecast (NRUF) Reports); comply with guidelines and procedures adopted pursuant to numbering authority delegated to the states; and comply with industry guidelines and practices applicable to telecommunications carriers with regard to numbering;15

- file requests for numbers with the relevant state commission(s) at least 30 days before requesting numbers from the Numbering Administrator;16

- provide proof it is or will be capable of providing service within sixty (60) days of the numbering resources activation date in accordance with 47 CFR § 52.15(g)(2), i.e., “facilities readiness”;17

- certify that it complies with its Universal Service Fund contribution obligations, its Telecommunications Relay Service contribution obligations, its NAP and local number portability administration contribution obligations, its obligations to pay regulatory fees, and its 911 obligations;18

- certify that it has the requisite technical, managerial, and financial capacity to provide service; include the name of its key management and technical personnel, such as the Chief Operating Officer and the Chief Technology Officer, or equivalent; and state that none of the identified personnel are being or have been investigated by the Commission or any law enforcement or regulatory agency for failure to comply with any law, rule, or order;19 and

- certify that no party to the application is subject to a denial of Federal benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1988.20

7. The Commission directed and delegated authority to the Bureau to “implement and maintain the authorization process.”21 Bureau staff review applications for conformance with procedural

(Continued from previous page)

14 Id. § 52.15(g)(3)(i)(A).
15 Id. § 52.15(g)(3)(i)(B).
16 Id. § 52.15(g)(3)(i)(C), (iv)(C). The Commission also requires interconnected VoIP providers to give accurate regulatory and numbering contact information to a state commission when they request numbers in that state, and to update this information whenever it becomes outdated. Id. § 52.15(g)(3)(iv)(D).
17 Id. § 52.15(g)(3)(i)(D). The Commission permits an interconnected VoIP provider to demonstrate proof of facilities readiness by (1) providing a combination of an agreement between the interconnected VoIP provider and its carrier partner and an interconnection agreement between that carrier and the relevant local exchange carrier, or (2) proof that the interconnected VoIP provider obtains interconnection with the Public Switched Telephone Network (PSTN) pursuant to a tariffed offering or a commercial arrangement (such as a TDM-to-IP or a VoIP interconnection agreement) that provides access to the PSTN. See VoIP Direct Access Order, 30 FCC Rcd at 6856-57, para. 37.
18 47 CFR § 52.15(g)(3)(i)(E).
19 Id. § 52.15(g)(3)(i)(F).
20 Id. § 52.15(g)(3)(i)(G).
21 VoIP Direct Access Order, 30 FCC Rcd at 6849, para. 22 & n.70 (“This Report and Order’s delegation of authority to the Wireline Competition Bureau is limited to the specific delegations made herein. Unless otherwise within the scope of the Bureau’s delegated authority, matters pertaining to the process for authorizing direct access to numbers for interconnected VoIP providers will be decided by the full Commission.”).
rules, and if the rule requirements are satisfied, release an “Accepted-for-Filing Public Notice” seeking comment on the application.\textsuperscript{22} Applications are deemed granted by the Commission on the 31st day after the release of the public notice, unless the Bureau notifies the applicant that the grant will not be automatically effective.\textsuperscript{23} The Bureau may halt the auto-grant process if (1) an applicant fails to respond promptly to Commission inquiries, (2) an application is associated with a non-routine request for waiver of the Commission’s rules, (3) timely filed comments on the application raise public interest concerns that require further Commission review, or (4) the Bureau determines that the request requires further analysis to determine whether the application serves the public interest.\textsuperscript{24}

8. Once an interconnected VoIP provider has Commission authorization to obtain numbering resources, it may request numbers directly from the Numbering Administrator.\textsuperscript{25} Interconnected VoIP providers that apply for and receive Commission authorization for direct access to numbering resources “are subject to, and acknowledge, Commission enforcement authority.”\textsuperscript{26} Failure to comply with the obligations set out by the Commission “could result in revocation of the Commission’s authorization, the inability to obtain additional numbers pending that revocation, reclamation of unassigned numbers already obtained directly from the Numbering Administrators, or enforcement action.”\textsuperscript{27} The Commission delegated authority to both the Bureau and the Enforcement Bureau to order the revocation of authorization and to direct the Numbering Administrator to reclaim any of the service provider’s unassigned numbers.\textsuperscript{28}

9. Based on lessons learned from reviewing scores of direct access applications\textsuperscript{29} since the 2015 \textit{VoIP Direct Access Order}, the Commission began to consider ways to update the interconnected VoIP provider application requirements to add important information that is useful or necessary to the Bureau’s public interest review.\textsuperscript{30} To date, the Bureau has requested such information from applicants on a case-by-case basis where appropriate.\textsuperscript{31} For example, certain applications with significant foreign ownership that raise potential national security and/or law enforcement issues have been filed.\textsuperscript{32}

\textsuperscript{22} \textit{Id.} at 6858, para. 39.
\textsuperscript{23} 47 CFR § 52.15(g)(3)(iii).
\textsuperscript{24} \textit{See id.} § 52.15(g)(3)(ii)(A)-(D); \textit{VoIP Direct Access Order}, 30 FCC Rcd at 6858, para. 40.
\textsuperscript{25} \textit{VoIP Direct Access Order}, 30 FCC Rcd at 6849, para. 22 & n.70 (“Once an interconnected VoIP provider obtains Commission authorization, we do not require it to notify the Commission of ongoing requests for numbers.”).
\textsuperscript{26} \textit{Id.} at 6864, para. 52.
\textsuperscript{27} \textit{Id.} at 6852, para. 28.
\textsuperscript{28} \textit{Id.} at 6865, para. 53.
\textsuperscript{29} We refer to “direct access to numbers applications” and “direct access applications” interchangeably throughout this item.
\textsuperscript{30} \textit{See Numbering Policies for Modern Communications et al.}, WC Docket Nos. 13-97 et al., Further Notice of Proposed Rulemaking, 36 FCC Rcd 12907, 12912, para. 10 (2021) (\textit{VoIP Direct Access Further Notice}). There, the Commission stated that the Bureau had reviewed nearly 150 VoIP direct access to number applications in the six years between the \textit{VoIP Direct Access Order} and the \textit{VoIP Direct Access Further Notice}, and determined that it required additional information from applicants for its public interest review. \textit{Id.} Since August 5, 2021, the Bureau has reviewed an additional 18 applications and found it needed to request the additional information in nearly every case.
\textsuperscript{31} \textit{Id.}

Additionally, direct access applications have been challenged by commenters raising concerns about intercarrier compensation and call routing or call blocking practices.\(^3^3\)

10. In August 2021, the Commission adopted a \textit{Further Notice of Proposed Rulemaking} seeking comment on how to improve the interconnected VoIP direct access application process to address the identified gaps in the direct access application process, the continued scourge of illegal robocalls, national security, and number resource exhaust.\(^3^4\) We received comments from a wide range of stakeholders, including state public utility commissions, interconnected VoIP providers, industry standards groups and trade associations, and consumer advocates.\(^3^5\)

III. DISCUSSION

11. The application process for interconnected VoIP providers’ direct access to numbering is the first line of defense in mitigating the risk of providing scarce numbering resources to bad actors.\(^3^6\) It is thus critically important that the rules governing this process prevent, to the greatest extent possible, interconnected VoIP providers that engage in unlawful robocalling or spoofing, or otherwise threaten the national security and law enforcement interests of the United States, from accessing or retaining our nation’s numbering resources.\(^3^7\) While our direct access rules currently contemplate that the Bureau may request supplemental information as necessary to conduct a thorough public interest review,\(^3^8\) the rule changes we adopt today make certain previously supplemental showings a mandatory prerequisite before the Bureau accepts new applications for filing and grants such applications in the public interest. The rules we adopt today strike an appropriate balance between establishing necessary checks on interconnected VoIP direct access applicants and authorization holders and fostering an efficient direct access process that has, in part, facilitated the ongoing technological transition to advanced IP communications networks.

A. Ensuring that Authorization Approvals Serve the Public Interest

12. First, we tighten our application requirements to ensure that the Bureau receives sufficient detail from interconnected VoIP applicants to make informed, public-interest-driven decisions about their direct access applications and thereby protect the public from bad actors. These new requirements will also increase our enforcement capabilities should we find that providers are skirting our rules. Upon the effective date of these rules, we require explicit acknowledgment of compliance with all robocall regulations; implement disclosure and update requirements regarding ownership and control; require certification of compliance with other applicable Commission regulations and certain state law; and add a declaration requirement to hold applicants accountable for the truthfulness and accuracy of their direct access applications.

(Continued from previous page)
1. **Certifying Compliance with Robocall-Related Rules**

13. We adopt our proposal to require a direct access applicant to certify that it will use numbering resources lawfully and will not encourage, assist, or facilitate illegal robocalls, illegal spoofing, or fraud. Protecting Americans from the harmful effects of unwanted and illegal robocalls remains the Commission’s top consumer protection priority. More than just a nuisance, illegal robocalls continue to expose millions of American consumers to harmful risks. The Commission receives more complaints about such unwanted calls than about anything else—approximately 119,000 last year alone.

14. To help curb illegal robocalls and enhance the Bureau staff’s ability to protect the public interest from such calls, the *VoIP Direct Access Further Notice* proposed requiring applicants to certify in their direct access applications to numerous statements regarding illegal robocalls and the Robocall Mitigation Database and to disclose whether they are subject to a robocall-related action, investigation, or inquiry from various enforcement entities. We received substantial opposition from a wide range of commenters in response to these proposals. Many commenters argued that our proposed approach would risk creating redundancies and cause confusion because interconnected VoIP providers are already subject to the Commission’s comprehensive framework to combat illegal robocalls. Some commenters


40 The Commission has estimated that $10.5 billion is lost annually by consumers due to illegal robocalls, not accounting for the non-quantifiable losses suffered by consumers and the erosion of confidence in the nation’s telephone network. *See Caller ID Authentication First Report and Order*, 35 FCC Rcd at 3263, para. 48. The Commission has also found that the potential benefits resulting from eliminating the wasted time and nuisances caused by illegal scam robocalls would exceed $3 billion annually. *Id.*, para. 47.


42 We proposed requiring applicants for direct access to certify that they: (1) will use numbering resources lawfully; (2) will not encourage nor assist and facilitate illegal robocalls, illegal spoofing, or fraud; (3) will take reasonable steps to cease origination, termination, and/or transmission of illegal robocalls once discovered; (4) will cooperate with the Commission, federal and state law enforcement and regulatory agencies with relevant jurisdiction, and the industry-led registered consortium, regarding efforts to mitigate illegal or harmful robocalling or spoofing and tracebacks; (5) have filed in the Robocall Mitigation Database; (6) have either (A) fully implemented the STIR/SHAKEN caller ID authentication protocols and framework or (B) have implemented either STIR/SHAKEN caller ID authentication or a robocall mitigation program for all calls for which it acts as a voice service provider, and if the latter, have described in the Database the detailed steps they are taking regarding number use that can reasonably be expected to reduce the origination and transmission of illegal robocalls. *VoIP Direct Access Further Notice*, 36 FCC Rcd at 12913-14, paras. 13-14. We also proposed requiring direct access applicants or authorization holders to inform the Commission if they are subject to a Commission, law enforcement, or regulatory action, investigation, or inquiry due to their robocall mitigation plan being deemed insufficient or problematic, or due to suspected unlawful robocalling or spoofing, and to acknowledge this requirement in their applications. *Id.* at 12914-15, para. 15.

43 *See, e.g.*, Lumen Comments at 12; RingCentral, Inc., Telnyx, LLC & Vonage Holdings Corp. Comments at 6 (RingCentral et al.); Twilio Comments at 5-6; USTelecom – The Broadband Association Comments at 3 (USTelecom); Voice on the Net Coalition Comments at 3 (VON); Cloud Commc’ns All. Reply at 1-2 (CCA); Lumen Reply at 9-10; RingCentral et al. Reply at 3-5, 10; USTelecom Reply at 2.

44 *See, e.g.*, Lumen Comments at 12 (“[T]hese certifications would be wholly duplicative of requirements already imposed as part of the far more comprehensive framework in the Commission’s robocalling proceedings in the wake of the TRACED Act. This framework already applies to all types of voice service providers, including interconnected VoIP providers.”); RingCentral et al. Comments at 7 (arguing that certifications that duplicate existing requirements are “unnecessary,” because “[t]he Commission can readily verify whether applicants have,” for instance, “register[ed] in the robocall mitigation database”); Twilio Comments at 5-6; USTelecom Comments at 3 (“[T]he Commission should re-focus its proposal to avoid imposing confusing and duplicative requirements on service providers and to instead focus on potential gaps in its existing requirements.”).
also argued that our proposals would not effectively reduce the origination of illegal robocalls, or would impact interconnected VoIP providers’ competitiveness with other types of providers by imposing on them unique burdens. Upon consideration of the record, we adopt a more straightforward approach that avoids these concerns and instead cross-references the relevant Commission rules targeting illegal robocalls in our new certifications.

15. **Robocall-related certifications.** We revise section 52.15(g)(3) of the Commission’s rules to require an interconnected VoIP provider seeking direct access to numbering resources to certify that:

- the applicant will not use the numbers obtained pursuant to an interconnected VoIP provider numbering authorization to knowingly transmit, encourage, assist, or facilitate illegal robocalls, illegal spoofing, or fraud, in violation of robocall, spoofing, and deceptive telemarketing obligations under 47 CFR §§ 64.1200, 64.1604, 64.6300 *et seq.*, and 16 CFR § 310.3(b); and
- the applicant has fully complied with all applicable STIR/SHAKEN caller ID authentication and robocall mitigation program requirements and filed a certification in the Robocall Mitigation Database as required by 47 CFR §§ 64.6301-64.6305; and

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45 VON Comments at 3 & n.4.

46 See RingCentral et al. Comments at 11; VON Comments at 2 (“[A]dopting these new requirements would not protect against illegal robocalls. More problematic, the proposed rules would be anticompetitive in that they would impose burdens on interconnected VoIP providers not applied to other direct access recipients without any record that the new rules would prevent robocalls or enhance network security.”); CCA Reply at 2-3.

47 See Appx. A, § 52.15(g)(3)(ii)(C), (D), and (K).

48 *VoIP Direct Access Further Notice*, 36 FCC Red at 12913, para. 13. As voice service providers, interconnected VoIP providers must comply with all regulations that target illegal robocalls that are generally applicable to all voice service providers. See 47 CFR §§ 64.1600(r)(1), 64.6300(n)(1) (defining “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”); *Advanced Methods to Target and Eliminate Unlawful Robocalls*, CG Docket No. 17-59, Third Report and Order, Order on Reconsideration, and Fourth Further Notice of Proposed Rulemaking, 35 FCC Rcd 7614, 7615 n.3 (2020) (defining “voice service provider” for the purposes of the Commission’s call blocking rules as including “any entity originating, carrying, or terminating voice calls through time-division multiplexing (TDM), Voice over Internet Protocol (VoIP), or commercial mobile radio service (CMRS)”). Additionally, interconnected VoIP providers acting as terminating, originating, intermediate, and/or gateway providers must accordingly also comply with the specific regulations targeting illegal robocalls that are applicable to each type of provider. Some commenters propose additional changes to the robocalling rules that are not necessarily tied to direct access to numbers or limited to interconnected VoIP providers. Electronic Privacy Information Center Comments at 3-16 (EPIC) (urging the Commission to provide “[m]ore explicit guidance to providers on what activities should be considered indicators of an illegal robocall operation,” “[a] list of methods providers should be required to use to maximize their opportunities to spot these indicators[,]” “[s]pecific actions providers should be required to take once the indicators are apparent,” “[a] clear statement that a provider’s failure to . . . use either the Commission’s proposed methods of spotting illegal robocall operations or a different but equally effective method, and . . . shut down access to the callers conducting an illegal robocall operation, will lead to the suspension and possible permanent expulsion of the provider from the numbering system,” and “greater transparency . . . regarding sources of potential robocall threats”); ZipDX, LLC Reply at 9 (ZipDX) (requesting that the Commission “migrate all automated calling to a new, non-geographic NPA (area code) specifically allocated for that purpose,” and require voice callers using automation “to register their campaigns”). We decline to adopt or address these proposals, as they are beyond the scope of this proceeding.

49 *VoIP Direct Access Further Notice*, 36 FCC Red at 12914, para. 14. Accordingly, should the Commission deem the applicant’s filing insufficient and remove it from the Robocall Mitigation Database, the applicant may not validly certify to this statement. As noted above, we proposed requiring interconnected VoIP providers to certify (continued….)
• neither the applicant nor any of its key personnel identified in the application are or have been subject to a Commission, law enforcement, or any regulatory agency investigation for failure to comply with any law, rule, or order, including the Commission’s rules applicable to unlawful robocalls or unlawful spoofing.50

16. The additional certifications we adopt today strike a balance between acknowledging interconnected VoIP providers’ disproportionate role in the facilitation of illegal robocalls,51 and ensuring that our approach is minimally burdensome and competitively neutral.52 Consistent with the record here,53 we do not adopt new obligations regarding STIR/SHAKEN caller ID authentication or robocall mitigation specifically for interconnected VoIP providers, but instead merely require those providers to certify that they will comply, or have complied, with certain preexisting requirements.54 These certifications are not redundant and serve an important proactive educational function—alerting interconnected VoIP providers at the outset of the direct access application process of important obligations, thereby helping to ensure robust compliance and foster a more trustful numbering ecosystem. As explained below, the certifications carry the weight of the Commission’s requirement that an officer or responsible official of the company attests under penalty of perjury, pursuant to section 1.16 of the Commission’s rules,55 that all statements in the application are true and accurate.56 These certifications (Continued from previous page) 

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that they will cooperate with various governmental agencies and the industry-led registered consortium regarding efforts to mitigate illegal or harmful robocalling or spoofing and traceback. See supra para. 14 n.42. In our recent Caller ID Authentication Sixth Report and Order, we expanded the scope of a similar Robocall Mitigation Database certification requirement to cover all providers. See Caller ID Authentication Sixth Report and Order at 18, para. 29-31. We thus decline to adopt our proposal here to avoid imposing redundant requirements.

50 VoIP Direct Access Further Notice, 36 FCC Rcd at 12914-15, para. 15. This certification is consistent with the reporting requirements recently adopted by the Commission for all providers to certify as to whether they have been the subject of a formal Commission, law enforcement, or regulatory agency action or investigation with accompanying findings of actual or suspected wrongdoing due to the filing entity transmitting, encouraging, assisting, or otherwise facilitating illegal robocalls or spoofing. Caller ID Authentication Sixth Report and Order at 25-26, para. 47; id. at 62-63 (amending 47 CFR § 64.6305 to include this new certification). We decline at this time to adopt our proposal to expand the sphere of proceedings (i.e., to include “actions” and “inquiries” in addition to investigations) covered by this certification, as we agree with RingCentral that the proposal was vaguely worded and therefore did not “provide[] sufficient notice to enable providers to comply.” RingCentral et al. Comments at 6. Additionally, we emphasize that being subject to an investigation would not necessarily disqualify an applicant from receiving direct access authority. In the event an applicant is not able to certify that it is not subject to a Commission, law enforcement, or regulatory agency investigation due to suspected unlawful robocalling or spoofing, an applicant can explain in its application why the investigation should not disqualify the applicant from receiving direct access authorization. For example, an applicant could provide information rebutting a warning letter (e.g., a cease-and-desist letter) of suspected illegal robocalling received from the Commission or FTC and/or a description of the steps the applicant has taken to respond to such a letter.

51 See Caller ID Authentication Sixth Report and Order at 19-20, para. 34.

52 This approach accords with our recent decision in the Caller ID Authentication Sixth Report and Order not to adopt heightened robocall mitigation standards for interconnected VoIP providers. See id.

53 See, e.g., CCA Reply at 1-2 (agreeing with commenters that “the manifold proposals to address illegal robocalls set forth in the Further Notice are largely redundant of existing requirements and are potentially counterproductive”); id. at 5 (arguing that new substantive requirements on interconnected VoIP providers “are more appropriately targeted to all voice service providers . . . [and] would require additional rulemakings”).

54 By requiring applicants to certify compliance with preexisting rule sections, we ensure that our approach does not cause confusion, and remains accurate should we decide to revise the robocall-related obligations applicable to voice service providers in the Call Authentication Trust Anchor or other robocall-related dockets.

55 47 CFR § 1.16. We also note that, by statute, any person that knowingly and willfully makes a false statement shall be fined or imprisoned or both. 18 U.S.C. § 1001.

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will thus serve the public interest by further deterring direct access applicants from engaging in unlawful robocalling or spoofing, and by giving the Commission another enforcement mechanism to use against bad actors. Our requirement that applicants certify that they are not subject to an investigation, including a robocall-related investigation, paired with our preexisting rule that authorization holders must maintain the accuracy of their certifications, will keep us informed of such investigations as they arise. Due to the persistence of robocalls and associated complaints nationwide, we unsurprisingly received broad support for adding robocall-specific certifications to direct access applications from governmental entities. RingCentral additionally supports our approach of strengthening our enforcement of already existing requirements.

17. Some commenters contend that these new certifications could incentivize interconnected VoIP providers to obtain numbers from the secondary market, rather than by applying for direct access. This, they posit, would be a negative outcome because direct access to numbers facilitates traceback requests and gives regulators better visibility into number utilization. While we agree with commenters regarding the benefits of direct access, we disagree that our new certifications will push interconnected VoIP providers into the secondary market. The additional certifications we adopt today are minimally burdensome as they do not add any new substantive obligations, and are only incremental to the existing certifications required by the Commission’s rules. We are therefore confident that the incremental cost of filing such certifications will not materially impact an interconnected VoIP provider’s decision regarding numbering resource acquisition.

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56 See VoIP Direct Access Further Notice, 36 FCC Rcd at 12918, para. 22.


60 See RingCentral et al. Reply at 3-4 (“[T]he Commission should focus on enforcing existing requirements.”).

61 See CCA Reply at 2 (stating that “proposed certification requirements and technical documentation are redundant, overly burdensome, and counterproductive in that they may drive providers back to the secondary market for numbers”).

62 See VON Comments at 4 (“Direct access to phone numbers will facilitate traceback efforts which, in turn, can help to quickly identify and stop illegal robocalling and other forms of calling fraud.”); CCA Reply at 2 (“Discouraging applications for direct number access could actually undermine the Commission’s robocall mitigation efforts, as well as hinder its efforts to track number utilization. Direct access to numbers facilitates traceback, improves visibility into number utilization, and promotes the transition from TDM to IP network infrastructure, among other benefits.”) (internal citations omitted).

63 See Bandwidth Reply at 6 (stating that “the bulk of the proposed rules are reasonable and appropriately targeted toward preventing potential abuses that harm the public interest while simultaneously continuing to encourage innovative and wanted services”). Moreover, to the extent this does occur, our accompanying Second Further Notice seeks to explore how we can reach interconnected VoIP providers that obtain their numbering resources other than through direct access. See infra Part IV.C.
18. **Notification of investigations post-grant.** In the VoIP Direct Access Further Notice, we proposed requiring direct access authorization holders to inform the Commission if the authorization holder is subject—either at the time of its application or after its filing or its grant—to a Commission, law enforcement, or regulatory agency action, investigation, or inquiry due to its robocall mitigation plan being deemed insufficient or problematic, or due to suspected unlawful robocalling or spoofing. We decline to adopt our proposal at this time. Because we adopt a new certification in this regard (as explained above), and because the Commission’s rules already contain a requirement that an authorization holder “[m]aintain the accuracy of all . . . certifications in its application,” and “file a correction with the Commission . . . within thirty (30) days” of any changes, adopting this proposal is unnecessary. By taking this approach, we address RingCentral’s concern regarding adding a potentially confusing additional layer of reporting requirements beyond what is already required by the current rule. We are satisfied that our current requirement to keep all certifications up-to-date will capture our new robocall-related certifications, and will keep us apprised of any new investigations involving interconnected VoIP direct access authorization holders.

2. **Enhanced Disclosure and Review of Ownership and Control of Applicants**

19. We adopt rules to require the disclosure and review of foreign ownership and control of interconnected VoIP direct access applicants. The Commission has recognized that “[i]llegal robocalling often originates from sources outside the United States,” and “[t]he Commission and Congress have long acknowledged that illegal robocalls that originate abroad are a significant part of the robocall problem.” Indeed, in 2020, the North American Numbering Council (NANC), the Commission’s advisory committee of outside experts on telephone numbering matters, stated that “it is a long-standing problem that international gateway traffic is a significant source of fraudulent traffic.” The Commission accordingly strives to stay abreast of foreign companies using U.S. telephone numbers. For example, it has stressed that “[e]nsuring that foreign voice service providers using U.S. telephone numbers comply with the certification requirements prior to being listed in the database is especially important in light of the prevalence of foreign-originated illegal robocalls aimed at U.S. consumers and the difficulty in eliminating such calls.” VoIP providers require particular scrutiny in the robocall area as well, given

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64 *VoIP Direct Access Further Notice*, 36 FCC Rcd at 12914-15, para. 15.
66 See RingCentral et al. Comments at 6.
67 *Advanced Methods to Target and Eliminate Unlawful Robocalls; Call Authentication Trust Anchor*, CG Docket No. 17-59 et al., Declaratory Ruling and Third Further Notice of Proposed Rulemaking, 34 FCC Rcd 4876, 4902, para. 82 (2019); see also, e.g., *One Eye LLC*, EB-TCD-20-0031678 and EB Docket No. 22-174, Final Determination Order (rel. May 11, 2023) (directing downstream voice providers to block traffic from gateway provider found to be transmitting illegal robocalls that originated overseas).
70 *Call Authentication Trust Anchor*, WC Docket No. 17-97, Second Report and Order, 36 FCC Rcd 1859, 1906, para. 91 (2020). Foreign ownership of providers serving our nation’s consumers also is a matter of concern for the Commission generally, as it may pose national security and/or law enforcement risks to the United States. *Review of* (continued….)
that “[t]he rising tide of robocalls and the emergence of VoIP go hand in hand.”71 In fact, “[t]oday, widely available VoIP software can allow bad actors with malicious intent to make spoofed calls with minimal technical experience and cost.”72 As a result, “[a]llowing [VoIP providers with foreign ownership or control] direct access to numbers and critical numbering databases raises a number of potential risks, including the impact to number conservation requirements; questions related to jurisdiction, oversight, and enforcement of numbering rules; consideration of assessment of taxes and fees upon foreign-owned entities; and potential national security and law enforcement risks with access to U.S. telecommunications network operations.”73 These factors make it important for the Commission to know about foreign ownership of interconnected VoIP providers seeking direct access to our nation’s finite numbering resources, especially because a number of providers with substantial foreign ownership have applied to obtain direct access to numbering resources since the 2015 VoIP Direct Access Order.74

20. The current rules on direct access applications, however, do not require interconnected VoIP providers to disclose any information about their ownership or affiliation, nor do they specify a process to evaluate applications with substantial foreign ownership. The VoIP Direct Access Further Notice therefore proposed requirements aimed at ascertaining the foreign ownership and control of interconnected VoIP applicants and tentatively concluded that applicants should disclose any 10% or

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greater “equity and/or voting interest, or a controlling interest.” It also proposed requiring such applicants to identify any interlocking directorates with a foreign carrier, as well as any affiliation with a foreign carrier. As discussed below, we now adopt ownership disclosure requirements for interconnected VoIP direct access applicants, and relatedly conclude that applications from such providers will be placed on a “non-streamlined” processing track if the applicant has a foreign owner whose interest exceeds the reporting threshold set forth in section 63.18(h) of the Commission’s rules, which we incorporate for purposes of ownership reporting here.

21. **Ownership disclosure requirements.** We adopt a rule to require interconnected VoIP applicants for a Commission direct access authorization to provide all of the information, disclosures, and certifications required by sections 63.18(h) and (i) of the Commission’s rules. If the applicant does not have information required to be provided under sections 63.18(h) and (i), the application must include a statement to that effect. This approach ensures the requirements for interconnected VoIP direct access applicants match the requirements for international section 214 applications, as well as applications for submarine cable landing licenses (which likewise cross-reference section 63.18(h)). It also ensures the requirements for interconnected VoIP direct access applicants will remain consistent with the requirements for international section 214 applicants regardless of any modifications to sections 63.18(h) or (i). We find that adopting a reporting threshold consistent with that used in other Commission

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76 Id.; see 47 CFR § 63.09(g)(1).


78 47 CFR § 63.18(h) (requiring “[t]he name, address, citizenship and principal businesses of any person or entity that directly or indirectly owns at least ten percent of the equity of the applicant, and the percentage of equity owned by each of those entities (to the nearest one percent . . . .”); 47 CFR § 63.18(i) (requiring “[a] certification as to whether or not the applicant is, or is affiliated with, a foreign carrier. The certification shall state with specificity each foreign country in which the applicant is, or is affiliated with, a foreign carrier.”); see infra note 80 (addressing amendments to section 63.18(h), and addressing a rulemaking proceeding in which the Commission sought comment on changing the requirement in section 63.18(h)).

79 47 CFR § 1.767(a)(8)(i); see also Review of International Section 214 Authorizations to Assess Evolving National Security, Law Enforcement, Foreign Policy, and Trade Policy Risks; Amendment of the Schedule of Application Fees Set Forth in Sections 1.1102 through 1.1109 of the Commission’s Rules, IB Docket No. 23-119, MD Docket No. 23-134, Order and Notice of Proposed Rulemaking, FCC 23-28, at *64, para. 172 (rel. Apr. 25, 2023) (Evolving Risks Order and NPRM) (seeking comment on amending section 1.767(a)(8)(i) of the rules to remove the reference to section 63.18(h) and retain the current 10% reporting threshold for submarine cable landing license applications); see infra note 80.

80 For example, the Commission adopted changes to section 63.18(h) in 2020. See Process Reform for Executive Branch Review of Certain FCC Applications and Petitions Involving Foreign Ownership, IB Docket No. 16-155, Report and Order, 35 FCC Rcd 10927, 10985, Appx. B, para. 11 (2020) (Executive Branch Process Reform Order); Process Reform for Executive Branch Review of Certain FCC Applications and Petitions Involving Foreign Ownership, IB Docket No. 16-155, Erratum, 35 FCC Rcd 13164, 13173, para. 11 (2020) (Order Erratum) (amending section 63.18(h) to read, “[t]he name, address, citizenship, and principal businesses of any individual or entity that directly or indirectly owns at least ten percent of the equity interests and/or voting interests, or a controlling interest, of the applicant, and the percentage of equity and/or voting interest owned by each of those entities (to the nearest one percent) . . . .”). The amendments to section 63.18(h), however, are not yet effective. Federal Communications Commission, Process Reform for Executive Branch Review of Certain FCC Applications and Petitions Involving Foreign Ownership, 85 Fed. Reg. 76360, 76376, 76385-86 (Nov. 27, 2020). The Commission also has a pending rulemaking proceeding seeking comment, among other things, on whether to adopt a new ownership reporting threshold that would require disclosure of certain 5% percent or greater direct and indirect equity and/or voting interests with respect to applications for international section 214 authority and modification, assignment, transfer of control, and renewal of international section 214 authority, and on whether to apply the 5% reporting threshold to encompass all equity and voting interests, regardless of whether the interest holder is a domestic or foreign individual or entity. Evolving Risks Order and NPRM at *38-41, paras. 88-97. In (continued….)
application processing regimes promotes certainty and transparency. This approach also ensures there is no undue burden on direct access applicants, since many companies already provide the same or similar information to the Commission in other contexts.

22. Adopting the same standards that will be used for international section 214 applications, in particular, is appropriate given our focus on national security and law enforcement concerns and reducing risks of illegal robocalling facilitated by potential bad actors abroad. Requiring ownership information, from a U.S.- or foreign-owned applicant, will assist Bureau staff in their existing practice of identifying applications that require further review to determine whether the direct access applicant’s ownership, control, or affiliation raises national security and/or law enforcement concerns. Indeed, “[i]t is axiomatic that the Commission needs accurate information in order to carry out its work, and this is especially true with regard to compliance with foreign ownership disclosures. In several recent cases the Commission has found that foreign ownership of telecommunications companies providing services in the United States may pose a risk to national security, law enforcement interests, or the safety of U.S. persons.” As noted above, several providers with substantial foreign ownership have applied to obtain direct access to numbering resources since adoption of the 2015 VoIP Direct Access Order, making the initial review process especially important to address the risk of providing access to our numbering resources to potential bad actors abroad. This requirement also will cause applicants to conduct robust due diligence, thus increasing the reliability of their information.

23. The record largely supports instituting some form of ownership disclosure for direct access applicants. VON and Microsoft, however, argue that a foreign ownership reporting requirement (Continued from previous page) that proceeding, the Commission stated, “[t]he current 10% reporting threshold may not capture all foreign interests that may present national security, law enforcement, foreign policy, and/or trade policy concerns.” Id. at *38, para. 89. If the Commission amends 63.18(h) by adopting a 5% reporting threshold, we direct the Bureau to seek comment on whether applicants for a direct access authorization should disclose information, including the name, address, citizenship, and principal business, of any individual or entity that directly or indirectly owns 5% percent or greater equity and/or voting interests, or a controlling interest, of the applicant. Based upon the Bureau’s review of the comments, we further delegate to the Bureau the authority to address any such final threshold requirement in a public notice.


82 Note that applicants seeking assignment or transfer of control of an international section 214 authorization are also subject to the ownership-disclosure requirement in section 63.18(h) pursuant to section 63.24. See 47 CFR § 63.24.


84 See id. at 12918-19, paras. 23-24 & n.73 (citing NANC, Report on Foreign Ownership of Interconnected Voice over Internet Protocol Applicants, at 3-5 (June 29, 2017) (NANC Report on Foreign Ownership), http://nanc-chair.org/docs/mtg_docs/June17_NANC_Report_on_Foreign_Ow nership_of_Interconnected_VOIP_Applicants.pdf); see also International Section 214 Authorization Order and Notice at 14-17, paras. 16-23 (requiring all international section 214 authorization holders to respond to a one-time collection to update the Commission’s records regarding the foreign ownership of international section 214 authorization holders). We do not require ownership disclosures by existing interconnected VoIP direct access authorization holders but seek comment on whether they should provide such information in the Second Further Notice accompanying this Second Report and Order. See infra para. 81.


86 See supra para. 19 n.74.

87 See Bandwidth Inc. and Bandwidth.com CLEC, LLC Comments at 16 (Bandwidth Comments) (ownership, generally); Twilio Comments at 7 (Twilio “supports the proposal to require interconnected VoIP applicants seeking (continued….)
“will add unnecessary time and expense to the review process without any obvious purpose or anticipated reduction in illegal robocalls.”88 While we recognize that an ownership disclosure requirement constitutes an additional step in the direct access application process for interconnected VoIP providers, we conclude that the public interest in receiving this information outweighs any incremental cost on applicants. Interconnected VoIP providers that seek access to telephone numbers on a permanent basis acquire both the rights and obligations associated with using that access in the public interest,89 and we must ensure that access does not result in illegal practices that harm consumers. As noted above, the ownership disclosures we adopt are like those required in several other Commission application processes, so requiring the same kind of disclosure here is not unduly onerous.90 Moreover, an applicant that is a privately held entity should know its investors and maintain records of their significant direct or indirect equity and/or voting interest holders in the ordinary course of business. An applicant that is a publicly held company is also required to identify its interest holders in requisite filings with the U.S. Securities and Exchange Commission (SEC).91 As in other contexts requiring the same kind of ownership disclosure, the relatively minor burden of disclosing ownership information in a direct access application is outweighed by the public interest benefit of the Commission having the information when the application is filed, in time to address potential issues raised by foreign ownership before granting an

88 VON Comments at 5-6 (stating that the Commission “has reviewed nearly 150 VoIP direct access to number applications in the past six years, and can cite to just four instances when applicants were asked to provide additional ownership information”) (footnote omitted); see also Microsoft Reply at 3 (agreeing with VON in opposing ownership disclosure requirements).

89 VoIP Direct Access Order, 30 FCC Rcd at 6851-52, 6878, paras. 27, 78 (stating that interconnected VoIP providers must comply with all numbering rules, industry guidelines and practices, and that the Commission has authority to extend to interconnected VoIP providers both the rights and obligations associated with using telephone numbers).

90 Twilio argues that applicants for growth numbering resources should not have to disclose ownership information in those applications because they would already have been granted access to numbers. Twilio Comments at 8. We are not revising the rules on applications for growth numbering resources in 47 CFR § 52.15(g)(4). We do, however, address below the duty to update ownership disclosures when the relevant information changes. See infra paras. 28-31.

applicant rights or privileges.\textsuperscript{92}

24. \textit{Non-streamlined pleading cycle for direct access applicants with reportable foreign ownership.} As proposed in the \textit{VoIP Direct Access Further Notice}, we amend our rules to state that the Bureau will remove applications from streamlined processing whenever the applicant has reportable foreign ownership, meaning ownership or control by a foreign entity that meets or exceeds the threshold for disclosure under section 63.18(h) of the Commission’s rules, as now incorporated in section 52.15(g)(3).\textsuperscript{93} The rule formalizes the current practice of taking applications with substantial foreign ownership off the streamlined processing cycle.\textsuperscript{94}

25. Allowing sufficient time for review of applications with reportable foreign ownership will help the Bureau identify and assess potential national security and law enforcement risks raised by such applications, and provide transparency to applicants regarding the timeframe for processing their applications. Twilio supported this proposal, and no commenter opposed it.\textsuperscript{95}

26. \textit{Referral of applications with reportable foreign ownership to Executive Branch agencies.} We decline to automatically refer to the Executive Branch agencies interconnected VoIP providers’ direct access applications that have reportable foreign ownership or control.\textsuperscript{96} There was a lack of strong record support for automatic referrals. Moreover, given the limited number of referrals to date, it is more prudent and efficient to continue the current practice under 1.40001(a) of the rules, where the Commission, in its discretion, makes case-by-case referrals of direct access applications if it finds that “the specific circumstances of an application require the input of the Executive Branch as part of [the Commission’s] public interest determination of whether an application raises national security, law enforcement, foreign policy, and/or trade policy concerns.”\textsuperscript{97}

27. \textit{Development of standard questions.} We also decline to develop a list of “Standard Questions” for interconnected VoIP applicants with reportable foreign ownership or control. While the Commission has adopted “a standardized set of national security and law enforcement questions (Standard Questions) that certain applicants and petitioners . . . with reportable foreign ownership will be required to answer as part of the Executive Branch review process,”\textsuperscript{98} there was no strong record support for developing such questions for all interconnected VoIP direct access applicants with reportable foreign ownership. Given the lack of a developed record and our decision not to automatically refer applications

\textsuperscript{92} See FCC Enforcement Advisory: FCC Licensees and Authorization Holders Must Timely Disclose Changes in Foreign Ownership and Control, Public Notice, DA 23-336, at 2 (EB Apr. 20, 2023) (“Enforcement Advisory”) (“The Commission’s public interest analysis of ownership and control of applicants for Commission licenses [under 47 USC § 214] rests, in part, on an applicant’s foreign ownership structure as it exists at the time the Commission considers the application, and in connection with such consideration, refers an application to the Executive Branch for review. The level of foreign ownership or control at the time of a review may also inform the analysis of whether these risks can be mitigated.”).


\textsuperscript{94} See \textit{VoIP Direct Access Further Notice}, 36 FCC Rcd at 12920, para. 26 (“Pursuant to the Executive Branch Review Order, the Commission, in its discretion, recently has referred a number of direct access to numbering applications where there is substantial foreign ownership of the applicant to the Committee.”).

\textsuperscript{95} Twilio Comments at 7.


\textsuperscript{97} \textit{Executive Branch Process Reform Order}, 35 FCC Rcd at 10935-36, para. 24 & n.55; see 47 CFR § 1.40001(a).

to the Executive Branch agencies when an interconnected VoIP provider has reportable foreign ownership, we find it appropriate to rely on the current practice, under which Commission staff and the Executive Branch agencies can request additional information from applicants on a case-by-case basis.99

28. **Duty to update ownership information.** To ensure ownership information remains up to date, we revise section 52.15(g)(3) to require interconnected VoIP providers that obtain direct access authorization under the revised rules to submit an update to the Commission and each applicable state (i.e., each state where the provider has acquired or applied to receive numbers from the state at the time of the ownership change) within 30 days of any change to the reportable ownership information disclosed in their direct access applications, or if a provider that previously did not have reportable ownership information comes to have reportable foreign ownership information.100 Alternatively, if the provider that obtained direct access authorization under our revised rules did not have reportable ownership percentages and information (whether on domestic or foreign owners) at the time of its original application, but subsequently has reportable information, we require it to provide the information as an update to its authorization within a 30-day timeframe.101 We also delegate authority to the Bureau to direct the Numbering Administrator to suspend number requests if the Bureau determines, based on updated information, that further review of the direct access authorization is necessary.

29. This requirement builds upon the current rules, which require each interconnected VoIP provider with direct access to numbering resources to maintain the accuracy of all the contact information and certifications submitted in its application, and to file a correction with the Commission and each applicable state within 30 days of any change to the contact information or certifications.102 Going forward, obtaining such updates regarding changes to ownership information will help us ensure that direct access authorization holders’ ownership does not change post-authorization in a manner contrary to the public interest, such as introducing a potential bad actor-owner that facilitates illegal robocalling, poses a threat to the national security and law enforcement interests of the United States, or otherwise engages in conduct detrimental to the public interest. Under the current rules, bad actors could surreptitiously strengthen their influence on authorization holders by increasing their ownership after the Commission grants the initial authorization, thereby evading Commission oversight and undermining enforcement efforts if that change in ownership levels did not have to be reported. By requiring all ownership information to be updated within 30 days of a change, potential bad actors can no longer remain hidden from view. In fact, such information can be used to determine whether a change in authorization is warranted (e.g., making the authorization be conditioned on a mitigation agreement, or even revoking the authorization).103

30. The National Association of Attorneys General supports requiring interconnected VoIP

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99 See 47 CFR § 1.745.

100 [VoIP Direct Access Further Notice](https://www.fcc.gov/), 36 FCC Rcd at 12921-22, para. 30; see Appx. A, § 52.15(g)(3)(x)(A). For example, if a provider had no reportable ownership information at the time of its application but a person or entity later came to possess more than 10% of the equity in the provider, the provider would have to report the change. If a provider had reportable ownership information at the time of its application but the ownership changes (e.g., a holder of 10% of the equity came to hold 50%), the provider would have to report than change. But if there is a change in ownership that does not reach the reportable level (e.g., a holder of two percent of the equity came to hold six percent), no update would have to be filed.


103 See 47 CFR § 52.15(g)(3)(iv)(A). To further serve the public interest in protecting finite numbering resources from misuse by bad actors at home and abroad, in the Second Further Notice we adopt today, we propose to require currently existing interconnected VoIP authorization holders to provide ownership disclosures.
authorization grantees to update their ownership information after a change.\textsuperscript{104} Some commenters oppose it,\textsuperscript{105} however, arguing that such a requirement would be onerous and unnecessary, especially with regard to information that has no bearing on the Commission’s objective to prevent foreign bad actors from gaining direct access to U.S. numbers, and is not competitively neutral because non-VoIP providers would not have to provide it.\textsuperscript{106} Twilio also questions whether the 30-day deadline is truly necessary to advance the Commission’s objectives, rather than an annual or biennial update.\textsuperscript{107}

31. We reject these arguments because we believe the public interest benefit of a requirement to keep all ownership data up to date within 30 days of a change outweighs the minimal burden on grantees. As stated in the \textit{VoIP Direct Access Further Notice}, “obtaining such updates will help us to ensure that the ownership [of grantees] does not change post-authorization in a manner that evades the purpose of application review.”\textsuperscript{108} Absent an update requirement, applicants could skirt the more extensive review that applies to applications with reportable foreign ownership simply by delaying the investment by a foreign entity. This could even occur unintentionally as the result of an unexpected investment or buyout by a foreign entity. In either case, the update requirement helps ensure authorization holders with reportable foreign ownership receive an appropriate level of scrutiny in light of their changed ownership, so the Commission could consider, for example, whether the provider should enter a robocall mitigation agreement.\textsuperscript{109} We also conclude that requiring updates within 30 days, rather than annually or biennially, is a better way to ensure the Commission has current information, and that providing updated ownership information is relevant to our efforts to eliminate illegal robocalls for all the reasons stated above regarding providing foreign ownership data in applications.\textsuperscript{110} Finally, while non-VoIP direct access applicants are not covered by this new rule, we do not believe the burden on interconnected VoIP providers is so large as to affect competition, and in any event do not foreclose imposing this same duty on non-VoIP applicants in the future.

32. \textit{Filing procedure}. We require all updated or corrected ownership information to be filed in the Electronic Comment Filing System (ECFS) through the Direct Access intake docket (Inbox 52.15) and via e-mail to DAA@fcc.gov, unless the Bureau specifies another method.\textsuperscript{111} We note that the Bureau may request additional documentation as necessary.

33. \textit{State submission requirement}. Interconnected VoIP providers obtaining direct access authorization under the revised rules we issue today also are required to submit updated or corrected

\textsuperscript{104} See NAAG Reply at 5 (“State AGs support . . . requiring that holders of direct access authorization update the Commission and applicable states within thirty days of any change to the ownership information submitted to the Commission.”).

\textsuperscript{105} Twilio Comments at 7-8; VON Comments at 5-6; CCA Reply at 4.

\textsuperscript{106} Twilio Comments at 7-8; VON Comments at 5-6; CCA Reply at 4.

\textsuperscript{107} Twilio Comments at 8 (“If the Commission determines that post-grant ownership updates are necessary, such updates should be limited in scope and narrowly tailored to serve the Commission’s goals. The Commission should carefully consider whether such updates are truly needed within 30 days of a change, or whether some other routine, but less frequent reporting period would suffice (e.g., an annual or biennial update.”).

\textsuperscript{108} \textit{VoIP Direct Access Further Notice}, 36 FCC Red at 12921-22, para. 30. No commenter proposed a “materiality threshold” to determine when ownership data updates must be filed, and we therefore decline to adopt one.

\textsuperscript{109} See Enforcement Advisory at 2 (“Any subsequent undisclosed and unauthorized assignments or transfers of control [by section 214 licensees] may alter the national security and law enforcement risk analyses, including whether and how these risks can be mitigated. Absent proper disclosures to the FCC, the Commission’s initial public interest determination may no longer apply, because a non-notified transfer or assignment may introduce a new threat which presents an ongoing and unmitigated risk to national security or law enforcement interests.”).

\textsuperscript{110} See supra paras. 19-23.

\textsuperscript{111} \textit{VoIP Direct Access Further Notice}, 36 FCC Red at 12922, para. 32.
ownership information to the states from which the authorization holder has acquired or requested numbers at the time of the ownership change.\textsuperscript{112} Such information should be submitted to states in the same manner the providers would submit a correction or update to their original applications.\textsuperscript{113}

34. \textit{Executive Branch agencies’ review of corrected information.} As proposed in the \textit{VoIP Direct Access Further Notice},\textsuperscript{114} we also delegate authority to the Bureau to direct the Numbering Administrator, pursuant to its applicable procedures, to suspend all pending and future requests for numbers if the updated or corrected ownership information submitted by an authorization holder indicates a material change or discloses new information such that additional investigation is necessary to confirm that the authorization still serves the public interest. In the foreign ownership context, if updated or corrected ownership information leads the Commission to refer the authorization holder to the Executive Branch agencies, the Bureau shall also direct the Numbering Administrator to suspend all pending and future requests for numbers until such review is complete and a determination is made by the Bureau.

35. \textit{Use of numbers after submission of updated or new information.} Finally, we note that authorization holders may continue to use numbers they obtained prior to submitting updated or corrected ownership information to the Bureau unless the Bureau determines that the authorization must be revoked per the formal revocation procedure we adopt below.\textsuperscript{115}

3. \textbf{Certifying Compliance with Other Commission Rules}

36. Under our current rules, interconnected VoIP providers seeking to obtain numbers must comply with various obligations that are designed to enhance public safety, prevent access stimulation and intercarrier compensation abuse, ensure that Commission broadband maps are accurate, and ensure that providers actually provide the service they describe.\textsuperscript{116} As we do in the robocall context above, we increase our enforcement capabilities and strengthen those rules by requiring interconnected VoIP providers to make certifications regarding their compliance with those rules in their direct access applications.

37. \textit{Public safety certification.} Consistent with our proposal in the \textit{VoIP Direct Access Further Notice},\textsuperscript{117} we revise section 52.15(g)(3) of the Commission’s rules to require interconnected VoIP applicants for direct access authorization\textsuperscript{118} to certify that they comply with the Communications Assistance with Law Enforcement Act (CALEA).\textsuperscript{119} We also require applicants to provide evidence in their application that demonstrates their compliance with the Commission’s part 9 public safety rules and CALEA.\textsuperscript{120} We additionally delegate to Bureau or other Commission staff the right to request additional

\textsuperscript{113} See 47 CFR § 52.15(g)(3)(iv)(A).
\textsuperscript{114} \textit{VoIP Direct Access Further Notice}, 36 FCC Rcd at 12921-22, para. 30.
\textsuperscript{115} See infra Part III.B.3.
\textsuperscript{116} 47 CFR § 52.15(g)(3)(i) and (iv).
\textsuperscript{117} \textit{VoIP Direct Access Further Notice}, 36 FCC Rcd at 12915, para. 16.
\textsuperscript{118} The 911 obligations found in part 9 of the Commission’s rules apply both to two-way interconnected VoIP providers and one-way interconnected VoIP providers. See 47 CFR § 9.3. As only two-way interconnected VoIP providers may receive direct access to numbers under 47 CFR § 52.15(g)(3), this certification requirement only applies to two-way interconnected VoIP providers.
\textsuperscript{119} 47 U.S.C. § 1001 \textit{et seq.} Our rules already require an applicant for direct access authorization to certify that it complies with “its 911 obligations under 47 CFR part 9.” 47 CFR § 52.15(g)(3)(i)(E).
\textsuperscript{120} To preserve flexibility and minimize burdens, we decline to prescribe precisely what evidence should be submitted to satisfy this requirement. We note that technical specifications and call-flow diagrams “have been helpful to Commission staff in assessing direct access applicants’ compliance with 911 service and CALEA

(continued….)
documentation from the applicant to demonstrate compliance with these public safety obligations, where necessary. 121

38. As with the other certifications we adopt today, this new certification requirement will provide the Commission with additional enforcement abilities should the Bureau find that an authorization holder does not in fact comply with our public safety rules or CALEA. Our requirement to provide evidence of compliance with these obligations merely formalizes the preexisting Bureau practice of requesting such evidence after an application’s submission. By requiring this evidentiary showing at the outset, we promote efficiency by ensuring Bureau staff have the relevant documentation when they begin their application review. Additionally, because the ability to provide public safety answering points (PSAPs) with caller location and call-back numbers necessitates two-way interconnection with the public switched telephone network (PSTN), this requirement will help Bureau staff assess whether an applicant actually provides interconnected VoIP service.

39. Several parties support this measure. 122 The Maine Public Utilities Commission suggests that we should additionally require providers to submit the 911-related documentation to state regulatory and public safety agencies. 123 We decline to take this approach because state regulatory agencies vary widely in terms of their jurisdiction over interconnected VoIP providers. While some states treat interconnected VoIP providers like communications service providers for specified purposes, 124 others have statutes expressly limiting or removing their jurisdiction over interconnected VoIP providers altogether. 125 A general requirement to send such documentation to state regulatory agencies would not be tailored appropriately to ensure only those agencies that have an interest in that information would receive it. Tailoring such a requirement to apply only to those states with jurisdiction over interconnected VoIP providers is also undesirable because it would create regulatory asymmetry that is not competitively neutral. We address additional state-related issues in Part III.A.4 below.

40. Access Stimulation certification. The VoIP Direct Access Further Notice sought comment on possible changes to our direct access authorization rules to help combat Access Stimulation and other forms of intercarrier compensation arbitrage. 126 In April of this year, we adopted a Second Report and Order in the Access Arbitrage docket which closed perceived loopholes in our Access Stimulation rules that some entities, including interconnected VoIP providers, were exploiting to the detriment of interexchange carriers (IXCs) and their end-user customers. 127 Given the revisions to our Access Stimulation rules adding new requirements for Internet Protocol Enabled Service (IPES) Providers—which include interconnected VoIP providers 128—we adopt a new certification that cross-

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references those new rules to help ensure applicants for direct access to numbers are aware of, and comply with them. 130 We thus revise section 52.15(g)(3) of the Commission’s rules to require interconnected VoIP providers applying for direct access to numbers to certify that they comply with our Access Stimulation rules found in 47 CFR § 51.914. 131

41. We adopt this requirement to help alleviate concerns that direct access authorization will be used to evade our Access Stimulation rules when the applicant is directly or indirectly related to an entity suspected of being an access stimulator. 132 This requirement will provide an additional enforcement mechanism if it is violated, including the potential for revocation of the provider’s direct access authorization. As with the other certifications we adopt today, we expect the threat of enforcement action related to a false certification to deter applications by those that would violate our rules, including those related to Access Stimulation. 133

42. Commenters in both the Direct Access and our Access Arbitrage dockets have expressed support for this type of certification requirement as a means to deter interconnected VoIP providers from engaging in schemes to avoid the Access Stimulation rules. 134 Verizon, for example, stated that “IPES providers with direct access should acknowledge and affirmatively agree to observe the Commission’s access stimulation rules. Access stimulating IPES providers would face consequences for making false certifications to the Commission.” 135 AT&T agreed with Verizon, stating that “[s]uch a requirement will give the Commission an additional arrow in its quiver in the fight against harmful arbitrage schemes and should not place an undue administrative burden on IPES providers.” 136 We believe that these benefits Verizon and AT&T raise outweigh the concerns from some commenters that certifications that require

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129 See Access Arbitrage Second Report and Order at 2, para. 2 & n.1.

130 See Verizon Reply at 2 (“To combat this problem fully, the Commission should amend Parts 51 and 61 of its rules—either instead of or in addition to amending the Part 52 numbering rules and adopting certification requirements—to ensure that VoIP providers are not facilitating and profiting from access stimulation.”).

131 47 CFR § 51.914.

132 In our recent Access Arbitrage Second Report and Order, we noted that, “[d]espite multiple orders and investigations making clear the Commission will not tolerate access arbitrage, some providers continue to manipulate their call traffic or call flows in attempts to evade our rules. Recently, [local exchange carriers (LECs)] have inserted [IPES] Providers into call paths as part of an ongoing effort to evade our rules and to continue to engage in access stimulation. After inserting an IPES Provider into the call flow, the LEC then claims that it is not engaged in access stimulation as currently defined in our rules.” Access Arbitrage Second Report and Order at 2, para. 2; see, e.g., AT&T Opposition at 2 (opposing a grant of direct access authorization to a provider that “appear[s] to be closely associated with” a known access stimulator, and stating that “some companies have continued to abuse and exploit loopholes in” the Commission’s Access Stimulation rules).

133 AT&T Corp. v. Wide Voice LLC, Bureau ID No. EB-20-MD-005, 36 FCC Rcd 9771, 97712, 9775-76, 9779-84, paras. 6, 13, 21-30 (2022), aff’d sub nom. Wide Voice LLC v. FCC, 61 F.4th 1018 (9th Cir. 2023).

134 See, e.g., AT&T Services, Inc. Reply, WC Docket No. 18-155, at 3 (rec. Oct. 3, 2022); Verizon Comments, WC Docket No. 18-155, at 19 (rec. Sept. 6, 2022); Bandwidth Comments at 9 n.9; Verizon Reply at 2 (supporting a certification requirement for direct access applicants paired with amendments to Parts 51 and 61 “of the Commission’s rules as a way to “combat [the Access Stimulation] problem fully”).


136 AT&T Services, Inc. Reply, WC Docket No. 18-155, at 3 (rec. Oct. 3, 2022); see also AT&T Opposition at 3 (“The Commission’s review of [direct access] Applications should ensure that . . . Applicants’ requests for additional numbering resources will not promote access arbitrage activities or call congestion.”). Other commenters in that docket also supported taking steps to stop IPES Providers from engaging in Access Stimulation. See, e.g., Bandwidth, Inc. et al. Comments, WC Docket No. 18-155, at 3-4 (rec. Sept. 6, 2022); Inteliquent, Inc. Comments, WC Docket No. 18-155, at 3-9 (rec. Sept. 6, 2022); Lumen Comments, WC Docket No. 18-155, at 3-6 (rec. Sept. 6, 2022); USTelecom Comments, WC Docket No. 18-155, at 2 (rec. Sept. 6, 2022).
interconnected VoIP providers to state their compliance with existing rules are duplicative or unnecessary.\(^{137}\)

43. We decline to adopt additional requirements beyond the certification at this time,\(^{138}\) as our newly adopted Access Stimulation rules are designed to help address the issues that commenters have noted in this docket.\(^{139}\) Should we find that more action is necessary to restrict interconnected VoIP providers’ engagement in Access Stimulation schemes, we reserve the ability to revisit our conclusion here. We also agree with CCA that many of the suggestions we received in the record “go well beyond the scope of the Further Notice, [and] are not specifically related to interconnected VoIP providers directly obtaining telephone numbers.”\(^{140}\)

44. **FCC Form 477 and 499 filings.** Under our rules, interconnected VoIP providers that have qualifying subscribers must file FCC Forms 477 and 499.\(^{141}\) As proposed in the *VoIP Direct Access Further Notice*, we revise section 52.15(g)(3) of the Commission’s rules to require interconnected VoIP providers that must file FCC Forms 477 and 499 to provide evidence that they have complied with these obligations, and any successor filing obligations, when filing a direct access application.\(^{142}\) Should providers not have evidence of filing these forms, their certification should explain the reasons why. The 2015 *VoIP Direct Access Order* noted that during the procedural review of direct access applications, Bureau staff routinely verify that both FCC Forms 477 and 499 have been filed, if applicable.\(^{143}\) Our new rule formalizes this inquiry into an application requirement which, again, promotes efficiency and adds another layer of enforcement capability. We note that submission of FCC Forms 477 and 499 filing receipts would constitute *prima facie* evidence of compliance with these rules.\(^{144}\) We also note that,

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\(^{137}\) See, e.g., Lumen Comments at 12; CCA Reply at 2.

\(^{138}\) See, e.g., AT&T Comments at 6; Bandwidth Comments at 15-16; Lumen Comments at 3-12; Verizon Reply at 3-10.

\(^{139}\) *See supra* para. 40.

\(^{140}\) CCA Reply at 5-6.

\(^{141}\) Interconnected VoIP providers that have one or more revenue-generating end-user customers must file FCC Form 477, a semiannual reporting obligation that, for interconnected VoIP providers, collects data regarding (1) the number of service subscriptions sold to their own end-user customers by census tract and, for each census tract, shall provide the number of subscriptions provided under consumer service plans; and (2) the service characteristics for its subscriptions in each state. FCC, FCC Form 477 Local Telephone Competition and Broadband Reporting Instructions for Filings as of December 31, 2019 and Beyond at 20, 23-24 (May 21, 2020), https://www.reginfo.gov/public/do/DownloadDocument?objectID=109891201; see 47 CFR § 1.7001(b)(4). The Commission also requires interconnected VoIP providers to report each year on the FCC Form 499-A the revenues they receive from offering service. See 47 CFR § 64.1195; Wireline Competition Bureau Releases the 2021 Telecommunications Reporting Worksheets and Accompanying Instructions, WC Docket No. 06-122, Public Notice, 35 FCC Rcd 13671, 13671 nn.1, 2 (WCB 2020); see also 47 CFR §§ 54.706(a)(18), 54.708, 54.711, 54.713. FCC Form 499-A is an annual reporting obligation that permits the calculation of the filer’s universal service contribution obligation, among other financial obligations, based on its historical revenues from the prior year. See Universal Serv. Admin. Co., *Forms to File*, https://www.usac.org/service-providers/contributing-to-the-usf/forms-to-file (last visited July 14, 2023).

\(^{142}\) *VoIP Direct Access Further Notice*, 36 FCC Rcd at 12916, para. 18.

\(^{143}\) *VoIP Direct Access Order*, 30 FCC Rcd at 6858, para. 39 n.131. As acknowledged in the *VoIP Direct Access Order*, a new interconnected VoIP provider “may not have a Form 477 on file at the time that it seeks to obtain numbers” given that it may be seeking direct access to numbers as part of launching a new service. *Id.* at 6851, para. 25. For providers that do not have eligible subscribers at the time of filing their direct access applications, we expect but do not require such providers to submit evidence of their submissions when they become obligated to do so under our rules.

\(^{144}\) The FCC Form 477 filing system will no longer be used to collect new FCC Form 477 submissions, and will remain open only for filers to make corrections to existing FCC Form 477 filings for data as of June 30, 2022 and (continued….)
beginning with data as of December 31, 2022, providers, including interconnected VoIP providers, are required to submit the following data using the Broadband Data Collection (BDC) filing system: fixed and mobile broadband and voice FCC Form 477 subscription data, fixed and mobile BDC broadband availability data, BDC mobile voice availability data.\footnote{Id.}

4. Compliance with State Laws

45. The 2015 \textit{VoIP Direct Access Order} and current rules require an interconnected VoIP provider to acknowledge a duty to comply with state guidelines and procedures adopted under the numbering authority the Commission has delegated to the states.\footnote{\textit{VoIP Direct Access Order}, 30 FCC Red at 6850, para. 24; 47 CFR § 52.15(g)(3)(i)(B).} In the \textit{VoIP Direct Access Further Notice}, the Commission asked whether to revise this rule to state that interconnected VoIP providers holding a numbering authorization must comply with state numbering requirements and other applicable requirements for businesses operating in the state.\footnote{\textit{VoIP Direct Access Further Notice}, 36 FCC Red at 12922-23, para. 33.} Having considered the record, we now revise section 52.15(g)(3) to make clear that interconnected VoIP applicants and authorization holders that request numbering resources from the Numbering Administrator for a particular state must acknowledge that their direct access authorization is subject to compliance with both state numbering requirements and to the laws, regulations, and registration requirements applicable to them as businesses operating in that state, not merely state requirements specifically issued under Commission delegated numbering authority. Upon the effective date of these new rules, direct access applicants must expressly acknowledge in their applications that they will comply with such laws.\footnote{See Appx. A, § 52.15(g)(3)(ii)(B); \textit{VoIP Direct Access Further Notice}, 36 FCC Red at 12922-23, para. 33.}

46. One of the original purposes of the requirement to comply with state delegated numbering authority law was to promote competitive neutrality by requiring interconnected VoIP providers with direct access to numbering resources to be subject to the same numbering requirements as carriers getting numbers for that state.\footnote{\textit{VoIP Direct Access Order}, 30 FCC Red at 6852, para. 28.} Unfortunately, it appears some interconnected VoIP providers have assumed they have no duty to abide by other state requirements because section 52.15(g)(3)(i)(B) focuses solely on delegated numbering authority.\footnote{Mich. PSC Comments at 2; W. Va. Pub. Serv. Comm’n Reply at 3 (W. Va. Reply).} That is not the Commission’s intent and is inconsistent with the goal of competitive neutrality. The revision we adopt today addresses this unintended consequence and helps keep interconnected VoIP providers on a more equal footing with local exchange carriers (LECs) (which must comply with state general registration requirements pursuant to their certificates of public convenience and necessity and status as businesses operating in the states). It will directly help avoid confusion over the duty to comply with applicable state laws beyond delegated numbering matters.\footnote{\textit{VoIP Direct Access Further Notice}, 36 FCC Red at 12923-24, para. 33 (citing \textit{VoIP Direct Access Order}, 30 FCC Red at 6850, para. 24) (“[R]equiring interconnected VoIP providers that obtain numbering resources directly from the Numbering Administrator to comply with the same numbering requirements as carriers will help “ensure competitive neutrality among providers of voice services.”); La. Pub. Serv Comm’n’s Comments at 4 (La. PSC) (“[G]ranting fixed, interconnected VoIP providers access to numbering resources without compliance with state requirements places such providers in a more favorable position than that occupied by traditional carriers, which still must comply with minimum state standards. Such an unequal result would be contrary to the policy of achieving numbering access parity.”); Nat’l Ass’n of Reg. Util. Comm’rs Reply at 4 (NARUC Reply) (“If a carrier is going to (continued….)
authorization holders from requesting numbering resources for states where they do not serve end-user customers, a practice that contributes to the exhaust of numbering resources in that state. By clarifying that VoIP direct access authorization holders must also comply with other applicable state laws, such as registration requirements, the new requirement will make it more difficult for interconnected VoIP providers to evade measures that enable states to generally address other consumer-protection issues, including unlawful robocalling.

47. Several state commissions support this requirement. They observe there has been confusion, or at least disagreement, about the extent to which interconnected VoIP providers with direct access to numbering resources must comply with general state-law duties applicable to other businesses obtaining numbers in the states, such as LECs. In Maine, for example, voice service providers must register with the Maine Public Utilities Commission’s third-party administrator for the Maine Universal Service Fund and the Maine Telecommunications Education Access Fund. The Maine PUC staff, however, has found it does not always have the information it needs to determine whether interconnected VoIP providers doing business in Maine are contributing to these funds, which it says is required by state law. Other state commissions note similar issues.

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profit from access to numbering resources assigned to a state, it should carry the same responsibilities as others using those scarce resources.”).

152. See Mich. PSC Comments at 3 (noting significant increases in demand for numbering resources in areas with very low populations since interconnected VoIP providers were allowed direct access to numbering resources); Neb. PUC Comments at 2-3; Pa. PUC Comments at 3-4; W. Va. PSC Reply at 2-3.


154. Bandwidth Comments at 17-18; Cal. Pub. Util. Comm’n Comments at 1-3 (Cal. PUC); La. PSC Comments at 1-7; Mich. PUC Comments at 1-3; Mo. PSC Comments at 1-4; Neb. PSC Comments at 2-4; Pa. PUC Comments at 5; Me. PUC Reply at 1-5; NAAG Reply at 6; NARUC Reply at 1-5; W. Va. PSC Reply at 1-6.

155. Me. PSC Reply at 4-5.

156. Id. at 4. Maine also recently passed a statute that requires interconnected VoIP providers to contribute to a state universal service fund if they use numbers obtained from Maine to provide service. See 2023 Me. Legis. Serv. Ch. 144 (H.P. 247) (L.D. 396) (West) (“An Act to Preserve the 207 Area Code and Impede So-called Robocalling”). We take no position here on whether specific state-law requirements raised in state commission comments apply to interconnected VoIP providers with direct access authorizations, but rather note them to show the kinds of concerns raised by the state commissions. The state commission commenters address state requirements such as duties to: (1) register with other state authorities, such as the secretary of state or a tax authority, as an entity doing business in the state, see Mich. PSC Comments at 2 & n.2; Neb. PSC Comments at 3; W. Va. PSC Reply at 3 & n.1; (2) register with or providing contact information to the state public utilities commission, see Mich. PSC Comments at 2 & n.2; La. PSC Comments at 3; W. Va. PSC Reply at 3 & n.1; (3) contribute to state universal service funds, 911 funds, or other funds, see La. PSC Comments at 3; Neb. PSC Comments at 3; Me. PUC Reply at 4; W. Va. PSC Reply at 3 & n.1; (4) file annual reports of various kinds with the state public utility commission, see La. PSC Comments at 3; Terra Nova Telecom Reply at 2-3 (Terra Nova Reply); W. Va. PSC Reply at 3 & n.1; and (5) provide financial data and documentation of the company’s ability and plans to provide service in the state, see La. PSC Comments at 3; Terra Nova Reply at 2-3).
48. In light of this record evidence, we disagree with commenters who say there has been no confusion about the scope of the duty to comply with state law or that this revised rule amounts to a new delegation of numbering authority to the states. Our revised rule today concerns state laws, regulations and registration requirements applicable to them as businesses operating in a given state, separate from any Commission delegation of numbering authority. We are not delegating any new numbering authority to the states here. Rather, the purpose is to make plain that direct access applicants must acknowledge that their authorization is contingent on complying not only with state requirements issued under delegated numbering authority, but also with other independently applicable state obligations, such as registration requirements, that would apply to them as businesses operating in the state.

49. We also disagree with commenters who argue that requiring interconnected VoIP providers to acknowledge that their direct access authorization is subject to compliance with applicable state requirements would undermine the Commission’s 2004 Vonage Order and its preemption of most state regulation of interconnected VoIP service. As explained in the Vonage Order, that decision “express[ed] no opinion” on the applicability to an interconnected VoIP provider of a state’s “general laws governing entities conducting business within the state, such as laws concerning taxation; fraud; general commercial dealings; and advertising, advertising, and other business practices.” The Commission also stated in that order that “as we move forward in establishing policy and rules for . . . IP-enabled services, states will continue to play their vital role in protecting consumers from fraud, enforcing fair business practices, for example, in advertising and billing, and generally responding to consumer inquiries and complaints.” Accordingly, even after the Vonage Order, the Commission has permitted states to require interconnected VoIP providers to contribute to state universal service funds and pay state fees related to 911/E911 service.

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50. We also disagree with arguments that the revised rule is too vague because it does not specify the particular state requirements that could apply to interconnected VoIP providers with direct access to numbering resources. Any such list inevitably would risk being incomplete or quickly outdated. The point of our rule revision is to have applicants acknowledge their direct access authorization is subject to compliance with applicable laws, regulations, and registration requirements for businesses operating in the state(s) where the authorization holder seeks to obtain numbers. We note, moreover, that any interconnected VoIP provider obtaining numbering resources from a state pursuant to section 52.15(g)(3)(i)(C) presumably would already be evaluating its potential duties under state law (e.g., registration with a secretary of state or tax authorities, possible obligations under state universal service funds or regarding 911 fees) to an extent that allows it to acknowledge whether it will comply with state law. Our new application requirement therefore should not impose any added burdens on interconnected VoIP applicants beyond their normal preparation to begin dealing with a state and possibly providing service there.

51. “Minimal contacts.” In order to help minimize numbering exhaust, the Commission asked whether it should adopt a “minimal contacts” requirement that interconnected VoIP providers would have to meet in order to obtain numbering resources in a given state. Having considered the record, we refer this issue to the NANC, as discussed below in Part III.C. The Commission has not explicitly prohibited the use of numbering resources requested for one state to serve customers in other states, whether the entity obtaining the numbers is a LEC or an interconnected VoIP provider holding a direct access authorization. We recognize that a LEC is more likely to have contacts with the state for which it has requested numbering resources, such as physical facilities, a CPCN, and a state registration. At this time, however, we do not have sufficient record evidence to fully assess this issue, and attempting to define “minimal contacts” for interconnected VoIP providers here would risk unintentionally imposing a new requirement that numbering resources requested for a particular state be used to serve at least some customers in that state. Absent such a new requirement, which is outside the scope of this proceeding, a “minimal contacts” requirement would put the Commission into the position of having to evaluate the specific contacts of any direct access authorized interconnected VoIP provider for each particular state in

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which it seeks numbers, which inevitably would be a complex, provider-specific inquiry, and one for which we lack helpful Commission precedent.165

52. **Nomadic interconnected VoIP providers.** The revised state-law acknowledgment requirement we adopt applies to all interconnected VoIP providers requesting numbering resources in a particular state, even if their services are non-fixed or nomadic and not directly linked to the state corresponding to the respective area code.166 The fact that some interconnected VoIP providers provision non-fixed (or nomadic) services does not alter the applicability of the state-law acknowledgment requirement.167 Non-fixed or nomadic interconnected VoIP service providers request numbering resources from states and therefore place burdens on each such state’s numbering resources just as their fixed-VoIP counterparts do.168 It would also burden state commissions to determine the precise geographic locations of non-fixed providers each time a numbering request was received.169 State commissions strongly supported applying the state-law acknowledgment requirement to non-fixed and nomadic interconnected VoIP providers, and we agree with such a requirement.170

53. **Directing the Numbering Administrator to deny applications.** We delegate authority to the Bureau to direct the Numbering Administrator to deny requests for numbering resources from an interconnected VoIP provider when the Commission is notified (e.g., by a state commission) that the provider is not complying with independently applicable state legal requirements.171 It is important that there be some clear consequence of not complying with applicable state laws when obtaining numbering resources from a state based on a federal numbering authorization.172 Our actions here also are consistent

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165 The California PUC commented that if “minimal contacts” means having customers in the state and operating authority by the state, it would support a “minimal contacts” requirement. Cal. PUC Comments at 3. Other state public utility commissions supported instituting a “minimal contacts” requirement but did not offer any further detail regarding the standard. La. PSC Comments at 5; Mo. PSC Comments at 4; Pa. PUC Comments at 9; Me. PUC Reply at 2, 5; NAAG Reply at 6; NARUC Reply at 3; W. Va. PSC Reply at 5. The lack of a clear proposed definition, or consensus around any definition, supports our decision not to adopt a definition or standard at this time.


167 RingCentral contends that state requirements other than those issued under delegated numbering authority cannot apply to them because nomadic VoIP services “are impossible to segregate into intrastate and interstate components” and therefore are subject to “exclusive federal jurisdiction.” RingCentral et al. Comments at 13; RingCentral et al. Reply at 14. RingCentral rests this argument on the Vonage Order, but, as noted above, the Vonage Order left room for some state-law requirements to apply to interconnected VoIP providers as long as they do not conflict with or undermine federal law. See supra para. 49. Nomadic interconnected VoIP applicants would be acknowledging that their direct access authorization is subject to compliance with state laws to the extent such laws apply to them as businesses operating in the state.

168 Cal. PUC Comments at 2 (“Nomadic VoIP places demands on the numbering system that warrant full oversight to ensure efficient use of public numbering resources.”); W. Va. PSC Reply at 4 (“Nomadic VoIP places demands on the state’s numbering resources and thus, warrants state oversight in order to ensure efficient use of numbering resources.”).

169 Pa. PUC Comments at 8-9 (“Trying to determine the precise geographical location of non-fixed or nomadic voice services would require an inordinate effort on the part of state commissions and may well prove futile.”).

170 Cal. PUC Comments at 2; Mo. PSC Comments at 4; Pa. PUC Comments at 8-9; NARUC Reply at 4-5; W. Va. PSC Reply at 4. But see La. PSC Comments at 4 (stating that differences in the technical nature of nomadic and interconnected VoIP services justify different treatment).


172 NARUC Comments at 5 (“If the FCC wants compliance [with state law], there must be a consequence if [the direct access applicant of authorization holder] fails to comply. . . . . The possibility of losing access to the desired numbering resources is a strong incentive for carrier compliance.”); Neb. PSC Comments at 5 (“Compliance with state requirements should be a baseline for being granted numbering resources.”).
with current practice, under which, when a state reports that a provider is not complying with state requirements, the Numbering Administrator may deny that provider’s numbering requests. Although we believe that existing practices conform with section 52.15 of the Commission’s rules, making the requirement explicit clarifies the process so as to leave no doubt as to these requirements.

5. **Ensuring the Accuracy of Application Contents**

54. We revise section 52.15(g)(3) of the Commission’s rules to require an officer or authorized representative of the applicant to submit a declaration under penalty of perjury, pursuant to section 1.16 of the rules, attesting that all statements in the application and any appendices are true and accurate. We specify that false statements or certifications made to the Commission may result in rejection of an application or revocation of an authorization. Consistent with warnings included in filings for other Commission authorizations and CPNI certifications, we remind applicants that willful false statements are also punishable by fine and/or imprisonment and/or forfeiture. Requiring a declaration under penalty of perjury will help ensure applications are accurate and that applicants are taking the application process seriously. The new declaration will also dissuade bad actors from filing false information or filing altogether out of fear of committing the crime of perjury and suffering increased punishment.

55. Our rules prohibit any applicant for any Commission authorization from making material false statements or omissions of material information in its dealings with the Commission. Our addition of a declaration under penalty of perjury is consistent with the international section 214 application process, and the authorization process for many other FCC authorizations, in which applicants include a verification executed by an officer or other authorized representative that the information included in the filing is true and accurate. This requirement is also consistent with Robocall Mitigation Database filings, which must include a declaration under penalty of perjury pursuant to section 1.16 of the Commission’s rules. We further note that many direct access applicants already provide this type of declaration voluntarily.

6. **Other Issues**

56. **Declining to expand direct access to numbers.** Under our existing rules, VoIP direct access applicants must provide interconnected VoIP services rather than one-way VoIP or other types of

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173 47 CFR § 1.16.
174 See VoIP Direct Access Further Notice, 36 FCC Rcd at 12918, para. 22. No commenter addressed or opposed this requirement.
175 See Pa. PUC Comments at 4. We discuss below the Bureau’s authority to reject an application or revoke an authorization if it discovers that an applicant has made a false statement, and its authority to provide applicants or authorization holders the opportunity to cure inadvertently mistaken application information. See infra Part III.B.2-3; see also 47 U.S.C. § 312(a)(1).
180 See 47 CFR § 1.17(a).
182 See 47 CFR § 64.6305(c)(3)(ii).
services that make use of numbers.\footnote{Id. §§ 52.5(e) (defining “Service provider”), 52.15(g)(3) (specifying authorization process for “provider[s] of interconnected VoIP service”); VoIP Direct Access Order, 30 FCC Rcd at 6877, para. 76.} The Commission sought comment on whether to allow one-way VoIP or other types of service providers to have direct access to numbers.\footnote{VoIP Direct Access Further Notice, 36 FCC Rcd at 12917, para. 20.} We elect not to do so at this time. The record does not support this expansion of direct access and, indeed, contains some opposition to doing so until the guardrails proposed in the VoIP Direct Access Further Notice are adopted and effectively implemented.\footnote{See VoIP Direct Access Further Notice, 36 FCC Rcd at 12917, para. 20.} By avoiding unnecessary or premature expansion of direct access to such providers, we better protect valuable and limited numbering resources from potential bad actors, both because fewer entities will have direct access to numbers and because interconnected VoIP providers engage in commercial agreements with carriers and have obligations and checks that one-way providers may not.\footnote{Bandwidth Comments at 13 (“Applicants should be expected to provide technical documentation (e.g., technical service descriptions) demonstrating a more complete representation of all types of services that they intend to offer with the numbering resources they seek.”); VON Comments at 3 (“The Commission provides no evidence or support that collecting this additional information is likely to result in a reduction in the number of illegal robocalls or will prevent bad actors from accessing telephone numbers.”).} Our action is also consistent with the rationale in the 2015 VoIP Direct Access Order for limiting direct access authorizations to interconnected VoIP providers. That order found that interconnected VoIP providers are more likely than other VoIP providers to need direct access to numbers because they are more likely to provide service used by consumers to replace “plain old telephone service” (POTS), and because outbound-only VoIP service does not require telephone numbers.\footnote{Id. at 6856-57, para. 37.}

57. **Facilities readiness certification.** The VoIP Direct Access Order provided examples of what an applicant could submit to show “facilities readiness” as required by 47 CFR § 52.15(g)(3)(i)(D).\footnote{See VoIP Direct Access Further Notice, 36 FCC Rcd at 12917, para. 20.} We sought comment on whether to revise section 52.15(g)(3) of the direct access rules to explicitly specify the documents that will be allowed to satisfy the “facilities readiness” requirement.\footnote{Bandwidth Comments at 13 (“Applicants should be expected to provide technical documentation (e.g., technical service descriptions) demonstrating a more complete representation of all types of services that they intend to offer with the numbering resources they seek.”); VON Comments at 3 (“The Commission provides no evidence or support that collecting this additional information is likely to result in a reduction in the number of illegal robocalls or will prevent bad actors from accessing telephone numbers.”).} Comments on the issue were divided,\footnote{Bandwidth Comments at 13 (“Applicants should be expected to provide technical documentation (e.g., technical service descriptions) demonstrating a more complete representation of all types of services that they intend to offer with the numbering resources they seek.”); VON Comments at 3 (“The Commission provides no evidence or support that collecting this additional information is likely to result in a reduction in the number of illegal robocalls or will prevent bad actors from accessing telephone numbers.”).} and, having considered the issue further, we decline to revise our rule. Rather, we conclude that the examples of technical documentation and information that applicants may submit to demonstrate facilities readiness in the VoIP Direct Access Order will continue to suffice.\footnote{Id. at 6856-57, para. 37.} This approach preserves the flexibility of interconnected VoIP providers to submit information that is relevant to the unique characteristics of their networks. We also reaffirm our delegation of authority to the Bureau to request additional documentation on a case-by-case basis as necessary.\footnote{See 47 CFR § 1.745.}
58. **Know-your-customer certification.** Section 64.1200(n)(3) requires voice service providers to “[t]ake affirmative, effective measures to prevent new and renewing customers from using its network to originate illegal calls, including knowing its customers and exercising due diligence in ensuring that its services are not used to originate illegal traffic.”\(^{193}\) The *VoIP Direct Access Further Notice* sought comment on whether to require direct access applicants to certify that they “‘know their customer’ through customer identity verification.”\(^{194}\) Comments on this topic were mixed.\(^{195}\) After considering the record, we decline to adopt a specific know-your-customer certification at this time. As discussed below in the section addressing our referrals to the NANC,\(^{196}\) interconnected VoIP providers often resell numbers that they have obtained through the direct access process to third-party providers. Additionally, our decision to study the issue of number resale further, our adoption of new certifications as part of interconnected VoIP providers’ applications for direct access authorization, and potential future action regarding number resale and indirect access recipient certifications, may accomplish the same objectives as would adopting a know-your-customer certification. We therefore reserve for future determination whether to adopt such a certification in the direct access application context.

B. **Application Review and Authorization Oversight**

59. In this section, we adopt measures to facilitate greater transparency regarding the review of direct access applications, make explicit our procedures for rejecting applications, and expand the bases on which direct access authorizations may be revoked and adopt a process for such revocations.

1. **Codifying the Process for Reviewing Direct Access Applications**

60. As proposed, we revise section 52.15(g)(3) of the Commission’s rules to formalize the process for reviewing direct access applications.\(^{197}\) We direct Bureau staff to conduct a due-diligence review of an applicant’s direct access application prior to seeking comment on it.\(^{198}\) This due-diligence review shall include, but is not limited to, determining whether the applicant is the subject of a past or pending Enforcement Bureau inquiry or whether the applicant has reportable foreign ownership. This initial review process is critical to ensure illegal robocallers and other bad actors do not gain access to finite numbering resources. As noted above, we direct the Bureau to withhold placing any application submitted by an applicant with reportable foreign ownership on streamlined processing (that is, withhold issuing an “Accepted-for-Filing Public Notice”).\(^{199}\) Additionally, the Bureau retains the authority to determine, at its discretion, whether to accept an application for non-streamlined filing so that it may

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\(^{193}\) *Id.* § 64.1200(n)(3).

\(^{194}\) *VoIP Direct Access Further Notice*, 36 FCC Red at 12914, para. 13; *see also* Caller ID Authentication First Report and Order, 35 FCC Red at 3295-96, paras. 127, 130.

\(^{195}\) *See, e.g.*, EPIC Comments at 7 (“The Commission should not merely implement a Know Your Customer regime for commercial customers, . . . but also require that providers take sufficient steps to continue to monitor those commercial customers for indicators of illegal robocalling.”); *id.* at 15-17 (“There has been no evidence to suggest that residential End-Users are a major source of robocalls, and so data collection about them is unlikely to mitigate robocalls . . . .”); SCDCA Comments at 4 (“The Department supports a ‘know your customer’ certification to help protect against identity thieves using stolen identities to obtain numbers . . . .”); NAAG Reply at 7 (arguing that a broader approach than merely requiring applicants to certify that they know their customer through customer identity verification is necessary); RingCentral et al. Reply at 5-6 (arguing that adopting a know-your-customer certification would “encumber[] the VoIP direct access process”).

\(^{196}\) *See infra* Part III.C.

\(^{197}\) *VoIP Direct Access Further Notice*, 36 FCC Red at 12923-24, paras. 34-35.

\(^{198}\) *See VoIP Direct Access Order*, 30 FCC Red at 6858, para. 39.

\(^{199}\) *See supra* paras. 24-25.
further analyze whether a grant is in the public interest during and after the prescribed comment period. \footnote{5 U.S.C. §§ 551-559; id. § 706(2)(E); 47 CFR § 52.15(g)(3)(iii)-(D) (listing four bases on which the Bureau may halt a streamlined auto-grant of an application).} Furthermore, if the Bureau finds that an application raises public interest concerns, it may withhold placing it on streamlined processing until those concerns are addressed through applicant supplements or otherwise, even if the application otherwise meets procedural requirements. \footnote{VoIP Direct Access Further Notice, 36 FCC Rcd at 12923, para. 34; Appx. A, § 52.15(g)(3)(v).} One commenter generally supported this approach, \footnote{Twilio Comments at 7; see also Bandwidth Comments at 17 (supporting non-streamlined processing if an application raises concerns about arbitrage or illegal robocalling).} and no commenter opposed it.

61. The action we take today formalizes this preexisting practice and makes explicit the Bureau’s authority in the rules. Specifically, the rules shall state that the Bureau will review direct access applications to ensure that they are complete and appropriate for streamlined treatment before the Bureau issues a public notice accepting the application for filing. \footnote{See Appx. A, § 52.15(g)(3)(iv).} By taking this step, we draw on our similar procedure governing review of international section 214 applications, \footnote{See International Section 214 Authorization Order and Notice at 9, para. 9.} and promote greater transparency and predictability for applicants regarding the process and timing applicable to a potential authorization. We note that applicants must provide additional information as requested by the Bureau during and after its initial review of a direct access application. \footnote{47 CFR § 1.745.} Such responses must be submitted to the Bureau using the same method for submitting original application materials, unless otherwise directed. \footnote{The majority of commenters supported Commission efforts to fight illegal robocalling and fraud, and staff diligence in reviewing applications and coordination with the Enforcement Bureau is part of ensuring potential robocallers do not gain access to numbering resources. See, e.g., Bandwidth Comments at 7, 10.}

2. Codifying the Processes for Rejecting Direct Access Applications

62. We next revise section 52.15(g)(3) of the Commission’s rules to authorize the Bureau to reject an application when it determines the applicant cannot satisfy the qualifications for a direct access authorization or that granting the application would not be in the public interest. \footnote{See VoIP Direct Access Further Notice, 36 FCC Rcd at 12923-24, paras. 34-36; Appx. A, § 52.15(g)(3)(vii). By “reject” we mean either dismiss or deny depending on the specifics of any particular application and the reason for its rejection.} We also adopt the proposal to authorize the Bureau, in its discretion, to reject applications submitted by an applicant which it has a reasonable basis to believe has engaged in behavior contrary to the public interest. \footnote{VoIP Direct Access Further Notice, 36 FCC Rcd at 12924, para. 36. Such behavior would include, for example, knowingly transmitting illegal robocalls or engaging in illegal Access Stimulation.} As described above, we also authorize the Bureau to reject an application if it determines that the applicant made a false or misleading statement. \footnote{See supra Part III.A.5.} We further conclude that the Bureau may reject applications if, for example, the Commission determines that an applicant with reportable foreign ownership presents national security, law enforcement, foreign policy, and/or trade policy risks. \footnote{See supra Part III.A.2.} Next, to improve transparency, we also direct the Bureau to announce rejection decisions, the reasons for the rejection, and whether they are with or without prejudice via public notice. \footnote{The record supports this action with no opposition. See Bandwidth Comments at 17; NAAG Comments at 5.} Similar to our action described above
regarding codifying the Bureau’s review process, this action codifying the Bureau’s authority to reject applications makes explicit a practice that already occurs under our current rules. We believe this delegation of authority formalizing these practices leads to greater transparency and predictability.

3. Revocation of Authorization

63. We next adopt procedures concerning the grounds for revocation and/or termination of direct access to numbers authorizations. Specifically, we find that the Commission may revoke and/or terminate direct access to numbers authorizations of interconnected VoIP providers for failure to comply with the Communications Act of 1934, as amended (Act) and its implementing rules, other applicable laws and regulations, and/or where retention of those authorizations no longer serves the public interest.212 We revise section 52.15(g)(3) of the Commission’s rules to specify the grounds on which we can revoke and/or terminate direct access authorizations, namely if:

(1) The authorization holder has failed to comply with the Commission’s numbering rules;213

(2) The authorization holder no longer meets the qualifications for a direct access authorization (e.g., the authorization holder no longer meets the application certification requirements or the conditions applicable to authorization holders under the Commission’s rules);214

(3) The authorization holder, or officer or authorized representative of the authorization holder, has made a false statement or certification to the Commission; or

(4) Revoking and/or terminating the authorization is in the public interest (e.g., the Commission’s assessment of the record evidence, including any filing by the Executive Branch agencies stating that retention of the authorization presents national security, law

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213 See 47 CFR part 52.

214 The Commission uses the term “termination” where an authorization is terminated based on the authorization holder’s failure to comply with a condition of the authorization, and has determined that the procedures applicable to termination need not mirror the procedures used for revocation of authorizations. See China Telecom Americas Order on Revocation and Termination, 36 FCC Rcd at 15988, para. 35; see also id. at 15989, para. 36 (“[S]ection 558(c)(2) does not grant a substantive right to escape from a condition that terminates a license.”); Atlantic Richfield Co. v. United States, 774 F.2d 1193, 1200-01 (D.C. Cir. 1985) (holding that the procedural requirements of section 558(c) apply only where “the licensee [may] be able to establish compliance with all legal requirements or . . . change its conduct in a manner that will put its house in lawful order”) (internal quotation and citations omitted).
enforcement, foreign policy, and/or trade policy concerns and/or violates the terms of a mitigation agreement reached with the Executive Branch agencies).\textsuperscript{215}

64. We delegate authority to the Bureau and the Enforcement Bureau to determine appropriate procedures and initiate revocation and/or termination proceedings and to revoke and/or terminate an authorization, as required by due process and applicable law\textsuperscript{216} and in light of the relevant facts and circumstances, including providing the authorization holder with notice and opportunity to respond.\textsuperscript{217}

65. We also delegate authority to the Bureau and the Enforcement Bureau to direct the Numbering Administrator to suspend the authorization holder’s access to new numbering resources after either bureau determines that the authorization holder acted willfully; or public health, interest, or safety requires an immediate suspension; or after giving the authorization holder notice and an opportunity to demonstrate or achieve compliance with our rules.\textsuperscript{218} Once either bureau revokes and/or terminates the authorization, the interconnected VoIP provider may no longer obtain additional numbers from the Numbering Administrator.\textsuperscript{219} Interconnected VoIP providers that have had their authorizations revoked

\textsuperscript{215}VoIP Direct Access Further Notice at 12924-25, para. 37; see Appx. A, § 52.15(g)(3)(viii); China Telecom Americas Order on Revocation and Termination, 36 FCC Rcd at 15966-67, para. 1, aff’d, China Telecom (Americas) Corp. v. FCC, 57 F.4th 256 (“In this Order on Revocation and Termination (Order), we revoke China Telecom (Americas) Corporation’s (CTA) domestic authority and revoke and terminate its international authority, pursuant to section 214 of the Communications Act of 1934, as amended (Act).”).

\textsuperscript{216}In recent revocation proceedings, the Commission exercised its discretion to “resolve disputes of fact in an informal hearing proceeding on a written record,” and reasonably determined that the issues raised in those cases could be properly resolved through the presentation and exchange of full written submissions before the Commission itself. See China Telecom (Americas) Corp. v. FCC, 57 F.4th at 268-269; Pacific Networks Corp. v. FCC, 2023 WL 5209560, at *4 (citing China Telecom (Americas) Corp. v. FCC, 57 F.4th at 268–71); see Evolving Risks Order and NPRM at *32, para. 78 & nn.184-185 (citing Procedural Streamlining of Administrative Hearings Order, 35 FCC Rcd 10729, 10732-33, para. 11 (2020) and China Telecom (Americas) Corp. v. FCC, 57 F.4th at 269)); id. at *7, para. 10 (“If revocation or termination may be warranted, the Commission may institute a revocation proceeding to ‘provide the authorization holder such notice and an opportunity to respond as is required by due process and applicable law, and appropriate in light of the facts and circumstances.’”); see also, e.g., LDC Telecommunications, Inc.

\textsuperscript{217}See, e.g., 5 U.S.C. § 558(c); China Telecom (Ams.) Corp. v. FCC, 57 F.4th at 268-71 (holding that “given the record in this case,” discovery and live hearing procedures, and an opportunity to achieve or demonstrate compliance were not required “by statute, regulation, FCC practice, or the Constitution”); Pacific Networks Corp. v. FCC, 2023 WL 5209560, at *4 (rejecting petitioners’ argument that the Due Process Clause and the APA require the agency, before it may revoke a section 214(a) authorization, to hold a live evidentiary hearing before a neutral adjudicator with an opportunity for discovery and cross-examination, and holding that “[n]othing in the Due Process Clause, the APA, or the Communications Act” requires the Commission to consult with other agencies, or to proceed by rulemaking in assessing the specific risks posed by these individual carriers); see China Telecom Americas Order on Revocation and Termination, 36 FCC Rcd at 15985, para. 26, aff’d, China Telecom (Americas) Corp. v. FCC (“We find that it is more than sufficient due process in this context to provide [China Telecom (Americas) Corporation] with timely and adequate notice of the reasons for revocation and/or termination; opportunity to respond with its own evidence and to make any factual, legal, or policy arguments; access to all of the unclassified evidence the Commission considers; and a written order from the Commission providing its preliminary reasoning for any adverse decision.”) (emphasis added); Pacific Networks/ComNet Order on Revocation and Termination, 37 FCC Rcd at 4241-42, para. 28, aff’d, Pacific Networks Corp. v. FCC. See also Evolving Risks Order and NPRM at *12-13, paras. 25-26 (proposing to cancel the international section 214 authorizations where authorization holders fail to timely respond to a one-time information request, subject to notice and opportunity to cure the noncompliance).

\textsuperscript{218}5 U.S.C. § 558(c).

\textsuperscript{219}Bandwidth Comments at 17 (“The Commission also should adopt its proposals to direct the Numbering Authority to suspend new number assignments . . . .”). While we do not at this time require an interconnected VoIP (continued….
may reapply for a new authorization if they can demonstrate that they have cured the grounds for the revocation and have taken measures to ensure they will not arise again. 220

66. As affirmed recently in our *Caller ID Authentication Sixth Report and Order*, where the Commission grants a right or privilege, it unquestionably has the right to revoke or deny that right or privilege in appropriate circumstances. 221 In addition, holders of these and all Commission authorizations have a clear and demonstrable duty to operate in the public interest. 222 The action we take today promotes transparency into our direct access authorization enforcement mechanisms by formalizing in our rules the procedure by which we will revoke such authorizations. This step will put bad actors on notice regarding the consequences they will face if they flout the rules. Our delegation of authority to the Bureaus will permit efficient processing of revocations, allowing the Commission to respond to bad actors in a timely manner.

67. The record overwhelmingly supports these proposals. One commenter, for example, states that “[i]t is important for the Commission to affirm its commitment to invoking this enforcement authority, because complaints under Section 208 cannot be brought against VoIP providers, given their lack of common carrier status. Use of this enforcement authority with respect to VoIP entities will help ‘combat access stimulation and other intercarrier compensation abuses . . . .’” 223 Similarly, another commenter states “if a Direct Access grantee is clearly found to be engaged in [intercarrier compensation] arbitrage abuse, the FCC must impose real consequences for such abuses because VoIP providers and other noncommon carrier Direct Access grantees are not subject to Section 208 of the Communications Act.” 224

(Continued from previous page)

provider to return its numbers once the Bureau has revoked its direct access authorization, we refer to the NANC how such a requirement would impact consumers, end-users, and providers, and whether such a requirement would be feasible. See infra para. 73. Relatedly, we also do not at this time restrict such providers from accessing numbering databases that may be necessary for providing service, such as routing and porting, for numbers it already has. These databases include, for example, the Local Exchange Routing Guide, Business Integrated Routing and Rating Database System, LIDB Access Routing Guide, Local Calling Area Data Source, Common Language Location Information, and Internet-based Telecommunications Relay Service, see e.g., Letter from Aaron M. Panner, Partner, Kellogg, Hansen, Todd, Figel & Frederick, P.L.L.C., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 20-174 et al., at Attach., Single Source Required Telecom Numbering, Routing, and Porting Products and Services in the Telecommunications Ecosystem (filed Sept. 25, 2020) (listing databases used in the telecommunications ecosystem). Accordingly, we also refer to the NANC the issue of how such a restriction would impact consumers, end-users, and providers. See infra para. 73.

220 At this time, we decline to adopt number reclamation as a consequence of a revocation of direct access authorization. We refer the issue of the impact of number reclamation on consumers and end-users to the NANC. See infra para. 73. We therefore note that a revocation of direct access authorization does not obviate an interconnected VoIP provider’s obligations under our rules with respect to the numbering resources it still maintains. These obligations include, e.g., filing NRUF reports, making NANP cost-support contributions, and updating the Reassigned Numbers Database. See 47 CFR §§ 52.15(f)(5); 52.17; 64.1200(l).

221 *Caller ID Authentication Sixth Report and Order* at 37, para. 70.

222 Id.

223 AT&T Comments at 15.

224 Bandwidth Reply at 4; see also AT&T Comments at 4-5; Bandwidth Comments at 17 (“The Commission also should adopt its proposals to revoke authorization if the Commission or state/federal authorities have found the applicant/grantee fails to comply with applicable rules . . . .”); Mich. PSC Comments at 4 (“The MPSC supports this proposal of not allowing a provider to obtain new numbers from the Numbering Administrator should that authorization be revoked. As the FCC notes, there could be valid reasons for revoking such authorization (due to a national security risk or risk of originating numerous unlawful robocalls) and doing so would also protect the public and preserve the limited pool of numbers.”); NAAG Comments at 5 (supports “rejecting an application or revoking an authorization for direct access to numbers of any applicant or holder that has been found to have originated or (continued….)
C. North American Numbering Council Referrals

68. **Number use and resale generally.** The VoIP Direct Access Further Notice sought comment on whether direct access applicants should certify that the numbers they are applying for will only be used to provide interconnected VoIP services.\(^{225}\) The record we received regarding this issue was insufficient for us to determine precisely how interconnected VoIP providers are using the numbers they obtain, whether any such uses result in violations of our rules, and whether any further restrictions would have anticompetitive effects or impair neutrality with respect to technology. While the revised certifications and accompanying obligations we adopt herein should substantially aid our efforts to curtail unlawful uses of numbering resources, questions remain as to how numbers obtained by interconnected VoIP providers may continue to facilitate illegal robocalling or access stimulation, as well as how our policies affect number exhaustion in particular area codes.\(^{226}\) The NANC is entrusted with advising the Commission on numbering policy and technical issues associated with numbering “in the changing world of communications” and must ensure that the NANP administration does not unduly favor or disfavor one technology over another.\(^{227}\) In light of the limited record on this important issue of number use by interconnected VoIP providers, including number use by direct and indirect customers of such providers and further consideration of additional measures to combat illegal robocalls such as know-your-customer obligations,\(^{228}\) we therefore direct the Bureau to request that the NANC examine and report on:

1. how interconnected VoIP providers that obtain direct access to numbers are using those numbering resources today, including, for example, the extent to which they use numbers obtained in a state to serve the customers of that state, the extent to which they use numbers obtained via direct access to provide non-interconnected VoIP service, and the extent to which numbers obtained via direct access are resold to other providers;
2. those uses in terms of compliance with the Commission’s robocalling, Access Stimulation and other rules, area code exhaustion, and other public interest concerns, including potential consumer benefits or competitive harms of increasing the availability of direct access to numbers or placing more limits on the use of numbers obtained via direct access; and
3. possible options for mitigating any identified adverse impacts on consumers of number disuse, misuse, and resale, and how any Commission-imposed requirements for, or limits on, number use or resale would impact consumers, providers, and competition.

We additionally require that the NANC examine, in considering how to minimize the adverse impacts on consumers and/or area code exhaustion arising from interconnected VoIP providers obtaining numbers in a state where they serve few or no customers, the efficacy of Commission adoption of a “minimum contacts” requirement to obtain numbering resources in a particular state; and possible options for defining such a standard.

\(^{225}\) *VoIP Direct Access Further Notice*, 36 FCC Rcd at 12916, para. 17.

\(^{226}\) See Mich. PSC Comments at 3 (noting significant increases in demand for numbers in areas with very low populations since interconnected VoIP providers were allowed direct access to numbers); Neb. PSC Comments at 2-3 (same); Pa. PUC Comments at 3-4 (same); W. Va. PSC Reply at 2-3 (same).


\(^{228}\) See supra para. 58.
69. **Foreign-originated calls and use of numbers obtained indirectly.** Questions also remain regarding the use of U.S. NANP numbers for calls that originate abroad and terminate in the U.S. market. In the *Fifth Caller ID Authentication Further Notice*, we sought comment on whether we should restrict the use of domestic numbering resources for such calls in order to prevent illegal robocalls, and whether other countries’ regulations provide a useful roadmap for our own. We also sought comment on whether we should restrict indirect access to numbers (e.g., numbers obtained on the secondary market) by both interconnected VoIP providers and carriers generally, or only for numbers that would be used in foreign-originated calls.

70. Commenters in that proceeding agreed that some entities are increasingly using numbers obtained, particularly through indirect access, to originate illegal robocalls. TNS recently noted that “numbers may be purchased separately with one provider and linked with outbound calling minutes from a second,” which it argued “is a major source of bad actor traffic.” Indeed, the success of STIR/SHAKEN “may already be responsible for some bad actors shifting to acquiring batches of real numbers instead of spoofing.” Commenters disagreed, however, on whether and what steps should be taken to prevent such abuse, including the appropriate liability standard, and whether restrictions should apply to all providers or solely to interconnected VoIP providers. Commenters urged the Commission to proceed cautiously when considering restrictions. Notably, no party in that proceeding

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229 See *Caller ID Authentication Fifth Further Notice* at 85-88, paras. 218-23.

230 See *id.* at 86, para. 223.

231 See *id.* at 86-87, para. 222 & n.584 (citing RingCentral et al. Comments, WC Docket No. 13-97 et al., at 3 (rec. Oct. 14, 2021); USTelecom Comments, WC Docket No. 13-97 et al., at 5-6 (rec. Oct. 14, 2021)); USTelecom Comments, CG Docket No. 17-59 et al., at 14 (rec. Aug. 17, 2022) (“Robocallers are often able to obtain these numbers by way of an extensive number distribution and resale market that may also shield bad actors from responsibility.”). TNS, 2022 Robocall Investigation Report 18 (9th ed. 2022).

233 A number of commenters in the Call Authentication Trust Anchor docket argued that the Commission should take steps to address number misuse. For example, VON agreed with USTelecom that, “at a minimum,” providers reselling numbers to other providers should “impose strong contractual obligations” to prevent number misuse and the Commission should encourage number resale best practices. See USTelecom Comments, CG Docket No. 17-59 et al., at 14; VON Reply, CG Docket No. 17-59 et al., at 4 (rec. Sept. 16, 2022); see also Credit Union National Association et al. Comments, CG Docket No. 17-59 et al., at 6 (rec. Aug. 17, 2022) (arguing that, although a complete ban on number resale would be excessive, it would be reasonable for the Commission to require U.S. number resellers to perform more exacting know-your-customer due diligence in transactions with foreign providers). Others argued no restrictions should be imposed. See, e.g., American Bankers Association Reply, CG Docket No. 17-59 et al., at 4 (rec. Sept. 18, 2022).

235 EPIC & NCLC Comments, CG Docket No. 17-59 et al., at 13-14 (rec. Aug. 17, 2022) (arguing that providers should be held strictly liable for illegal robocalling that makes use of numbers the providers rent out); but see USTelecom Comments, CG Docket No. 17-59 et al., at 14 (arguing that a strict liability standard is not appropriate and providers should instead take “reasonable steps” to prevent misuse).

236 See Telnyx Comments, CG Docket No. 17-59 et al., at 4 (rec. Aug. 17, 2022) (noting that if restrictions are placed only on VoIP number resale, “VoIP service providers will begin to resell numbering resources from non-VoIP providers”); RingCentral Inc. Comments, CG Docket No. 17-59 et al., at 6 (rec. Aug. 17, 2022) (opposing VoIP only restrictions); VON Comments, CG Docket No. 17-59 et al., at 5 (rec. Aug. 17, 2022) (same). But see EPIC & NCLC Comments, CG Docket No. 17-59 et al., at 14 (placing heightened restrictions on “high-risk” VoIP providers).

237 See Cloud Commc’ns All. Comments, CG Docket No. 17-59 et al., at 15 (rec. Aug. 17, 2022) (“The Commission should proceed cautiously . . . . There are legitimate reasons why foreign offices of U.S. companies or foreign-
addressed the merits of specific foreign restrictions on numbering usage raised in the *Caller ID Authentication Fifth Further Notice* and their applicability to the U.S. marketplace.

71. In light of the complexity of numbering arrangements, the mixed record in this and related proceedings where this issue has arisen, and limited comment on the specific number usage restrictions in place in other countries, we agree with commenters in the Call Authentication Trust Anchor docket who argue that we should proceed cautiously.\(^{238}\) We therefore direct the Bureau to request that the NANC examine and report on:

1. the use of numbers obtained on the secondary market;\(^ {239}\)
2. the use of U.S. NANP numbers for calls that originate abroad and terminate in the U.S. market; and
3. the specific number usage restrictions already in place abroad, and on the likely effect of similar Commission action on providers, consumers, businesses, and illegal robocallers.

As part of its referral, the Bureau may choose to include direction to investigate issues or proposals related to number misuse it concludes may benefit from focused NANC examination, including proposals raised by commenters in the record of this and other related proceedings.

72. **Supplying numbers to customers on a trial basis.** In the *VoIP Direct Access Further Notice*, we asked whether we should require direct access applicants to certify that they will not supply numbers on a trial basis to new customers (i.e., use of numbers for free for the first 30 days, etc.), a practice that commonly leads to bad actors gaining temporary control over numbers for the purposes of including misleading caller ID information.\(^ {240}\) While some commenters agreed that supplying numbering resources for trial use can facilitate illegal robocalls, they provided no data to support their assertions.\(^ {241}\) Accordingly, we refer this issue to the NANC for further study.\(^ {242}\) Specifically, we direct the Bureau to request that the NANC examine and report on:

1. the practice of direct access authorization holders supplying telephone numbers to customers on a trial basis;
2. the use of such “trial basis” numbers to engage in illegal robocalling, spoofing, or fraud;
3. the effect on authorization holders in the event of a Commission prohibition on providing numbers on a trial basis; and
4. the effect of supplying telephone numbers to customers on a trial basis on numbering resource exhaust.

(Continued from previous page) operated call centers would use U.S. numbers in caller ID.”); RingCentral, Inc. Comments, CG Docket No. 17-59 et al., at 4.

\(^ {238}\) *See supra* note 237.

\(^ {239}\) Numbers obtained on the secondary market would include, e.g., numbers obtained from a reseller or a carrier partner. We seek comment in the accompanying Second Further Notice regarding whether we should require direct access authorization holders to obtain from a provider to whom they sell, lease, or otherwise transfer numbers, all the same certifications, acknowledgments, and disclosures the number recipient would have had to provide under section 52.15(g)(3) had the recipient applied for direct access to numbering resources. *See infra* Part IV.C.

\(^ {240}\) *VoIP Direct Access Further Notice*, 36 FCC Rcd at 12913-14, para. 13.

\(^ {241}\) NAAG Comments at 5; SCDCA Comments at 4; State AGs Reply at 5.

\(^ {242}\) We expect that this, and our other referrals to the NANC concerning number use, will give us a fuller picture regarding the customers’ use of numbering resources, and thereby aid our future consideration of whether to impose a know-your-customer certification requirement. *See supra* para. 58.
73. **Number reclamation.** In the VoIP Direct Access Further Notice, we sought comment on whether we should require an interconnected VoIP provider that has had its direct access authorization revoked to return the numbers that it has already obtained directly.\(^{243}\) Some commenters expressed concern that reclaiming numbers when direct access authority is revoked could have potential negative impacts on consumers, and that we should have proper procedures in place to mitigate these impacts.\(^{244}\) In light of the paucity of data submitted in the record, and in order to ensure that number reclamation as a consequence of a revocation of direct access authorization will not have a negative impact on consumers, we direct the NANC to study the benefits, risks, and solutions regarding reclamation of numbers when a direct access authorization is revoked, and the impact to consumers and end-users. Specifically, we direct the Bureau to request that the NANC examine and report on:

- (1) the potential impact on consumers, end-users, and providers of number reclamation as a consequence of direct access authorization revocation;
- (2) how providers or the Commission could mitigate any identifiable negative impacts for consumers and end-users; and
- (3) how to accomplish returning reclaimed numbers to providers with reinstated direct access authorization.

In its analysis, the NANC should additionally describe how interconnected VoIP providers use numbering databases in providing service, and how a restriction on accessing such databases would impact consumers, end-users, and providers.

**D. Cost-Benefit Analysis**

74. The rule clarifications and formalizations adopted in this *Second Report and Order* generally reflect a mandate from the TRACED Act. We conclude that the expected benefits will exceed the costs, which are minimal. The Commission found in the *Caller ID Authentication First Report and Order* that widespread deployment of the STIR/SHAKEN framework will increase its effectiveness for both voice service providers and their subscribers, producing a potential annual benefit floor of $13.5 billion due to the reduction in nuisance calls and fraud.\(^{245}\) In addition, the Commission identified many non-quantifiable benefits, such as restoring confidence in incoming calls\(^{246}\) and ensuring reliable access to emergency and healthcare communications.\(^{247}\) The rules we adopt in this *Second Report and Order* are intended, consistent with the TRACED Act, to help unlock those benefits. As the Commission has noted,
an overall reduction in illegal robocalls will greatly lower network costs by eliminating both the unwanted
taxi traffic and the labor costs of handling numerous customer complaints. The certifications and
disclosures we adopt place minimal burdens on interconnected VoIP providers, and our formalization of
the direct access application review process will ensure efficient use of staff time, imposing appropriately
small costs on Commission staff. We therefore conclude that the rules we adopt in this Second Report
and Order will impose only a minimal cost on direct access applicants while having the overall effect of
materiially lowering network costs and raising consumer benefits.

E. Legal Authority

75. The VoIP Direct Access Further Notice proposed concluding that our authority for
adopting the new or revised direct access to numbers application requirements for interconnected VoIP
providers arises from section 251(e) of the Act and section 6(a) of the TRACED Act. No commenter
opposed these proposals regarding the basis for our legal authority to adopt the requirements described in
this Second Report and Order. We conclude that section 251(e) of the Act provides sufficient authority
for the requirements adopted in this Report and Order and that section 6(a) of the TRACED Act provides
both supplemental and independent authority for those requirements specifically related to fighting illegal
robocalls.

76. Section 251(e)(1) of the Act grants the Commission “exclusive jurisdiction over those
portions of the North American Numbering Plan that pertain to the United States.” Based on this grant,
in the VoIP Direct Access Order the Commission concluded that section 251(e)(1) provided it with
authority “to extend to interconnected VoIP providers both the rights and obligations associated with
using telephone numbers.” The Commission also has relied on section 251(e)(1) to require
interconnected and one-way VoIP providers to implement the STIR/SHAKEN caller ID authentication
framework and allow customers to reach the National Suicide Prevention Lifeline by dialing 988. Consistent
with the Commission’s well-established reliance on section 251(e) numbering authority with
respect to interconnected VoIP providers, we conclude that section 251(e)(1) allows us to further refine
our processes and requirements governing direct access to numbers by interconnected VoIP providers.

77. We further conclude that section 6(a) of the TRACED Act provides us with separate,
additional authority to adopt our proposals related to fighting illegal robocalls. Section 6(a)(1) gives the
Commission authority “to determine how Commission policies regarding access to number resources,
including number resources for toll free and non-toll free telephone numbers, could be modified,
including by establishing registration and compliance obligations,” and to “take sufficient steps to know
the identity of the customers of such providers [of voice services], to help reduce access to numbers by
potential perpetrators of violations of section 227(b) of the Communications Act of 1934 (47 U.S.C.
227(b)).”

78. The Commission commenced the required proceeding pursuant to the TRACED Act in
March 2020, and expanded on those inquiries in the VoIP Direct Access Further Notice. Section

248 Id.
251 VoIP Direct Access Order, 30 FCC Rcd at 6878, para. 78.
252 See Implementation of the National Suicide Hotline Improvement Act of 2018, WC Docket No. 18-336, Report
and Order, 35 FCC Rcd 7373, 7394, para. 40 (2020); Caller ID Authentication First Report and Order, 35 FCC Rcd
at 3260-61, para. 42.
253 TRACED Act § 6(a)(1); see also 47 U.S.C. § 227(b) (restricting the making of telemarketing calls and the use of
automatic telephone dialing systems and artificial or prerecorded voice messages).
6(a)(2) of the TRACED Act states that “[i]f the Commission determines under paragraph (1) that modifying the policies described in that paragraph could help achieve the goal described in that paragraph, the Commission shall prescribe regulations to implement those policy modifications.” We conclude that section 6(a) of the TRACED Act, in directing us to prescribe regulations implementing policy changes to reduce access to numbers by potential perpetrators of illegal robocalls, provides an independent basis to adopt certain of the rule changes we are making to the direct access process with respect to fighting unlawful robocalls.

IV. SECOND FURTHER NOTICE OF PROPOSED RULEMAKING

79. In the accompanying Second Report and Order, we take steps to strengthen our direct access rules to protect consumers from interconnected VoIP providers who would gain access to, and then misuse, the nation’s finite numbering resources. Further, through the NANC referral directives we adopt today, additional reforms will be considered with respect to new direct access applications. By this Second Further Notice, we seek comment on the duties of existing direct access authorization holders whose authorizations predate the new application requirements we adopt today. We also seek comment on whether direct access applicants should disclose a list of states in which they seek to provide initial service. Finally, we seek comment on a proposal to minimize harms that may arise from entities that access numbering resources indirectly by holding their direct access authorization holder “partners” accountable for their actions.

A. Updating the Duties of Existing Authorization Holders

80. Part III.A of the Second Report and Order focuses on new applications for direct access to numbering resources. In the VoIP Direct Access Further Notice, however, the Commission also asked whether some of the proposed new requirements should also apply to existing authorization holders (i.e., interconnected VoIP providers that were granted direct access authorization prior to the effective date of this Report and Order and revised rules). In particular, the Commission asked about requiring such existing authorization holders to certify compliance with E911 and CALEA obligations, to certify they are not subject to a Commission, law enforcement or regulatory agency investigation for failure to comply with any law, rule, or order, including the Commission’s rules applicable to unlawful robocalls or unlawful spoofing, and to abide by state numbering requirements and other applicable requirements for businesses operating in the state. There were very limited comments on this issue. Further, the VoIP Direct Access Further Notice did not ask about applying other proposed new requirements, also adopted here, to existing interconnected VoIP direct access authorization holders.

81. Given the limited record in response to the VoIP Direct Access Further Notice about the applicability of these proposed requirements to existing authorization holders, and in order to allow the Commission to address at one time whether all of the new requirements adopted in the Second Report and Order should apply to existing authorization holders, we propose that the new or revised certification, acknowledgment, and disclosure obligations set forth in Part III.A of the Second Report and Order should

255 TRACED Act § 6(a)(2).
256 See supra Part III.A.
257 VoIP Direct Access Further Notice, 36 FCC Rcd at 12915, para. 16 (seeking comment on “whether and how we should obtain these proposed certifications [for E911 and CALEA] from interconnected VoIP providers holding an existing Commission authorization for direct access to numbers”).
258 Id. at 12914-15, para. 15 (proposing to adopt a requirement for “a direct access applicant or authorization holder” to provide such a certification).
259 Id. at 12922-23, para. 33 (seeking comment on whether to revise requirement for “interconnected VoIP providers holding a Commission numbering authorization” to clarify the scope of the duty to comply with state law).
260 See USTelecom Reply at 5.
likewise apply to existing interconnected VoIP authorization holders. Specifically, we propose to require existing interconnected VoIP direct access authorization holders to provide the certifications, acknowledgments, and disclosures required by the following sections in Appendix A hereto, specifically sections 52.15(g)(3)(ii)(B)-(F), (I), (K)-(L), and (N), within 30 days after the effective date of an order adopting such rules for existing authorization holders. We seek comment on this proposal.

82. The rationales for imposing each of these certification, acknowledgment, and disclosure obligations on future authorization holders, discussed in detail above, apply equally to existing interconnected VoIP direct access authorization holders. Obtaining this information from existing authorization holders would help the Bureau more effectively oversee the universe of direct access authorization holders by better enabling it to identify bad actors and preserve scarce numbering resources, while also balancing the obligations evenly for all authorization holders. Similarly, we propose to use the new information we require existing authorization holders to submit to determine whether a revocation of authorization, inability to obtain additional numbers, reclamation of unassigned numbers, or enforcement action may be warranted, just as if the information had been provided as part of a new application or an update or correction to their original application. We seek comment on this proposal.

83. With respect to these proposed requirements, we believe a 30 day deadline appropriately balances the strong public interest of the Bureau receiving this information against the burdens we anticipate these requirements may place on existing authorization holders, and seek comment on this conclusion. Do commenters agree that this deadline would strike the right regulatory balance? Would requiring existing authorization holders to provide the newly required certifications, acknowledgments, and other information impose an undue burden that would outweigh the potential benefits? Would requiring existing authorization holders to provide the newly required certifications, acknowledgments, and other information be necessary or appropriate to avoid asymmetrical regulation among interconnected VoIP providers? Alternatively, is this step necessary to narrow the gap in our oversight ability to reach potential bad actors with respect to numbering resources? Would declining to apply the new requirements to existing authorization holders place the Commission at a disadvantage in terms of investigating those authorization holders and enforcing the rules that apply to them? Would relying on Commission enforcement actions against existing authorization holders be as effective as the proposed new requirements in combating unlawful robocalling and addressing the concerns raised regarding foreign ownership of entities with access to numbering resources pertaining to the United States? Are there any legal barriers to requiring existing authorization holders to provide the required information? Are there other factors we should consider?

84. Executive Branch agencies’ review of corrected information. We propose to delegate authority to the Bureau to direct the Numbering Administrator via public notice to suspend all pending and future requests for numbers if the new information submitted by an existing authorization holder indicates a material change or discloses new information such that additional investigation is necessary to confirm that the authorization continues to serve the public interest. If the new information leads the Commission to refer the authorization holder to the Executive Branch agencies, we propose to authorize the Bureau to direct the Numbering Administrator via public notice to suspend all pending and future requests for numbers until review is complete and a determination is made. We seek comment on whether to use this process. In the alternative, is there another process we should use?

85. Use of numbers after submission of updated or new information. To avoid a disruption of service to customers during review of updated or corrected ownership information, we propose to permit authorization holders to continue to use numbers they obtained pursuant to our current procedures while submitting updated or corrected ownership information to the Bureau, unless and until the Bureau determines otherwise after investigation.261 We seek comment on this proposal.

261 See supra Part III.B.3.
B. Disclosure of Initial Service Area in Direct Access Applications

86. We propose to require new interconnected VoIP applicants to provide, in their direct access applications, a list of the states where they initially intend to request numbering resources. This proposal seeks to create parity with the requirement that other providers show authorization to provide service in the area(s) for which numbering resources are requested, which effectively requires them to identify the states where they initially will request numbers. It also would formalize the existing practice of the Bureau asking interconnected VoIP applicants to provide a list of the states where they intend to request numbers. We seek comment on this proposal. Would it place an undue burden on interconnected VoIP providers to provide this information? If so, how, given that all other providers are required to provide this information? Is it consistent with promoting symmetrical regulation? We also seek comment on whether requiring this information will help state commissions be better prepared to address interconnected VoIP provider applications pending at the Commission and consequently prepare for new numbering requests in their states. Is there a better way to help state commissions be aware of applications that may affect the demand on numbering resources in their states from new applicants?

C. Ensuring that Indirect Access Serves the Public Interest

87. We propose to require direct access authorization holders that sell, lease, or otherwise provide telephone numbers obtained via direct access to a voice service provider (an “indirect access recipient”) to: (1) obtain from the indirect access recipient all the same certifications, acknowledgments, and disclosures the indirect access recipient would have had to provide under section 52.15(g)(3), had the recipient applied for direct access to numbering resources itself; (2) obtain from the indirect access recipient all subsequent updates or corrections that would be required of a direct access authorization holder under section 52.15(g)(3); (3) retain a copy of all such certifications, acknowledgments, disclosures, and corrections and updates, to be provided to the Commission upon request; and (4) file with the Commission a list of the voice service providers to which the direct access authorization holder sells, leases, or otherwise provides telephone numbering resources that it obtained directly, and update that list within 30 days of adding any new indirect access recipient. We propose to apply these duties on a prospective basis to existing direct access authorization holders that provide telephone numbering resources to indirect access recipients after the effective date of the proposed new rule. We also propose to require future direct access applicants to certify they will abide by these requirements. We seek comment on these proposals.

88. As noted in the accompanying Second Report and Order, a key reason for strengthening the direct access application requirements is to enhance the Commission’s ability to ensure interconnected VoIP providers comply with regulations targeting illegal robocalls and other important requirements, and provide information to help the Commission address potential issues related to foreign ownership. As also noted above, however, interconnected VoIP providers can obtain numbers indirectly, such as from a competitive LEC that has a direct access authorization. Because interconnected VoIP providers’ use of finite telephone numbering resources via indirect means raises the same potential robocalling, access arbitrage, and other public interest issues as use of numbers by providers with direct access, we seek comment on whether it is appropriate for the Commission to apply the same showings as required from interconnected VoIP providers that obtain numbering resources directly. We believe that by ensuring

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262 See 47 CFR § 52.15(g)(2).
263 Id. § 52.15(g)(3).
264 See supra Part III.A.1, 2.
265 See supra paras. 68, 70.
266 We simultaneously refer questions to the NANC regarding the use and misuse of numbering resources obtained indirectly in our accompanying Second Report and Order above. See supra paras. 68-71. We do so to ensure we have a fulsome record should we decide to take action on this issue in the future.
all interconnected VoIP providers that receive access to numbers, whether directly or indirectly, make the certifications, acknowledgments, and disclosures required in direct access applications, the Commission can improve its ability to protect consumers from entities that evade our robocalling and other rules.\textsuperscript{267} We seek comment on this position.

89. Do commenters agree that this process would accrue the benefits to consumers that we describe? If so, would such benefits outweigh the potential burdens on direct access authorization holders and indirect access recipients? What are the negative consequences of this process for consumers, providers, and competition? Would the proposed requirements create a disincentive for direct access recipients to provide numbers to indirect access recipients? If so, is that good or bad for the public interest and consumers? For example, could this process incentivize indirect access recipients to seek direct access? How large is the secondary market for numbers obtained via direct access? Who are the main customers? How are resold numbers being used?

90. We seek comment on the Commission’s role to enforce our rules and obligations pertaining to direct access and numbering. What enforcement actions could the Commission take, or what penalties could it impose, on a direct access recipient that fails to obtain, retain, or provide the Commission with the necessary certifications, acknowledgments, and disclosures, or that fails to provide and keep current a list of the indirect access recipients to which it provides numbers? Could or should enforcement include revisiting or revoking the direct access authorization holder’s authorization? Would the Commission have authority, if an indirect access recipient were suspected or convicted of illegal robocalling or spoofing, to direct the Numbering Administrator to stop providing telephone numbers to the direct access authorization holder, and/or to prohibit the direct access authorization holder from providing numbers to the indirect access recipient? What other consequences, if any, should we consider for the direct access authorization holder when a recipient on its list is found to have violated the Commission’s numbering rules or other laws or regulations? We propose to apply the new duties prospectively, but is there any reason why we should not require existing direct access authorization holders to gather, retain, and provide the required information regarding indirect access recipients to which they have already provided numbering resources? If not, how much time should we give existing authorization holders to provide information regarding these indirect access recipients?

91. What other means should we consider to close the gap in our visibility into the use of numbering resources and related activities of indirect access recipients? How would these proposals address a scenario in which an indirect access recipient provides numbers to another indirect access recipient? Do indirect access recipients provide numbers that they obtained indirectly to other providers? How would or should we hold the direct access authorization holders accountable for indirect access recipients of its numbers that are further along this chain of providers?

92. \textit{Filing process.} Regarding the list of indirect access recipients to which a direct access authorization holder sells, leases, or otherwise provides numbers it obtained directly, we propose requiring direct access authorization holders to submit such list and any required updates to the Commission via the “Submit a Non-Docketed Filing” module in Electronic Comment Filing System (ECFS) established for the VoIP Direct Access proceeding (Inbox—52.15 VoIP Numbering Authorization Application) and via email to DAA@fcc.gov, our email alias for interconnected VoIP direct access to numbers applications. We believe that this approach will facilitate informed and timely review by interested members of the public and Commission staff, and we seek comment on this

\textsuperscript{267} In the Access Arbitrage proceeding, we took steps to strengthen our protection of consumers by requiring that an entity with direct access to numbers is responsible for the actions of a provider it subsequently indirectly assigns some or all of its numbers to. The entity receiving numbers directly is responsible (for purposes of Access Stimulation traffic ratio calculations) for call traffic to and from its OCN regardless of whether that entity subsequently indirectly assigns those telephone numbers to other providers. \textit{See Access Arbitrage Second Report and Order} at 17-21, paras. 28-36.
Should the lists of indirect access recipients be kept confidential, subject to a protective order, or otherwise shielded from public access?

D. Legal Authority

93. We tentatively conclude that section 251(e)(1) of the Act, which grants us “exclusive jurisdiction over those portions of the North American Numbering Plan that pertain to the United States,” provides us with authority to adopt our proposals. We seek comment on this conclusion. In the VoIP Direct Access Order, the Commission concluded that section 251(e)(1) provided it with authority “to extend to interconnected VoIP providers both the rights and obligations associated with using telephone numbers.” Consistent with the Commission's well-established reliance on section 251(e) numbering authority with respect to carriers and interconnected VoIP providers, we propose concluding that section 251(e)(1) allows us to further refine our requirements governing direct access to numbering resources. We seek comment on this proposal. Consistent with the VoIP Direct Access Order, we also propose concluding that refining our application and post-application direct access requirements would not conflict with sections 251(b)(2) or 251(e)(2) of the Act. We seek comment on this proposal.

94. We also tentatively conclude that section 6(a) of the TRACED Act provides us with additional authority to adopt our proposal. Section 6(a)(1) directs that

> [n]ot later than 180 days after the date of the enactment of this Act, the Commission shall commence a proceeding to determine how Commission policies regarding access to number resources, including number resources for toll free and non-toll free telephone numbers, could be modified, including by establishing registration and compliance obligations, and requirements that providers of voice service given access to number resources take sufficient steps to know the identity of the customers of such providers, to help reduce access to numbers by potential perpetrators of violations of section 227(b) of the Communications Act of 1934 (47 U.S.C. 227(b)).

The Commission commenced the proceeding as required by section 6(a)(1) of the TRACED Act in March 2020, and this Second Further Notice expands on those inquiries. Section 6(a)(2) of the TRACED Act states that “[i]f the Commission determines under paragraph (1) that modifying the policies described in that paragraph could help achieve the goal described in that paragraph, the Commission shall prescribe regulations to implement those policy modifications.” We propose concluding that section 6(a) of the TRACED Act, by directing us to prescribe regulations implementing policy changes to reduce access to numbers by potential perpetrators of illegal robocalls, provides an independent basis to adopt the changes we propose to the direct access process with respect to fighting unlawful robocalls, and we seek comment on this proposal. Should we interpret section 6(a) of the TRACED Act as an independent grant of

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269 VoIP Direct Access Order, 30 FCC Rcd at 6878, para. 78.
270 See 47 U.S.C. § 251(b)(2) (imposing on each local exchange carrier the duty to provide, to the extent technically feasible, number portability in accordance with requirements prescribed by the Commission); id. § 251(e)(2) (“The cost of establishing telecommunication numbering administration arrangements and number portability shall be borne by all telecommunications carriers on a competitively neutral basis as determined by the Commission.”); VoIP Direct Access Order, 30 FCC Rcd at 6879-80, paras. 81-82.
271 TRACED Act § 6(a)(1); see also 47 U.S.C. § 227(b) (restricting the making of telemarketing calls and the use of automatic telephone dialing systems and artificial or prerecorded voice messages).
273 TRACED Act § 6(a)(2).
authority on which we may rely here? Section 6(b) of the TRACED Act authorizes imposition of forfeitures on certain parties found in violation “of a regulation prescribed under subsection (a),”274 which we tentatively conclude supports our proposal to find that section 6(a) of the TRACED Act is an independent grant of rulemaking authority. We seek comment on this position. Should we codify or adopt any regulations to implement the forfeiture authorization in section 6(b) of the TRACED Act, including as to indirect access recipients, and if so, what regulations should we adopt?275

E. Promoting Digital Equity and Inclusion

95. The Commission, as part of its continuing effort to advance digital equity for all,276 including people of color, persons with disabilities, persons who live in rural or Tribal areas, and others who are or have been historically underserved, marginalized, or adversely affected by persistent poverty or inequality, invites comment on any equity-related considerations and benefits (if any) that may be associated with the proposals and issues discussed herein. Specifically, we seek comment on how our proposals may promote or inhibit advances in diversity, equity, inclusion, and accessibility, as well as the scope of the Commission’s relevant legal authority.

V. PROCEDURAL MATTERS

96. Regulatory Flexibility Act. The Regulatory Flexibility Act of 1980, as amended (RFA),277 requires that an agency prepare a regulatory flexibility analysis for notice and comment rulemakings, unless the agency certifies that “the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities.”278 Accordingly, we have prepared a Final Regulatory Flexibility Analysis (FRFA) concerning the possible impact of the rule changes contained in this Second Report and Order on small entities. The FRFA is set forth in Appendix B.

97. We have also prepared an Initial Regulatory Flexibility Analysis (IRFA) concerning the potential impact of the rule and policy changes contained in the Second Further Notice. The IRFA is set forth in Appendix C. Written public comments are requested on the IRFA. Comments must be filed by the deadlines for comments on the Second Further Notice indicated on the first page of this document and must have a separate and distinct heading designating them as responses to the IRFA.

274 Id. § 6(b).

275 See id. (“Any person who knowingly, through an employee, agent, officer, or otherwise, directly or indirectly, by or through any means or device whatsoever, is a party to obtaining number resources, including number resources for toll free and non-toll free telephone numbers, from a common carrier regulated under title II of the Act (47 U.S.C. 201 et seq.), in violation of a regulation prescribed under subsection (a), shall, notwithstanding section 503(b)(5) of the Communications Act of 1934 (47 U.S.C. 503(b)(5)), be subject to a forfeiture penalty under section 503(b) of that Act (47 U.S.C. 503(b)). A forfeiture penalty under this subsection shall be in addition to any other penalty provided for by law.”).

276 Section 1 of the Act provides that the Commission “regulat[es] interstate and foreign commerce in communication by wire and radio so as to make [such service] available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex.” 47 U.S.C. § 151. The term “equity” is used here consistent with Executive Order 13985 as the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. See Exec. Order No. 13985, 86 Fed. Reg. 7009, Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (Jan. 20, 2021).


278 5 U.S.C. § 605(b).
98. **Paperwork Reduction Act.** This document may contain new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. Specifically, the rules adopted in 47 CFR § 52.15(g)(ii) and (ix) may require new or modified information collections. All such new or modified information collection requirements will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies will be invited to comment on the new or modified information collection requirements contained in this proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), we previously sought specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees. In this document, we describe several steps we have taken to minimize the information collection burdens on small entities.279

99. The Second Further Notice also may contain proposed new and revised information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and 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, see 44 U.S.C § 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

100. **Ex Parte Presentations—Permit-But-Disclose.** The proceeding this Second Further Notice initiates shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s ex parte rules.280 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 and/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 section 1.1206(b) of the Commission’s rules. In proceedings governed by section 1.49(f) of the Commission’s rules 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.281

101. **Comment Filing Procedures.** Pursuant to sections 1.415 and 1.419 of the Commission’s rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. 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).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing ECFS: [https://www.fcc.gov/ecfs](https://www.fcc.gov/ecfs).

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280 47 CFR §§ 1.1200 et seq.

281 Id. § 1.49(f).
• 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 45 L Street NE, Washington, DC 20554.


102. Pursuant to section 1.49 of the Commission’s rules, 47 CFR § 1.49, parties to this proceeding must file any documents in this proceeding using the Commission’s Electronic Comment Filing System (ECFS): www.fcc.gov/ecfs.

103. Accessible Formats. To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

104. Contact Person. For further information about this proceeding, please contact Mason Shefa, FCC Wireline Competition Bureau, Competition Policy Division, at (202) 418-2494, or mason.shefa@fcc.gov.

VI. ORDERING CLAUSES

105. Accordingly, IT IS ORDERED that pursuant to sections 1, 3, 4, 201-205, 227b-1, 251, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 153, 154, 201-205, 227b-1, 251, 303(r), and section 6(a) of the TRACED Act, Pub. L. No. 116-105, § 6(a)(1)-(2), 133 Stat. 3274, 3277 (2019), the Second Report and Order and Second Further Notice of Proposed Rulemaking hereby IS ADOPTED and Part 52 of the Commission’s Rules, 47 CFR Part 52, IS AMENDED as set forth in Appendix A. The Second Report and Order shall become effective 30 days after publication in the Federal Register, except for 47 CFR §§ 52.15(g)(3)(B)-(F), (I), (K)-(L), and (N), as amended in Appendix A, which shall become effective upon an announcement in the Federal Register of OMB review and an effective date of those rules.

106. IT IS FURTHER ORDERED that the Commission’s Office of the Secretary, Reference Information Center, SHALL SEND a copy of this Second Report and Order and Second Further Notice of Proposed Rulemaking, including the Final Regulatory Flexibility Analysis and Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.
107. IT IS FURTHER ORDERED that the Office of the Managing Director, Performance Evaluation and Records Management, SHALL SEND a copy of this Second Report and Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. § 801(a)(1)(A).

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary
APPENDIX A

Final Rules

The Federal Communications Commission amends part 52 of Title 47 of the Code of Federal Regulations as follows:

PART 52 – NUMBERING

1. Amend § 52.15 by revising paragraphs (g)(1)-(3) to read as follows:

§ 52.15 Central office code administration.

(g) Applications for numbering resources.

(1) General requirements. An applicant for numbering resources must include in its application the applicant’s company name, company headquarters address, OCN, parent company’s OCN(s), and the primary type of business in which the numbering resources will be used.

(2) Initial numbering resources. An applicant for initial numbering resources must include in its application evidence that the applicant is authorized to provide service in the area for which the numbering resources are requested; and that the applicant is or will be capable of providing service within sixty (60) days of the numbering resources activation date. A provider of VoIP Positioning Center (VPC) services that is unable to demonstrate authorization to provide service in a state may instead demonstrate that the state does not certify VPC service providers in order to request pseudo-Automatic Numbering Identification (p-ANI) codes directly from the Numbering Administrators for purposes of providing 911 and E-911 service.

(3) Commission authorization process. A provider of interconnected VoIP service may show a Commission authorization obtained pursuant to this paragraph as evidence that it is authorized to provide service under paragraph (g)(2) of this section.

(i) Definition. The term “foreign carrier” found in this section is given the same meaning as in § 63.09(d) of this chapter.

(ii) Contents of the application for interconnected VoIP provider numbering authorization. An application for authorization must reference this section and must contain the following:

(A) The applicant’s name, address, and telephone number, and contact information for personnel qualified to address issues relating to regulatory requirements, compliance with Commission’s rules, 911, and law enforcement;

(B) An acknowledgment that the authorization granted under this paragraph is subject to compliance with applicable Commission numbering rules; numbering authority delegated to the states, and the state laws, regulations, and registration requirements applicable to businesses operating in each state where the applicant seeks numbering resources; and industry guidelines and practices regarding numbering as applicable to telecommunications carriers;

(C) A certification that the applicant will not use the numbers obtained pursuant to an authorization under this paragraph to knowingly transmit, encourage, assist, or facilitate illegal robocalls, illegal spoofing, or fraud, in violation of robocall, spoofing, and deceptive telemarketing obligations under §§ 64.1200, 64.1604, and 64.6300 et seq. of this chapter, and 16 CFR 310.3(b);

(D) A certification that the applicant has fully complied with all applicable STIR/SHAKEN caller ID authentication and robocall mitigation program requirements and filed a certification in the Robocall Mitigation Database as required by §§ 64.6301 to 64.6305 of this chapter;
(E) A certification with accompanying evidence that the applicant complies with its 911 obligations under part 9 of this chapter, and that it complies with the provisions of the Communications Assistance with Law Enforcement Act, 47 U.S.C. 1001 et seq.;

(F) A certification that the applicant complies with the Access Stimulation rules under § 51.914 of this chapter;

(G) An acknowledgment that the applicant must file requests for numbers with the relevant state commission(s) at least 30 days before requesting numbers from the Numbering Administrators;

(H) Proof that the applicant is or will be capable of providing service within sixty (60) days of the numbering resources activation date in accordance with paragraph (g)(2) of this section;

(I) Proof that the applicant has filed FCC Forms 477 and 499, or a statement explaining why each such form is not yet applicable;

(J) A certification that the applicant complies with its applicable Universal Service Fund contribution obligations under part 54, subpart H of this chapter, its Telecommunications Relay Service contribution obligations under § 64.604(c)(5)(iii) of this chapter, its NANP and LNP administration contribution obligations under §§ 52.17 and 52.32 of this chapter, and its obligations to pay regulatory fees under § 1.1154 of this chapter;

(K) A certification that the applicant possesses the financial, managerial, and technical expertise to provide reliable service. This certification must include the name of applicant’s key management and technical personnel, such as the Chief Operating Officer and the Chief Technology Officer, or equivalent, and state that neither the applicant nor any of the identified personnel are being or have been investigated by the Federal Communications Commission, law enforcement, or any regulatory agency for failure to comply with any law, rule, or order, including the Commission’s rules applicable to unlawful robocalls or unlawful spoofing;

(L) The same information, disclosures, and certifications required by §§ 63.18(h) and (i) of this chapter;

(M) A certification pursuant to §§ 1.2001 and 1.2002 of this chapter that no party to the application is subject to a denial of Federal benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1988, see 21 U.S.C. 862; and

(N) A declaration under penalty of perjury pursuant to § 1.16 of this chapter that all statements in the application and any appendices are true and accurate. This declaration shall be executed by an officer or other authorized representative of the applicant.

(iii) An applicant for Commission authorization under this section must file its application electronically through the “Submit a Non-Docketed Filing” module of the Commission’s Electronic Comment Filing System (ECFS). Each application shall be accompanied by the fee prescribed in part 1, subpart G of this chapter.

(iv) Public notice and review period for streamlined pleading cycle. Upon determination by the Wireline Competition Bureau (Bureau) that the applicant has filed a complete application that is appropriate for streamlined treatment, the Bureau will assign a docket number to the application and issue a public notice stating that the application has been accepted for filing as a streamlined application. The applicant must make all subsequent filings relating to its application in this docket. Parties may file comments addressing an application for authorization no later than 15 days after the Bureau releases a public notice stating that the application has been accepted for filing as a streamlined application. The applicant must make all subsequent filings relating to its application in this docket. Parties may file comments addressing an application for authorization no later than 15 days after the Bureau releases a public notice stating that the application has been accepted for filing, unless the public notice specifies a different filing date. An application under this section is deemed granted by the Commission on the 31st day after the Commission releases a public notice stating that the application has been accepted for filing, unless the Bureau notifies the applicant that the grant will not be automatically effective.

(v) Non-streamlined processing of applications. If an application discloses that the applicant has reportable ownership by a foreign person or entity under paragraph (g)(3)(ii)(L) of this section, the
Bureau shall remove the application from streamlined processing. The Bureau may also remove an application from streamlined processing at its discretion for other reasons. The Bureau shall notify the applicant by public notice that it is removing the application from streamlined processing, and shall state the reason for the removal. An application may also receive non-streamlined processing if:

(A) An applicant fails to respond promptly to Commission inquiries;
(B) An application is associated with a non-routine request for waiver of the Commission’s rules;
(C) An application would, on its face, violate a Commission rule or the Communications Act;
(D) Timely filed comments on the application raise public interest concerns that require further Commission review; or
(E) The Bureau determines that the application requires further analysis to determine whether granting the application serves the public interest.

(vi) **Additional information.** Applicants must provide additional information requested by the Bureau during and after its initial review of a direct access application. Failure to respond to such a request or other official correspondence may result in the rejection of the application without prejudice. Any additional information that the Bureau may require must be submitted in the same manner as the original application filing, unless the Bureau specifies another method.

(vii) **Rejection of applications.** The Bureau may reject an application by announcing the rejection, the reasons for the rejection, and whether the rejection is with or without prejudice via public notice if it determines or has a reasonable basis to believe that:

(A) The applicant cannot satisfy the qualification requirements for a Commission authorization under this paragraph;
(B) The applicant has made a false statement or certification to the Commission;
(C) The applicant has engaged in behavior contrary to the public interest; or
(D) Granting the application would not serve the public interest.

(viii) **Authorization suspension.** The Wireline Competition Bureau or Enforcement Bureau may suspend a direct access authorization holder’s access to new numbering resources under 5 U.S.C. 558(c):

(A) After either Bureau determines that the authorization holder acted willfully; or public health, interest, or safety requires an immediate suspension; or
(B) After giving the authorization holder notice and an opportunity to demonstrate compliance with the Commission’s rules.

(ix) **Authorization revocation.** The Wireline Competition Bureau or Enforcement Bureau shall determine appropriate procedures and initiate revocation and/or termination proceedings and revoke and/or terminate an authorization, as required by due process and applicable law and in light of the relevant facts and circumstances, including providing the authorization holder with notice and opportunity to respond. Either Bureau may commence such revocation and/or termination proceedings if:

(A) The authorization holder has failed to comply with the Commission’s numbering rules;
(B) The authorization holder no longer meets the requirements for a Commission authorization under this paragraph;
(C) The authorization holder, or officer or authorized representative of the authorization holder, has made a false statement or certification to the Commission; or
(D) Revoking and/or terminating the authorization is in the public interest.
(x) Conditions applicable to all interconnected VoIP provider numbering authorizations. An interconnected VoIP provider authorized to request numbering resources directly from the Numbering Administrators under this section shall:

(A) Maintain the accuracy of all contact information, certifications, and ownership or affiliation information in its application. If any contact information, certification, or affiliation information submitted in an application pursuant to this section, is no longer accurate, the provider must file a correction with the Commission and each applicable state within thirty (30) days of the change of contact information, certification, or affiliation information. Regarding ownership information, if the holders of equity and/or voting interests in the provider change such that (i) a provider that previously did not have reportable ownership or control information under paragraph (g)(3)(ii)(L) now has reportable ownership or control information, or (ii) there is a change to the reportable ownership or control information the provider previously reported under paragraph (g)(3)(ii)(L), the provider must file a correction with the Commission and each applicable state within thirty (30) days of the change to its ownership or control information. The Commission may use the updated contact information, certifications, or ownership or affiliation information to determine whether a change in authorization status is warranted;

(B) Comply with the applicable Commission numbering rules; numbering authority delegated to the states; and industry guidelines and practices regarding numbering as applicable to telecommunications carriers;

(C) File requests for numbers with the relevant state commission(s) at least thirty (30) days before requesting numbers from the Numbering Administrators;

(D) Provide accurate regulatory and numbering contact information to each state commission when requesting numbers in that state.

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APPENDIX B
Final Regulatory Flexibility Analysis

A. Need for, and Objectives of, the Second Report and Order

1. The Second Report and Order takes important steps aimed at stemming the tide of illegal robocalls perpetrated by interconnected VoIP providers and protecting the nation’s numbering resources from abuse by foreign bad actors by strategically updating the Commission’s rules regarding how such providers obtain nationwide authorization for direct access to our nation’s limited numbering resources.

2. First, the Second Report and Order requires applicants to make robocall-related certifications to ensure compliance with the Commission’s rules targeting illegal robocalls.1 Second, to mitigate the risk of providing bad actors abroad with access to our numbering resources, it requires applicants to disclose and keep current information about their ownership.2 Third, it requires applicants to certify to their compliance with other Commission rules applicable to interconnected VoIP providers.3 Fourth, it requires providers requesting numbers from a state’s numbering administrator to comply with the state’s laws and registration requirements that are applicable to businesses requesting numbers in that state.4 Fifth, it requires applicants to include a signed declaration that their applications are true and accurate.5 Sixth, and finally, it formalizes the Bureau’s application review, application rejection, and authorization revocation processes.6

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

3. There were no comments raised that specifically addressed the proposed rules and policies presented in the IRFA. Nonetheless, the Commission considered the potential impact of the rules proposed in the IRFA on small entities and took steps where appropriate and feasible to reduce the compliance burden for small entities in order to reduce the economic impact of the rules enacted herein on such entities.

C. Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration

4. Pursuant to the Small Business Jobs Act of 2010, which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rules as a result of those comments.7 The Chief Counsel did not file any comments in response to the proposed rules in this proceeding.

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

5. 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 rules adopted herein.8 The RFA generally defines

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1 See supra Part III.A.1.
2 See supra Part III.A.2.
3 See supra Part III.A.3.
4 See supra Part III.A.4.
5 See supra Part III.A.5.
6 See supra Part III.B.
8 See id. § 604(a)(4).
the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”9 In addition, the term “small business” has the same meaning as the term “small-business concern” under the Small Business Act.10 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.11

6. **Small Businesses, Small Organizations, Small Governmental Jurisdictions.** Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe, at the outset, three broad groups of small entities that could be directly affected herein.12 First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the Small Business Administration’s (SBA) Office of Advocacy, in general a small business is an independent business having fewer than 500 employees.13 These types of small businesses represent 99.9% of all businesses in the United States, which translates to 32.5 million businesses.14

7. Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”15 The Internal Revenue Service (IRS) uses a revenue benchmark of $50,000 or less to delineate its annual electronic filing requirements for small exempt organizations.16 Nationwide, for tax year 2020, there were approximately 447,689 small exempt organizations in the U.S. reporting revenues of $50,000 or less according to the registration and tax data for exempt organizations available from the IRS.17

9 Id. § 601(6).
10 Id. § 601(3) (incorporating by reference the definition of “small-business concern” in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.” Id.
14 Id.
16 The IRS benchmark is similar to the population of less than 50,000 benchmark in 5 U.S.C § 601(5) that is used to define a small governmental jurisdiction. Therefore, the IRS benchmark has been used to estimate the number small organizations in this small entity description. See Annual Electronic Filing Requirement for Small Exempt Organizations — Form 990-N (e-Postcard), https://www.irs.gov/charities-non-profits/annual-electronic-filing-requirement-for-small-exempt-organizations-form-990-n-e-postcard. We note that the IRS data does not provide information on whether a small exempt organization is independently owned and operated or dominant in its field.
17 See Exempt Organizations Business Master File Extract (EO BMF), “CSV Files by Region,” https://www.irs.gov/charities-non-profits/exempt-organizations-business-master-file-extract-eo-bmf. The IRS Exempt Organization Business Master File (EO BMF) Extract provides information on all registered tax-exempt/non-profit organizations. The data utilized for purposes of this description was extracted from the IRS EO BMF data for businesses for the tax year 2020 with revenue less than or equal to $50,000, for Region 1-Northeast Area (58,577), Region 2-Mid-Atlantic and Great Lakes Areas (175,272), and Region 3-Gulf Coast and Pacific Coast Areas (213,840) that includes the continental U.S., Alaska, and Hawaii. This data does not include information for Puerto Rico.
8. Finally, the small entity described as a “small governmental jurisdiction” is defined generally as “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.”\(18\) U.S. Census Bureau data from the 2017 Census of Governments\(19\) indicate there were 90,075 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States.\(20\) Of this number there were 36,931 general purpose governments (county\(21\), municipal and town or township\(22\)) with populations of less than 50,000 and 12,040 special purpose governments - independent school districts\(23\) with enrollment populations of less than 50,000.\(24\) Accordingly, based on the 2017 U.S. Census of Governments data, we estimate that at least 48,971 entities fall into the category of “small governmental jurisdictions.”\(25\)

9. **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.\(26\) 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.\(27\) By exception, establishments providing satellite television distribution services using facilities

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19 See 13 U.S.C. § 161. The Census of Governments survey is conducted every five (5) years compiling data for years ending with “2” and “7.” See also U.S. Census Bureau, About Census of Governments, [https://www.census.gov/programs-surveys/cog/about.html](https://www.census.gov/programs-surveys/cog/about.html) (last updated Nov. 2021).

20 See U.S. Census Bureau, 2017 Census of Governments – Organization Table 2. Local Governments by Type and State: 2017 [CG1700ORG02], [https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html](https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html). Local governmental jurisdictions are made up of general purpose governments (county, municipal and town or township) and special purpose governments (special districts and independent school districts). See also tbl.2. CG1700ORG02 Table Notes_Local Governments by Type and State_2017.

21 See id. at tbl.5. County Governments by Population-Size Group and State: 2017 [CG1700ORG05], [https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html](https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html). There were 2,105 county governments with populations less than 50,000. This category does not include subcounty (municipal and township) governments.

22 See id. at tbl.6. Subcounty General-Purpose Governments by Population-Size Group and State: 2017 [CG1700ORG06], [https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html](https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html). There were 18,729 municipal and 16,097 town and township governments with populations less than 50,000.

23 See id. at tbl.10. Elementary and Secondary School Systems by Enrollment-Size Group and State: 2017 [CG1700ORG10], [https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html](https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html). There were 12,040 independent school districts with enrollment populations less than 50,000. See also tbl.4. Special-Purpose Local Governments by State Census Years 1942 to 2017 [CG1700ORG04], CG1700ORG04 Table Notes_Special Purpose Local Governments by State_Census Years 1942 to 2017.

24 While the special purpose governments category also includes local special district governments, the 2017 Census of Governments data does not provide data aggregated based on population size for the special purpose governments category. Therefore, only data from independent school districts is included in the special purpose governments category.

25 This total is derived from the sum of the number of general purpose governments (county, municipal and town or township) with populations of less than 50,000 (36,931) and the number of special purpose governments - independent school districts with enrollment populations of less than 50,000 (12,040), from the 2017 Census of Governments - Organizations tbls.5, 6 & 10.


27 Id.
and infrastructure that they operate are included in this industry. 28 Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers. 29

10. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. 30 U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. 31 Of this number, 2,964 firms operated with fewer than 250 employees. 32 Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 4,590 providers that reported they were engaged in the provision of fixed local services. 33 Of these providers, the Commission estimates that 4,146 providers have 1,500 or fewer employees. 34 Consequently, using the SBA’s small business size standard, most of these providers can be considered small entities.

11. Local Exchange Carriers (LECs). Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. Providers of these services include both incumbent and competitive local exchange service providers. Wired Telecommunications Carriers 35 is the closest industry with an SBA small business size standard. 36 Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers. 37 The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. 38 U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. 39 Of this number, 2,964 firms operated with fewer than

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28 Id.
29 Fixed Local Service Providers include the following types of providers: Incumbent Local Exchange Carriers (ILECs), Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VoIP Providers, Non-Interconnected VoIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, and Other Local Service Providers. Local Resellers fall into another U.S. Census Bureau industry group and therefore data for these providers is not included in this industry.
30 See 13 CFR § 121.201, NAICS Code 517311.
32 Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.
34 Id.
36 See 13 CFR § 121.201, NAICS Code 517311.
37 Fixed Local Exchange Service Providers include the following types of providers: Incumbent Local Exchange Carriers (ILECs), Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VoIP Providers, Non-Interconnected VoIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, Local Resellers, and Other Local Service Providers.
38 Id.
250 employees. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 4,590 providers that reported they were fixed local exchange service providers. Of these providers, the Commission estimates that 4,146 providers have 1,500 or fewer employees. Consequently, using the SBA’s small business size standard, most of these providers can be considered small entities.

12. **Incumbent Local Exchange Carriers (Incumbent LECs).** Neither the Commission nor the SBA have developed a small business size standard specifically for incumbent local exchange carriers. Wired Telecommunications Carriers is the closest industry with an SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 1,212 providers that reported they were incumbent local exchange service providers. Of these providers, the Commission estimates that 916 providers have 1,500 or fewer employees. Consequently, using the SBA’s small business size standard, the Commission estimates that the majority of incumbent local exchange carriers can be considered small entities.

13. **Competitive Local Exchange Carriers (LECs).** Neither the Commission nor the SBA has developed a size standard specifically applicable to local exchange services. Providers of these services include several types of competitive local exchange service providers. Wired Telecommunications Carriers is the closest industry with an SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having

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40 Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.


42 Id.


44 See 13 CFR § 121.201, NAICS Code 517311.

45 Id.


47 Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.


49 Id.

50 Competitive Local Exchange Service Providers include the following types of providers: Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VoIP Providers, Non-Interconnected VoIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, Local Resellers, and Other Local Service Providers.

1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 3,378 providers that reported they were competitive local exchange service providers. Of these providers, the Commission estimates that 3,230 providers have 1,500 or fewer employees. Consequently, using the SBA’s small business size standard, most of these providers can be considered small entities.

14. **Interexchange Carriers (IXCs).** Neither the Commission nor the SBA has developed a small business size standard specifically for Interexchange Carriers. Wired Telecommunications Carriers is the closest industry with an SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 127 providers that reported they were engaged in the provision of interexchange services. Of these providers, the Commission estimates that 109 providers have 1,500 or fewer employees. Consequently, using the SBA’s small business size standard, the Commission estimates that the majority of providers in this industry can be considered small entities.

15. **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

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52 See 13 CFR § 121.201, NAICS Code 517311.
54 Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.
56 Id.
58 See 13 CFR § 121.201, NAICS Code 517311.
59 Id.
61 Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.
wireless video services.\textsuperscript{64} The SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees.\textsuperscript{65} U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year.\textsuperscript{66} Of that number, 2,837 firms employed fewer than 250 employees.\textsuperscript{67} Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 594 providers that reported they were engaged in the provision of wireless services.\textsuperscript{68} Of these providers, the Commission estimates that 511 providers have 1,500 or fewer employees.\textsuperscript{69} Consequently, using the SBA’s small business size standard, most of these providers can be considered small entities.

16. **Local Resellers.** Neither the Commission nor the SBA have developed a small business size standard specifically for Local Resellers. Telecommunications Resellers is the closest industry with a SBA small business size standard.\textsuperscript{70} 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.\textsuperscript{71} Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure.\textsuperscript{72} Mobile virtual network operators (MVNOs) are included in this industry.\textsuperscript{73} The SBA small business size standard for Telecommunications Resellers classifies a business as small if it has 1,500 or fewer employees.\textsuperscript{74} U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale services for the entire year.\textsuperscript{75} Of that number, 1,375 firms operated with fewer than 250 employees.\textsuperscript{76} Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 207 providers that reported they were engaged in the provision of local resale services.\textsuperscript{77} Of these providers, the Commission

\begin{itemize}
  \item \textsuperscript{64} Id.
  \item \textsuperscript{65} See 13 CFR § 121.201, NAICS Code 517312.
  \item \textsuperscript{67} Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.
  \item \textsuperscript{68} Fed.-State Joint Bd. on Universal Serv., Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf.
  \item \textsuperscript{69} Id.
  \item \textsuperscript{70} See U.S. Census Bureau, 2017 NAICS Definition, “517911 Telecommunications Resellers,” https://www.census.gov/naics/?input=517911&year=2017&details=517911.
  \item \textsuperscript{71} Id.
  \item \textsuperscript{72} Id.
  \item \textsuperscript{73} Id.
  \item \textsuperscript{74} See 13 CFR § 121.201, NAICS Code 517911 (as of 10/1/22, NAICS Code 517121).
  \item \textsuperscript{76} Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.
  \item \textsuperscript{77} Fed.-State Joint Bd. on Universal Serv., Universal Service Monitoring Report at 26, Table 1.12 (2022), https://docs.fcc.gov/public/attachments/DOC-391070A1.pdf.
\end{itemize}
estimates that 202 providers have 1,500 or fewer employees. Consequently, using the SBA’s small business size standard, most of these providers can be considered small entities.

17. **Toll Resellers.** Neither the Commission nor the SBA have developed a small business size standard specifically for Toll Resellers. Telecommunications Resellers is the closest industry with an SBA small business size standard. 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. The SBA small business size standard for Telecommunications Resellers classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale services for the entire year. Of that number, 1,375 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 457 providers that reported they were engaged in the provision of toll services. Of these providers, the Commission estimates that 438 providers have 1,500 or fewer employees. Consequently, using the SBA’s small business size standard, most of these providers can be considered small entities.

18. **All Other Telecommunications.** This industry 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. Providers of Internet services (e.g. dial-up ISPs) or voice over Internet protocol (VoIP) services, via client-supplied telecommunications connections are also included in this industry. The SBA small business size standard for this industry classifies firms with annual receipts of $35 million

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78 Id.


80 Id.

81 Id.

82 See 13 CFR § 121.201, NAICS Code 517911 (as of 10/1/22, NAICS Code 517121).


84 Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.


86 Id.


88 Id.

89 Id.
U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year. Of those firms, 1,039 had revenue of less than $25 million. Based on this data, the Commission estimates that the majority of “All Other Telecommunications” firms can be considered small.

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

19. In the Second Report and Order, we adopt new certifications and disclosures in our direct access application process for all interconnected VoIP provider applicants. Upon the effective date of these rules, we require explicit acknowledgment of compliance with all robocall regulations; implement disclosure and update requirements regarding ownership and control; require certification of compliance with other applicable Commission regulations and certain state law; and add a declaration requirement to hold applicants accountable for the truthfulness and accuracy of their direct access applications.

20. Specifically, we require a direct access applicant to certify that it will use numbering resources lawfully and will not knowingly encourage, assist, or facilitate illegal robocalls, illegal spoofing, or fraud. If the applicant has a foreign owner whose interest exceeds the reporting threshold set forth in section 63.18(h) of our rules, those applications will be placed on a “non-streamlined” processing track. We require applicants for a Commission direct access authorization to disclose information, including the name, address, country of citizenship, and principal business of every person or entity that directly or indirectly owns at least ten percent of the equity and/or voting interest, or a controlling interest, of the applicant, and the percentage of equity and/or voting interest owned by each of those entities to the nearest one percent, consistent with the requirements of international section 214 applicants. Also consistent with section 214, we require an applicant to certify whether it is, or is affiliated with, a foreign carrier, and cross-reference with section 63.18(i) for consistency. A chart or narrative describing the applicant’s corporate structure is also required for interconnected VoIP applicants.

21. To ensure ownership information remains up to date, the Second Report and Order revises section 52.15(g)(3) to require interconnected VoIP providers that obtain direct access authorization under the revised rules to submit an update to the Commission and each applicable state within 30 days of any change to the ownership information disclosed in their direct access applications. Authorization holders are also required to submit updated or corrected ownership information to the states for which they have acquired or requested numbers at the time of the ownership change and in the same manner the providers would submit a correction or update to their original applications. We also revise section 52.15(g)(3) to require applicants to certify their compliance with the Communications Assistance with Law Enforcement Act (CALEA), and provide evidence in their applications that demonstrates their compliance with both CALEA and the Commission’s part 9 public safety rules. A new certification cross-references new access arbitrage rules, thus revising section 52.15(g)(3) to require interconnected VoIP providers applying for direct access to numbers to certify that they will not use numbering resources

90 See 13 CFR § 121.201, NAICS Code 517919.


92 Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably. See U.S. Census Bureau, Glossary, https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

93 See Second Report and Order at note 80.

94 47 CFR § 63.18(i).
to evade our access stimulation rules. Interconnected VoIP providers that must file FCC Forms 477 and 499 will now provide evidence that they have complied with these obligations, and any successor filing obligations, when filing a direct access application.

22. The Second Report and Order further revises section 52.15(g)(3) of our rules to require an officer or authorized employee representative of the applicant to submit a declaration under penalty of perjury, pursuant to section 1.16 of the rules, attesting that all statements in the application and any appendices are true and accurate. All updated or corrected ownership information shall be filed through existing methods such as the Electronic Comment Filing System (ECFS) through the Direct Access intake docket (Inbox 52.15) and via e-mail to DAA@fcc.gov, unless the Bureau specifies another method. The Bureau may request additional documentation as necessary, during and after its initial review of a direct access application.

23. After reviewing the record, we received no concerns about unique burdens from small businesses that would be impacted by the new certifications adopted in the Second Report and Order. As such, the Commission does not have sufficient information on the record to determine whether small entities will be required to hire professionals to comply with its decisions or to quantify the cost of compliance for small entities. The Commission, however, anticipates the approaches it has taken to implement the requirements will have minimal or de minimis cost implications because many of these obligations are required to comply with existing Commission regulations.

F. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

24. The RFA requires an agency to provide “a description of the steps the agency has taken to minimize the significant economic impact on small entities…including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.”

25. The Second Report and Order considered alternatives that may reduce the impact of these rule changes on small entities. Some proposals were not adopted because the requirements already exist under other parts of the Commission’s rules. New obligations regarding STIR/SHAKEN caller ID authentication or robocall mitigation specifically for interconnected VoIP providers were not adopted; instead applicants are required to certify compliance with preexisting rule sections. This reduces confusion and maintains accuracy should the Commission decide to revise the robocall-related dockets. We declined to adopt our proposal to require direct access authorization holders to certify on their applications, or inform the Commission if the authorization holder is subject to a Commission or other regulator or law enforcement investigation due to its robocall mitigation plan being deemed insufficient, or due to suspected unlawful robocalling or spoofing, because authorization holders are already required to do so under the Commission’s rules.

26. There was not strong record support for certain proposals that require action of the Office of International Affairs (OIA) or the Bureau, so we declined to adopt those finding that it is more efficient to rely on current practices to address these concerns. These include automatic referral of interconnected VoIP providers’ direct access applications to the Executive Branch agencies when an applicant has reportable foreign ownership, and developing a list of “Standard Questions” for interconnected VoIP applicants with reportable foreign ownership. We also declined to adopt rules to specify the documents that will be allowed to satisfy the “facilities readiness” requirement in the Commission’s current rules. Comments on the issue were divided and we conclude that existing examples of technical documentation are sufficient. Further, after considering the record, we declined to adopt a know-your-customer certification proposal at this time.

27. As discussed above, the new certification requirements in the Second Report and Order are minimally burdensome, as they merely require providers to certify that they are compliant with preexisting Commission rules. Our public safety and CALEA documentation submission requirement merely formalizes existing Bureau practice of requesting such information from direct access applicants. Our new ownership disclosure requirement tracks requirements already imposed on providers in the section 214 context. For these reasons, we believe that small and other interconnected VoIP providers will not have an issue including these new certifications and disclosures in their direct access authorization applications.

G. Report to Congress

28. The Commission will send a copy of the Second Report and Order, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act.96 In addition, the Commission will send a copy of the Second Report and Order, including this FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the Second Report and Order (or summaries thereof) will also be published in the Federal Register.97

96 Id. § 801(a)(1)(A).
97 See id. § 604(b).
APPENDIX C

Initial Regulatory Flexibility Analysis

1. 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 a substantial number of small entities by the policies and rules proposed in the Second Further Notice of Proposed Rulemaking (Second 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 Second Further Notice. The Commission will send a copy of the Second Further Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). In addition, the Second Further Notice and IRFA (or summaries thereof) will be published in the Federal Register.

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

2. In the TRACED Act, Congress directed the Commission to examine whether and how to modify its policies to reduce access to numbers by potential perpetrators of illegal robocalls. Consistent with Congress’s direction, the Second Further Notice proposes to update our rules regarding direct access to numbers by providers of interconnected VoIP services to help stem the tide of illegal robocalls. Today, widely available VoIP software allows malicious callers to make spoofed calls with minimal experience and cost. Therefore, as we continue to refine our process for allowing VoIP providers direct access to telephone numbers, we must account both for the benefits of competition and the potential risks of allowing bad actors to leverage access to numbers to harm Americans.

3. The Commission first began to allow interconnected VoIP providers to obtain numbers for customers directly from the Numbering Administrator rather than relying on a carrier partner in 2015. Based on our experience since that time, the Second Further Notice proposes to adopt clarifications and guardrails to better ensure that VoIP providers that obtain the benefit of direct access to numbers comply with existing legal obligations and do not facilitate illegal robocalls, pose national security risks, or evade or abuse intercarrier compensation requirements.

4. First, we seek comment on a proposal to apply the new application requirements adopted in the Second Report and Order to existing authorization holders whose authorizations predate the effective date of those new requirements. Second, we seek comment on whether direct access applicants should disclose a list of states in which they seek to provide initial service. Third, we seek comment on our proposal to minimize harms that may arise from bad actors that access numbering resources indirectly (i.e., without a direct access authorization), by requiring the direct access authorization holders that supply them with numbering resources to obtain from them the same certifications, acknowledgments, and disclosures required of direct access applicants.

B. Legal Basis

5. The proposed action is authorized pursuant to sections 1, 3, 4, 201-205, 227b-1, 251, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 153, 154, 201-205, 227b-1,

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3 See id.

4 See TRACED Act § 6(a)(1)-(2).

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

6. 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, 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.

7. Small Businesses, Small Organizations, Small Governmental Jurisdictions. Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe, at the outset, three broad groups of small entities that could be directly affected herein: First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the Small Business Administration’s (SBA) Office of Advocacy, in general a small business is an independent business having fewer than 500 employees. These types of small businesses represent 99.9% of all businesses in the United States, which translates to 32.5 million businesses.

8. Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.” The Internal Revenue Service (IRS) uses a revenue benchmark of $50,000 or less to delineate its annual electronic filing requirements for small exempt organizations. Nationwide, for tax year 2020, there

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7 See id. § 601(6).
8 Id. § 601(3) (incorporating by reference the definition of “small-business concern” in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.”
12 Id.
14 The IRS benchmark is similar to the population of less than 50,000 benchmark in 5 U.S.C § 601(5) that is used to define a small governmental jurisdiction. However, the IRS benchmark has been used to estimate the number small organizations in this small entity description. See Annual Electronic Filing Requirement for Small Exempt Organizations — Form 990-N (e-Postcard), https://www.irs.gov/charities-non-profits/annual-electronic-filing-requirement-for-small-exempt-organizations-form-990-n-e-postcard. We note that the IRS data does not provide information on whether a small exempt organization is independently owned and operated or dominant in its field.
were approximately 447,689 small exempt organizations in the U.S. reporting revenues of $50,000 or less according to the registration and tax data for exempt organizations available from the IRS.15

9. Finally, the small entity described as a “small governmental jurisdiction” is defined generally as “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.”16 U.S. Census Bureau data from the 2017 Census of Governments17 indicate there were 90,075 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States.18 Of this number there were 36,931 general purpose governments (county19, municipal and town or township20) with populations of less than 50,000 and 12,040 special purpose governments - independent school districts21 with enrollment populations of less than 50,000.22 Accordingly, based on the 2017 U.S. Census of Governments data, we estimate that at least 48,971 entities fall into the category of “small governmental jurisdictions.”23

10. WiredTelecommunications Carriers. The U.S. Census Bureau defines this industry as

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15 See Exempt Organizations Business Master File Extract (EO BMF), “CSV Files by Region,” https://www.irs.gov/charities-non-profits/exempt-organizations-business-master-file-extract-eo-bmf. The IRS Exempt Organization Business Master File (EO BMF) Extract provides information on all registered tax-exempt/non-profit organizations. The data utilized for purposes of this description was extracted from the IRS EO BMF data for businesses for the tax year 2020 with revenue less than or equal to $50,000, for Region 1- Northeast Area (58,577), Region 2-Mid-Atlantic and Great Lakes Areas (175,272), and Region 3-Gulf Coast and Pacific Coast Areas (213,840) that includes the continental U.S., Alaska, and Hawaii. This data does not include information for Puerto Rico.


17 See 13 U.S.C. § 161. The Census of Governments survey is conducted every five (5) years compiling data for years ending with “2” and “7.” See also U.S. Census Bureau, About Census of Governments, https://www.census.gov/programs-surveys/cog/about.html (last updated Nov. 18, 2021).

18 See U.S. Census Bureau, 2017 Census of Governments – Organization Table 2. Local Governments by Type and State: 2017 [CG1700ORG02], https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html. Local governmental jurisdictions are made up of general purpose governments (county, municipal and town or township) and special purpose governments (special districts and independent school districts). See also tbl.2. CG1700ORG02 Table Notes_Local Governments by Type and State_2017.

19 See id. at tbl.5. County Governments by Population-Size Group and State: 2017 [CG1700ORG05], https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html. There were 2,105 county governments with populations less than 50,000. This category does not include subcounty (municipal and township) governments.

20 See id. at tbl.6. Subcounty General-Purpose Governments by Population-Size Group and State: 2017 [CG1700ORG06], https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html. There were 18,729 municipal and 16,097 town and township governments with populations less than 50,000.

21 See id. at tbl.10. Elementary and Secondary School Systems by Enrollment-Size Group and State: 2017 [CG1700ORG10], https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html. There were 12,040 independent school districts with enrollment populations less than 50,000. See also tbl.4. Special-Purpose Local Governments by State Census Years 1942 to 2017 [CG1700ORG04], CG1700ORG04 Table Notes_Special Purpose Local Governments by State_Census Years 1942 to 2017.

22 While the special purpose governments category also includes local special district governments, the 2017 Census of Governments data does not provide data aggregated based on population size for the special purpose governments category. Therefore, only data from independent school districts is included in the special purpose governments category.

23 This total is derived from the sum of the number of general purpose governments (county, municipal and town or township) with populations of less than 50,000 (36,931) and the number of special purpose governments - independent school districts with enrollment populations of less than 50,000 (12,040), from the 2017 Census of Governments - Organizations tbls.5, 6 & 10.
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. Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers.

11. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 4,590 providers that reported they were engaged in the provision of fixed local services. Of these providers, the Commission estimates that 4,146 providers have 1,500 or fewer employees. Consequently, using the SBA’s small business size standard, most of these providers can be considered small entities.

12. Local Exchange Carriers (LECs). Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. Providers of these services include both incumbent and competitive local exchange service providers. Wired Telecommunications Carriers is the closest industry with an SBA small business size standard. Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers.

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25 Id.

26 Id.

27 Fixed Local Service Providers include the following types of providers: Incumbent Local Exchange Carriers (ILECs), Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VoIP Providers, Non-Interconnected VoIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, and Other Local Service Providers. Local Resellers fall into another U.S. Census Bureau industry group and therefore data for these providers is not included in this industry.

28 See 13 CFR § 121.201, NAICS Code 517311.


30 Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.


32 Id.


34 See 13 CFR § 121.201, NAICS Code 517311.

35 Fixed Local Exchange Service Providers include the following types of providers: Incumbent Local Exchange Carriers (ILECs), Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), (continued….)
The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. 36 U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. 37 Of this number, 2,964 firms operated with fewer than 250 employees. 38 Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 4,590 providers that reported they were fixed local exchange service providers. 39 Of these providers, the Commission estimates that 4,146 providers have 1,500 or fewer employees. 40 Consequently, using the SBA’s small business size standard, most of these providers can be considered small entities.

13.  **Incumbent Local Exchange Carriers (Incumbent LECs).** Neither the Commission nor the SBA have developed a small business size standard specifically for incumbent local exchange carriers. Wired Telecommunications Carriers 41 is the closest industry with an SBA small business size standard. 42 The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. 43 U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year. 44 Of this number, 2,964 firms operated with fewer than 250 employees. 45 Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 1,212 providers that reported they were incumbent local exchange service providers. 46 Of these providers, the Commission estimates that 916 providers have 1,500 or fewer employees. 47 Consequently, using the SBA’s small business size standard, the Commission estimates that the majority of incumbent local exchange carriers can be considered small entities.

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Cable/Coax CLECs, Interconnected VoIP Providers, Non-Interconnected VoIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, Local Resellers, and Other Local Service Providers.


37 Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

38 Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.


40 Id.


42 See 13 CFR § 121.201, NAICS Code 517311.

43 Id.


45 Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.


47 Id.
14. **Competitive Local Exchange Carriers (LECs).** Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. Providers of these services include several types of competitive local exchange service providers.\(^{48}\) Wired Telecommunications Carriers\(^{49}\) is the closest industry with an SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.\(^{50}\) U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.\(^{51}\) Of this number, 2,964 firms operated with fewer than 250 employees.\(^{52}\) Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 3,378 providers that reported they were competitive local exchange service providers.\(^{53}\) Of these providers, the Commission estimates that 3,230 providers have 1,500 or fewer employees.\(^{54}\) Consequently, using the SBA’s small business size standard, most of these providers can be considered small entities.

15. **Interexchange Carriers (IXCs).** Neither the Commission nor the SBA has developed a small business size standard specifically for Interexchange Carriers. Wired Telecommunications Carriers\(^{55}\) is the closest industry with an SBA small business size standard.\(^{56}\) The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.\(^{57}\) U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.\(^{58}\) Of this number, 2,964 firms operated with fewer than 250 employees.\(^{59}\) Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 127 providers that reported they were engaged in the provision of interexchange services. Of these providers, the Commission estimates that 109 providers have 1,500 or

\(^{48}\) Competitive Local Exchange Service Providers include the following types of providers: Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VoIP Providers, Non-Interconnected VoIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, Local Resellers, and Other Local Service Providers.


\(^{50}\) See 13 CFR § 121.201, NAICS Code 517311.


\(^{52}\) Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.


\(^{54}\) Id.


\(^{56}\) See 13 CFR § 121.201, NAICS Code 517311.

\(^{57}\) Id.


\(^{59}\) Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.
fewer employees. Consequently, using the SBA’s small business size standard, the Commission estimates that the majority of providers in this industry can be considered small entities.

16. **Cable System Operators (Telecom Act Standard).** The Communications Act of 1934, as amended, contains a size standard for a “small cable operator,” 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.” For purposes of the Telecom Act Standard, the Commission determined that a cable system operator that serves fewer than 677,000 subscribers, either directly or through affiliates, will meet the definition of a small cable operator based on the cable subscriber count established in a 2001 Public Notice. Based on industry data, only six cable system operators have more than 677,000 subscribers. Accordingly, the Commission estimates that the majority of cable system operators are small under this size standard. We note however, 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.

17. **Other Toll Carriers.** Neither the Commission nor the SBA has developed a definition for small businesses specifically applicable to Other Toll Carriers. This category includes toll carriers that do not fall within the categories of interexchange carriers, operator service providers, prepaid calling card providers, satellite service carriers, or toll resellers. Wired Telecommunications Carriers is the closest industry with an SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.
Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 90 providers that reported they were engaged in the provision of other toll services. Of these providers, the Commission estimates that 87 providers have 1,500 or fewer employees. Consequently, using the SBA’s small business size standard, most of these providers can be considered small entities.

18. **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 SBA size standard for this industry classifies a business as small if it has 1,500 or fewer employees. U.S. Census Bureau data for 2017 show that there were 2,893 firms in this industry that operated for the entire year. Of that number, 2,837 firms employed fewer than 250 employees. Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 594 providers that reported they were engaged in the provision of wireless services. Of these providers, the Commission estimates that 511 providers have 1,500 or fewer employees. Consequently, using the SBA’s small business size standard, most of these providers can be considered small entities.

19. **Satellite Telecommunications.** This industry 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 SBA small business size standard for this industry classifies a business with $35 million or less in annual receipts as small. U.S. Census Bureau data for 2017 show that 275

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69 Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.


71 Id.


73 Id.

74 See 13 CFR § 121.201, NAICS Code 517312.


76 Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.


78 Id.


80 See 13 CFR § 121.201, NAICS Code 517410.
firms in this industry operated for the entire year.\textsuperscript{81} Of this number, 242 firms had revenue of less than $25 million.\textsuperscript{82} Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 65 providers that reported they were engaged in the provision of satellite telecommunications services.\textsuperscript{83} Of these providers, the Commission estimates that approximately 42 providers have 1,500 or fewer employees.\textsuperscript{84} Consequently, using the SBA’s small business size standard, a little more than half of these providers can be considered small entities.

20. **Local Resellers.** Neither the Commission nor the SBA have developed a small business size standard specifically for Local Resellers. Telecommunications Resellers is the closest industry with a SBA small business size standard.\textsuperscript{85} 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.\textsuperscript{86} Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure.\textsuperscript{87} Mobile virtual network operators (MVNOs) are included in this industry.\textsuperscript{88} The SBA small business size standard for Telecommunications Resellers classifies a business as small if it has 1,500 or fewer employees.\textsuperscript{89} U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale services for the entire year.\textsuperscript{90} Of that number, 1,375 firms operated with fewer than 250 employees.\textsuperscript{91} Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 207 providers that reported they were engaged in the provision of local resale services.\textsuperscript{92} Of these providers, the Commission


\textsuperscript{82} Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably. See U.S. Census Bureau, Glossary, https://www.census.gov/glossary/#term_ReceiptsRevenueServices.


\textsuperscript{84} Id.


\textsuperscript{86} Id.

\textsuperscript{87} Id.

\textsuperscript{88} Id.

\textsuperscript{89} See 13 CFR § 121.201, NAICS Code 517911 (as of 10/1/22, NAICS Code 517121).


\textsuperscript{91} Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

estimates that 202 providers have 1,500 or fewer employees.\footnote{Id.} Consequently, using the SBA’s small business size standard, most of these providers can be considered small entities.

21. **Toll Resellers.** Neither the Commission nor the SBA have developed a small business size standard specifically for Toll Resellers. Telecommunications Resellers\footnote{See U.S. Census Bureau, 2017 NAICS Definition, “517911 Telecommunications Resellers,” \url{https://www.census.gov/naics/?input=517911&year=2017&details=517911}.} is the closest industry with an SBA small business size standard. 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.\footnote{Id.} Mobile virtual network operators (MVNOs) are included in this industry.\footnote{Id.} The SBA small business size standard for Telecommunications Resellers classifies a business as small if it has 1,500 or fewer employees.\footnote{See 13 CFR § 121.201, NAICS Code 517911 (as of 10/1/22, NAICS Code 517121).} U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale services for the entire year.\footnote{Id.} Of that number, 1,375 firms operated with fewer than 250 employees.\footnote{Id.} Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of December 31, 2021, there were 457 providers that reported they were engaged in the provision of toll services.\footnote{Fed.-State Joint Bd. on Universal Serv., Universal Service Monitoring Report at 26, Table 1.12 (2022), \url{https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf}.} Of these providers, the Commission estimates that 438 providers have 1,500 or fewer employees.\footnote{Id.} Consequently, using the SBA’s small business size standard, most of these providers can be considered small entities.

22. **Prepaid Calling Card Providers.** Neither the Commission nor the SBA has developed a small business size standard specifically for prepaid calling card providers. Telecommunications\footnote{See U.S. Census Bureau, 2017 NAICS Definition, “517911 Telecommunications Resellers,” \url{https://www.census.gov/naics/?input=517911&year=2017&details=517911}.} is the closest industry with a SBA small business size standard. 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.\footnote{Id.} Mobile virtual network operators (MVNOs) are included in this industry.\footnote{Id.} The SBA small business size standard for Telecommunications Resellers classifies a business as small if it has 1,500 or fewer employees.\footnote{See 13 CFR § 121.201, NAICS Code 517911 (as of 10/1/22, NAICS Code 517121).} The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.\footnote{Id.}
standard for Telecommunications Resellers classifies a business as small if it has 1,500 or fewer
employees.\textsuperscript{105} U.S. Census Bureau data for 2017 show that 1,386 firms in this industry provided resale
services for the entire year.\textsuperscript{106} Of that number, 1,375 firms operated with fewer than 250 employees.\textsuperscript{107}
Additionally, based on Commission data in the 2022 Universal Service Monitoring Report, as of
December 31, 2021, there were 62 providers that reported they were engaged in the provision of prepaid
card services.\textsuperscript{108} Of these providers, the Commission estimates that 61 providers have 1,500 or fewer
employees.\textsuperscript{109} Consequently, using the SBA’s small business size standard, most of these providers can
be considered small entities.

23. \textit{All Other Telecommunications.} This industry is comprised of establishments primarily
engaged in providing specialized telecommunications services, such as satellite tracking, communications
telemetry, and radar station operation.\textsuperscript{110} 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.\textsuperscript{111} Providers of Internet services (e.g. dial-up ISPs) or voice over Internet protocol
(VoIP) services, via client-supplied telecommunications connections are also included in this industry.\textsuperscript{112}
The SBA small business size standard for this industry classifies firms with annual receipts of $35 million
or less as small.\textsuperscript{113} U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry
that operated for the entire year.\textsuperscript{114} Of those firms, 1,039 had revenue of less than $25 million.\textsuperscript{115} Based
on this data, the Commission estimates that the majority of “All Other Telecommunications” firms can be
considered small.

\textsuperscript{105} See 13 CFR § 121.201, NAICS Code 517911.(as of 10/1/22, NAICS Code 517121).
\textsuperscript{106} See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of
Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517911,
\textsuperscript{107} Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that
meet the SBA size standard.
\textsuperscript{108} Fed.-State Joint Bd. on Universal Serv., Universal Service Monitoring Report at 26, Table 1.12 (2022),
379181A1.pdf
\textsuperscript{109} Id.
\textsuperscript{110} See U.S. Census Bureau, 2017 NAICS Definition, “517919 All Other Telecommunications,”
\textsuperscript{111} Id.
\textsuperscript{112} Id.
\textsuperscript{113} See 13 CFR § 121.201, NAICS Code 517919.
\textsuperscript{114} See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of
Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 517919,
\textsuperscript{115} Id. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that
meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and
revenues are used interchangeably. See U.S. Census Bureau, \textit{Glossary},
D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

24. If adopted, the proposals in the Second Further Notice may create new or additional reporting or recordkeeping and/or other compliance obligations for small entities. Specifically, the Second Further Notice proposes to apply the new application requirements we adopt in the Second Report and Order to existing authorization holders whose authorizations predate the effective date of those new requirements. This proposal, if adopted, would impose new reporting and compliance obligations on existing authorization holders. The Second Further Notice also proposes requiring direct access applicants to disclose a list of states in which they seek to provide initial service, formalizing the existing practice of the Bureau. Additionally, the Second Further Notice seeks comment on a proposal to minimize harms that may arise from bad actors that access numbering resources indirectly (i.e., without a direct access authorization), by requiring the direct access authorization holders that supply them with numbering resources to obtain from them the same certifications, acknowledgments, and disclosures required of direct access applicants.

25. The Commission anticipates some of the approaches proposed to implement the requirements in the Second Report and Order on existing direct access authorization holders will have minimal or de minimis cost implications because many of these obligations are required to comply with existing Commission regulations. At this time however, the Commission is not in a position to determine whether, if adopted, proposals and the matters upon which we seek comment will require small entities to hire professionals to comply, and cannot quantify the cost of compliance with the potential rule changes discussed herein. We anticipate the information we receive in comments including where requested, cost and benefit analyses, will help the Commission identify and evaluate relevant compliance matters for small entities, including compliance costs and other burdens that may result from the proposals and inquiries we make in the Second Further Notice.

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

26. The RFA requires an agency to describe any significant, specifically small business, 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.”

27. The Commission considered the possibility that burdens may be imposed on interconnected VoIP service providers (small or large) if we adopt rules that propose to strengthen requirements for existing direct access authorization holders. The Commission welcomes comments on any of the issues raised in the Second Further Notice that will impact small providers. In particular, the Second Further Notice considered and seeks comment on whether requiring existing direct access authorization holders to meet the new requirements of the Second Report and Order is necessary, or would be unduly burdensome, and whether the proposed 30-day timeframe for compliance is sufficient. The Second Further Notice also requests comment on possible burdens associated with requiring direct

116 See Second Further Notice, paras. 80-85.
117 See id. para. 86.
118 See id. paras. 87-92.
119 5 U.S.C. § 603(c)(1)-(4).
120 Second Further Notice, paras. 80-85.
access applicants to provide their initial proposed service area and the states where they intend to provide service and whether better options exist.\textsuperscript{121} In addition, the Second Further Notice seeks comment on the potential burdens and impact of requiring direct access authorization holders that sell, lease, or otherwise provide telephone numbers to an interconnected VoIP provider to obtain certifications, acknowledgments, and disclosures from them as if they were applying for a direct access authorization.\textsuperscript{122}

28. The Second Further Notice proposes that authorization holders be allowed to continue to use numbers they obtained prior to submitting updated or corrected ownership information to the Bureau unless the Bureau determines that the authorization must be revoked per the formal revocation procedure we adopt in the Second Report and Order.\textsuperscript{123} Alternatively, we seek comment on whether this step is necessary to narrow the gap in our oversight ability to reach bad actors with respect to numbering resources, and other factors the Commission should consider to enforce these rules.\textsuperscript{124}

29. To assist in the Commission’s evaluation of the economic impact on small entities, as a result of actions that have been proposed in the Second Further Notice, and to better explore options and alternatives, the Commission seeks comment on whether any of the burdens associated with the filing, recordkeeping and reporting requirements described above can be minimized for small entities. Additionally, the Commission seeks comment on whether any of the costs associated with any of the proposed requirements to eliminate unlawful robocalls can be alleviated for small entities. The Commission expects to more fully consider the economic impact and alternatives for small entities based on its review of the record and any comments filed in response to the Second Further Notice and this IRFA.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

30. None.

\textsuperscript{121} Id. para. 86.
\textsuperscript{122} Id. paras. 87-92.
\textsuperscript{123} Id. para. 86.
\textsuperscript{124} Id.