

FCC FACT SHEET*

Advanced Methods to Target and Eliminate Unlawful Robocalls
Second Further Notice of Proposed Rulemaking - CG Docket No. 17-59

Background: When consumers disconnect their phone numbers, they may not update all parties who have called them in the past, such as businesses to which the consumer gave prior express consent to call. And when that phone number is reassigned to a new consumer, that person may receive unwanted calls intended for the previous consumer. These calls can annoy the consumers that receive them and waste the time and effort of the callers while potentially subjecting them to liability. The Chairman has circulated a *Second Further Notice of Proposed Rulemaking* that proposes and seeks comment on ways to address this reassigned numbers problem.

What the *Second Further Notice* Would Do:

- Propose to ensure that one or more databases are available to provide callers with the comprehensive and timely information they need to avoid calling reassigned numbers.
- Seek comment on the information that callers who choose to use a reassigned numbers database need from such a database.
- Seek comment on the best way for service providers to report that information and for callers to access that information, including the following three alternatives:
 - (1) requiring service providers to report reassigned number information to a single, FCC-designated database;
 - (2) requiring service providers to report that information to one or more commercial data aggregators; or
 - (3) allowing service providers to report that information to commercial data aggregators on a voluntary basis.
- Seek comment on whether, and if so, how the Commission should adopt a safe harbor from liability under the Telephone Consumer Protection Act for those callers that choose to use a reassigned numbers database.

*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 CG Docket No. 17-59, 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
Advanced Methods to Target and Eliminate
Unlawful Robocalls
CG Docket No. 17-59

SECOND FURTHER NOTICE OF PROPOSED RULEMAKING*

Adopted: [] Released: []

Comment Date: (45 days after date of publication in the Federal Register)
Reply Comment Date: (75 days after date of publication in the Federal Register)

By the Commission:

I. INTRODUCTION

1. In this Second Further Notice of Proposed Rulemaking, as part of our multiple-front battle against unwanted calls, we propose and seek comment on ways to address the problem of unwanted calls to reassigned numbers. This problem subjects the recipient of the reassigned number to annoyance and wastes the time and effort of the caller while potentially subjecting it to liability.

2. Consumer groups and callers alike have asked for a solution to this problem. We therefore propose to ensure that one or more databases are available to provide callers with the comprehensive and timely information they need to discover potential number reassignments before making a call. To that end, we seek further comment on, among other issues: (1) the specific information that callers need from a reassigned numbers database; and (2) the best way to make that information available to callers that want it. Making a reassigned numbers database available to callers that want it will benefit consumers by reducing unwanted calls intended for another consumer while helping callers avoid the costs of calling the wrong consumer, including potential violations of the Telephone Consumer Protection Act (TCPA).1

II. BACKGROUND

3. As required by the Commission's rules, voice service providers ensure the efficient use of telephone numbers by reassigning a telephone number to a new consumer after it is disconnected by the

* This document has been circulated for tentative consideration by the Commission at its March 2018 open meeting. The issues referenced in this document and the Commission's ultimate resolutions of those issues remain under consideration and subject to change. This document does not constitute any official action by the Commission. However, the Chairman 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 Commission's ex parte rules apply and presentations are subject to "permit-but-disclose" ex parte rules. See, e.g., 47 CFR §§ 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.

1 The Telephone Consumer Protection Act of 1991, Pub. L. No. 102-243, is codified at 47 U.S.C. § 227.

previous subscriber.² Consumers disconnect their old numbers and change to new telephone numbers for a variety of reasons, including switching wireless providers without porting numbers and getting new wireline telephone numbers when they move. Upon disconnecting his or her phone number, a consumer may not update all parties who have called them in the past, including businesses to which the consumer gave prior express consent to call and other callers from which the consumer expects to receive calls. When that number is reassigned, the new subscriber of that number may receive unwanted calls intended for the previous subscriber.

4. The problem of unwanted calls to reassigned numbers can have important consequences for both consumers and callers. Beyond annoying the new subscriber of the reassigned number, a misdirected call can deprive the previous subscriber of the number of a desired call from, for example, their school, health care provider, or financial institution.³ In the case of prerecorded or automated voice calls (robocalls) to reassigned numbers, a good faith caller may be subject to liability for violations of the TCPA.⁴ That threat can have a chilling effect, causing some callers to be overly cautious and stop making wanted, lawful calls out of concern over potential liability for calling a reassigned number.⁵

5. While existing tools can help callers identify number reassignments,⁶ “callers lack guaranteed methods to discover all reassignments” in a timely manner.⁷ Accordingly, in the July 2017 *Reassigned Numbers NOI*,⁸ the Commission launched an inquiry to explore ways to reduce unwanted calls to reassigned numbers. The Commission sought comment on, among other issues, the best ways for service providers to report information about number reassignments and how that information can most effectively be made available to callers. Thirty-three parties filed comments and fourteen parties

² A number is disconnected when it is no longer used to route calls to the disconnecting subscriber of record. *See* Alliance for Telecommunications Industry Solutions, ATIS-0300051 - Central Office Code (NXX) Assignment Guidelines (COCAG) at 46 (2013). Once a number is disconnected, a service provider can designate it as an “aging number” for a period of time and subsequently reassign it to a new subscriber. *See* 47 CFR § 52.15(f)(ii) (“Aging numbers are disconnected numbers that are not available for assignment to another end user or customer for a specified period of time. Numbers previously assigned to residential customers may be aged for no more than 90 days.”).

³ *See, e.g.*, District of Columbia Public Schools Comments at 2 (“Recipients of our mass notifications expect them and consider them an essential part of our educational role.”); Anthem Reply Comments at 1 (explaining that the health care information transmitted by Anthem is welcomed by consumers and leads to better health outcomes); ABA Comments at 1 (“Bankers regularly need to contact their customers with important, beneficial, and time-critical calls . . .”).

⁴ *See, e.g.* Blackboard Comments at 2-3; Comcast Comments at 2; CUNA Comments at 7; NAFICU Comments at 2; NCTA Comments at 2; Tatango Comments at 3. The TCPA requires robocallers to obtain prior express consent before making robocalls, with the consent requirements varying based on whether the call goes to a wireless or a residential phone number and whether the call is for telemarketing purposes. *See* 47 U.S.C. § 227(b)(1)(A); 47 CFR § 64.1200(a)(1)-(2); *see also Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991*, CG Docket No. 92-90, Report and Order, 7 FCC Rcd 8752 (1992).

⁵ *See, e.g.*, Blackboard Comments at 4; CUNA Reply Comments at 6.

⁶ *See, e.g.*, Neustar TCPA Compliance Solutions, <https://www.neustar.biz/risk/compliance-solutions/tcpa> (last visited Feb. 26, 2017); Danal TCPA Compliance Solution, <https://tcpaconfidence.com/> (last visited Feb. 26, 2017); Payfone TCPA Compliance, <https://www.payfone.com/> (last visited Feb. 26, 2017); *see also Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991*, Declaratory Ruling and Order, CG Docket No. 02-278, WC Docket No. 07-135, 30 FCC Rcd 7961, 7999 n.254 (2015) (*2015 TCPA Declaratory Ruling*) (citing comments stating that marketplace solutions to inform callers about reassigned numbers are available).

⁷ *See 2015 TCPA Declaratory Ruling*, 30 FCC Rcd at 8007-08, para. 85; *see also id.* at 8092 (Statement of Commissioner O’Rielly) (noting that existing solutions are incomplete and not timely updated).

⁸ *See generally Advanced Methods to Target and Eliminate Unlawful Robocalls*, CG Docket No.17-59, Second Notice of Inquiry, 32 FCC Rcd 6007 (2017) (*Reassigned Numbers NOI* or *NOI*).

submitted reply comments.

6. The majority of commenters on the *NOI* support a comprehensive and timely database that allows callers to verify whether a number has been reassigned before making a call. Specifically, a broad range of commenters, including callers and associated trade organizations, consumer groups, cable and VoIP service providers, and data aggregators, support establishing a database where service providers can report reassigned number data and callers can access that data.⁹ Legislators have also encouraged the Commission to proceed with a rulemaking to create a comprehensive reassigned numbers database.¹⁰

7. Several commenters nonetheless raise concerns about this approach. For example, the United States Chamber of Commerce expresses concern about the costs associated with using a reassigned numbers database and notes that the Commission cannot mandate that callers use a reassigned numbers database in order to comply with the TCPA.¹¹ Several other commenters contend that establishing a reassigned numbers database is too costly as compared to the likely benefit.¹² Alternatively, CTIA and others contend that if the Commission decides to address the reassigned numbers problem, it should adopt a safe harbor from TCPA violations for callers that use existing commercial solutions and thereby encourage broader adoption and improvement of those solutions.¹³

III. DISCUSSION

8. We propose to ensure that one or more databases are available to provide callers with the comprehensive and timely information they need to avoid calling reassigned numbers. We therefore seek comment below on, among other things: (1) the information that callers who choose to use a reassigned numbers database need from such a database; (2) how to ensure that the information is reported to a database; and (3) the best approach to making that information available to callers.

9. We believe our legal authority for the potential requirements and alternatives discussed below stems directly from section 251(e) of the Act.¹⁴ More specifically, we believe that the Commission's exclusive jurisdiction over North American Numbering Plan (NANP) numbering resources provides ample authority to adopt any requirements that recipients of NANP numbers report reassignment or other information about those numbers, including the mechanism through which such information must be reported.¹⁵ We seek comment on these views and on the nature and scope of our legal authority under section 251(e) to adopt the potential requirements and alternatives discussed below.

⁹ See, e.g., Comcast Comments at 10-11; NCLC *et al.* Comments at 1-4; NRECA Comments at 3; NCTA Comments at 1; RILA Comments at 3; Tracfone Comments at 1.

¹⁰ See Letter from Sen. John Thune and Sen. Edward J. Markey, U.S. Senate, to FCC Chairman Ajit Pai (Oct. 3, 2017), https://www.commerce.senate.gov/public/_cache/files/d89fbc8-26e5-4f60-aad6-9b7d48820f15/D0F545782498F68870B5D3EDB81F5F99.thune-markey-letter-to-fcc-re-reassigned-numbers-database.pdf; see also Letter from Sen. John Thune and Sen. Edward J. Markey, U.S. Senate to CTIA (July 15, 2016), <https://www.markey.senate.gov/news/press-releases/senators-markey-thune-explore-how-wireless-carriers-may-reduce-unwanted-calls-and-texts>.

¹¹ See USCC Comments at 2-3.

¹² See, e.g., ACA International Comments at 4; CTIA Comments at 7-9; NSC Comments at 1.

¹³ See CTIA Comments at 8-9; CenturyLink Reply Comments at 4; ETA Comments at 3.

¹⁴ See 47 U.S.C. § 251(e).

¹⁵ The Commission has interpreted Section 251(e) to confer plenary authority “over the NANP and related telephone numbering issues in the United States.” *Local Number Portability Porting Interval and Validation Requirements, IP-Enabled Services, Telephone Number Portability*, WC Docket No. 07-243 et al., Report and Order, Declaratory Ruling, Order on Remand, and Notice of Proposed Rulemaking, 22 FCC Rcd 19531, 19533, para. 5 (2007).

A. Database Information, Access, and Use

10. Based on the *NOI* comments, an effective reassigned numbers database should contain both comprehensive and timely data for callers to discover potential reassignments before they occur.¹⁶ A reassigned numbers database should also be easy to use and cost-effective for callers while minimizing the burden on service providers supplying the data. With these goals in mind, we seek comment below on the operational aspects of a reassigned numbers database, namely the type and format of information that callers need from such a database, how comprehensive and timely the data needs to be in order for the database to be effective, any restrictions or limitations on callers' access to and usage of the database, and the best ways to ensure that callers' costs to use a reassigned numbers database are minimized. We also emphasize that usage of a reassigned numbers database would be wholly voluntary for callers.

11. *Type of Information Needed By Callers.* We seek comment on the information that a legitimate caller needs from a reassigned numbers database, and we seek to understand how callers expect an efficient and effective database to work. To that end, we seek comment on the following issues. *First*, we seek comment on the information a legitimate caller would have on hand when seeking to search or query a reassigned numbers database. We expect that such a caller would have in its possession, at a minimum, the following information: (1) the name of the consumer the caller wants to reach; (2) a telephone number associated with that consumer; and (3) a date on which the caller could be confident that the consumer was still associated with that number (*e.g.*, the last date the caller made contact with the consumer at that number; the date the consumer last provided that number to the caller; or the date the caller obtained consent to call the consumer). We seek comment on this view. What other information, if any, should we expect a legitimate caller to already possess before making a call?

12. *Second*, we seek comment on the information a caller would need to submit to a reassigned numbers database and the information the caller seeks to generate from a search or query of the database. We believe that, at a minimum, the database should be able to indicate (*e.g.*, by providing a "yes" or "no" response) whether a number has been reassigned since a date entered by the caller. That information could then be used by a legitimate caller to determine whether a number has been reassigned since the caller last had a reasonable expectation that a particular person could be reached at the number. We seek comment on this view. Do callers need any additional information beyond an indication of whether a particular number has been reassigned since a particular date? For example, do callers need the actual date on which the number was reassigned? If so, why? Do callers need the name of the individual currently associated with the number?¹⁷ Why or why not? What are the privacy implications of allowing callers to obtain such information and how should they be addressed?¹⁸ Or to phrase the question differently, how can we minimize the information provided by the database (to protect a consumer's information from being unnecessarily disclosed) while we maximize the effectiveness of the database (to protect a consumer from receiving unwanted calls)?

13. *Third*, if a reassigned numbers database should indicate whether a number has been reassigned, then how should we define when a number is reassigned for this purpose? Typically, the reassignment process consists of four steps: A number currently in use is first disconnected, then aged, then made available for assignment, and finally assigned to a new subscriber.¹⁹ Determining the appropriate step in the reassignment process to cull information from service providers and pass it to

¹⁶ See, *e.g.*, AFSA Comments at 1; Blackboard Comments at 8; Comcast Comments at 15; CUNA Comments at 6; NAFICU Comments at 1; NCLC *et al.* Comments at 8; NCHER Comments at 3.

¹⁷ See, *e.g.*, AFSA Comments at 2 ("The current owner of the number would also be helpful."); Comcast Comments at 16.

¹⁸ See, *e.g.*, Comcast Comments at 16 (arguing that, for privacy reasons, service providers should not be required to contribute more information about their customers than necessary to achieve the objectives of a reassigned numbers database).

¹⁹ See, *e.g.*, Comcast Comments at 16-18.

callers requires considering the needs of callers as well as the administrative feasibility and cost of reporting to service providers.

14. We propose to provide callers with information about when NANP numbers are disconnected. Because disconnection is a first step in the reassignment process, we believe that a database containing information on when a number has been disconnected will best allow callers to identify, at the earliest possible point, when a subscriber can no longer be reached at that number.²⁰ With timely access to such data, callers will be best positioned to rid their calling lists of reassigned numbers before calling them.²¹ Access to disconnection information would be preferable to new assignment information because, as one commenter notes, tracking new assignments “would provide little to no lead time for callers to update their dialing lists to avoid calling consumers with newly reassigned numbers.”²² Do commenters agree with these views? Why or why not? We also understand that service providers routinely track disconnection information²³ and we seek comment on this view. Do service providers use consistent criteria to track and record disconnects or does each service provider set their own criteria?

15. Should an effective reassigned numbers database contain information in addition to or in lieu of disconnection information? Commenters should discuss the advantages and disadvantages of their preferred approach relative to other approaches.

16. We also seek comment on information that callers believe should be excluded from a reassigned numbers database in order to ensure accurate and reliable data and prevent false positives. For example, if the database includes information about disconnections, should the database exclude information on when a number has been temporarily disconnected, thus excluding, for example, when a number is in a temporary suspension status (*e.g.*, for non-payment)?²⁴ Is it feasible for service providers to exclude such information from their reporting? What are the costs of differentiating disconnections for service providers? How should we weigh those costs against the risk that the reassigned numbers database might be overinclusive—stating that certain numbers have been reassigned more recently than they actually have been—and thus may unnecessarily discourage legitimate calls from being made?

17. *Comprehensiveness of Database Information.* We seek comment on how comprehensive a reassigned numbers database needs to be. We believe that when callers use such a database, they should reasonably expect that the database is sufficiently comprehensive such that they do not need to rely on any other databases. We seek comment on this view.

18. To ensure a comprehensive database, do callers need data from all types of voice service providers, including wireless, wireline, interconnected VoIP, and non-interconnected VoIP providers? Or would data from only certain types of providers be sufficient?²⁵ Nearly all *NOI* commenters on this issue argue that an effective reassigned numbers solution must contain data from all service providers.²⁶ For

²⁰ See, *e.g.*, American Financial Services Association (AFSA) Comments at 2; CUNA Comments at 3; National Council of Higher Education Resources (NCHER) Comments at 4; Tatango Comments at 4.

²¹ See, *e.g.*, Comcast Comments at 16-17; NCHER Comments at 4; Tatango Comments at 4; Vibes Media, LLC Comments (Vibes) at 11.

²² Comcast Comments at 18.

²³ See, *e.g.*, Comcast Reply Comments at 4-5 (“[C]laims that establishing a database would be too burdensome because voice providers do not track disconnections and reassignments are simply incorrect. Comcast routinely tracks such information in providing voice services—and, indeed, it is difficult to imagine how a provider could offer a viable voice service *without* tracking such information.”).

²⁴ See, *e.g.*, Comcast Comments at 16-17; CTIA Comments at 12-13; NCHER Comments at 4; NCLC Comments at 9; NSC Comments at 8; RILA Comments at 12; Tatango Comments at 5.

²⁵ See CenturyLink Reply Comments at 5-6 (favoring a database containing wireless numbers).

²⁶ See AFSA Comments at 1; Blackboard Comments at 8; Comcast Comments at 15; CUNA Comments at 6; Genesys Telecommunications Laboratories, Inc. (GTL) Reply Comments at 2; NAFICU Comments at 1; NCLC *et*

example, one commenter contends that without data from all voice service providers, a reassigned numbers database “would contain insufficient . . . information about a potentially large set of numbers, and thus likely would not be any more ‘comprehensive’ than existing tools.”²⁷ Do commenters agree? Why or why not? And do callers need reassignment information from text message providers to the extent that such providers do not also provide voice service? Are there significant occurrences of misdirected texts to reassigned numbers such that callers need this information?

19. We also seek comment on the universe of numbers that a reassigned numbers database should contain. For example, should such a database contain all numbers allocated by a numbering administrator to a service provider or only a subset of such numbers (*e.g.*, only numbers that have been disconnected since the commencement of the database)? If a reassigned numbers database contains only a subset of allocated numbers, we note that a caller may be unable to determine the status of a given number. On the other hand, a database containing all allocated numbers may be unwieldy. We seek comment on these views and on the best approach for making comprehensive data available to callers while minimizing the burdens on those reporting and managing the data.

20. Finally, we seek comment on whether there is any reason to limit the reported reassignment information to a specific timeframe. For instance, if the most recent reassignment of a number occurred five or ten years ago, do callers need that information?

21. *Timeliness of Database Information.* We seek comment on how timely the information contained in a reassigned numbers database must be. How frequently should the data be reported to maximize callers’ ability to remove reassigned numbers from their calling lists before placing calls? Some *NOI* commenters argue that data should be reported on a daily basis²⁸ while others contend that it should be updated in real-time or as close to real-time as practicable.²⁹ CTIA cautions, however, that real-time updates would result in greater costs, while potentially not measurably reducing unwanted calls compared to less frequent updates.³⁰ Tatango argues that data should be reported based on how long a service provider ages its numbers, with those providers that age their numbers quickly (*e.g.*, after two days) being required to report on a daily basis³¹ and those providers that age their numbers for at least 45 days being allowed to report on a monthly basis.³² We seek comment on these approaches, any alternatives, and their costs and benefits.

22. Additionally, we seek comment on how long service providers currently age numbers before making them available again for assignment. Should the Commission adopt a minimum aging period for disconnected numbers so that service providers could report data to a reassigned numbers database less frequently? If so, would 30 days be a reasonable minimum aging period? What are the costs and benefits

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al. Comments at 8; NCHER Comments at 3; National Retail Federation (NRF) Comments at 13-14; NCTA Comments at 4; RILA Comments at 14; Student Loan Servicing Alliance (SLSA) Comments at 5; Internet Association Comments at 4.

²⁷ Comcast Comments at 15.

²⁸ See AFSA Comments at 2; Comcast Comments at 15; NCHER Comments at 4; NCLC Comments at 9.

²⁹ See ACA International Comments at 8; CUNA Comments at 3; NRF Comments at 11; RILA Comments at 16; SLSA Comments at 5.

³⁰ CTIA Comments at 15.

³¹ See Tatango Comments at 13-14 (“Tatango believes that the frequency of updates should be dependent on the frequency with which a particular carrier reassigns numbers to new users. For example, carriers like AT&T and T-Mobile that put numbers back in service after only two days of aging, should be required to provide daily reports on numbers that are disconnected. Daily reporting would ensure that an aggregator and its customers have time to process the disconnects before the number has been returned to service.”).

³² Tatango Comments at 14; *see also* Consumer Bankers Association (CBA) Reply Comments at 4.

to service providers of having to comply with a minimum aging requirement? Would the costs outweigh any benefit of being able to report data to a reassigned numbers database less frequently?

23. *Format of Database Information.* We seek comment on the format in which callers need the relevant data. For example, several *NOI* commenters argue that callers need this information in an easily accessible, usable, and consistent file format such as comma-separated values (CSV)³³ or eXtensible Markup Language (XML) format.³⁴ Do commenters agree or believe that alternative formats should be used, and if so, which formats? Does the Commission need to specify the format of such information by rule, or should we allow the database administrator to determine it?

24. *User Access to Database Information.* We anticipate that callers may use the database directly or may wish to have entities that are not callers (such as data aggregators or entities that manage callers' call lists) use the database. We seek comment on this view and any associated impacts on implementation.

25. Additionally, we seek comment on any specific criteria or requirements that an entity must satisfy to become an eligible user. Most commenters on the *NOI* argue that some restrictions are necessary to prevent misuse of data.³⁵ We are particularly mindful that the database information may be business- and market-sensitive,³⁶ especially as it relates to customer churn. We also seek to mitigate any risk that the data could be used by fraudulent robocallers or other bad actors for spoofing or other purposes.³⁷ At the same time, we seek to minimize the administrative and cost burden on callers so as not to discourage their use of a reassigned numbers database. With these goals in mind, we seek comment on the potential requirements for eligible users discussed below and any other requirements that commenters believe are necessary. We also seek comment on how to enforce these requirements to ensure database security and integrity.

26. We seek comment on whether users should be required to certify the purpose for which they seek access to the information and, if so, how that purpose should be defined. In the *NOI*, the Commission asked whether entities seeking access should be required to certify that the information will be used only for purposes of TCPA compliance,³⁸ and many commenters favor such a restriction.³⁹ However, we note that all callers seeking to reduce unwanted calls to reassigned numbers—not merely callers seeking to ensure compliance with the TCPA—should be permitted to access a reassigned numbers database. We seek comment on this view. If commenters agree that user access should be permitted for this broader purpose (and not for any other purpose, such as marketing), what specific language should be used in any required certification?

³³ See AFSA Comments at 4; Internet Association Comments at 5; RILA Comments at 15; Tatango Comments at 16; Vibes Comments at 12.

³⁴ See Internet Association Comments at 5; RILA Comments at 15.

³⁵ See, e.g., The Alliance for Telecommunications Industry Solutions (ATIS) Reply Comments at 2; Comcast Comments at 18; CUNA Comments at 3; Insights Association Comments at 5; Internet Association Comments at 6; NRF Comments at 12; NCTA Comments at 5; RILA Comments at 17-18.

³⁶ See, e.g., CTIA Comments at 15 (commenting that any resource solution must ensure that providers do not have visibility into competitors' disconnections); NCTA Comments at 5 (noting that competitively sensitive information needs to be protected).

³⁷ See, e.g., NTCA Comments at 4.

³⁸ *Reassigned Numbers NOI*, 32 FCC Rcd at 6015, para. 26.

³⁹ See, e.g., ATIS Reply Comments at 2; Comcast Comments at 18; CUNA Comments at 3; Insights Association Comments at 5; Internet Association Comments at 6; NRF Comments at 12; NCTA Comments at 5; RILA Comments at 17-18.

27. We also seek comment on whether and how to track relevant information about those who access a reassigned numbers database. Several commenters on the *NOI* argue that database users should be subject to a registration requirement.⁴⁰ Do commenters agree? If users are required to set up an account that identifies the party obtaining the data, what information should they be required to provide? We also seek comment on whether database users should be subject to audits or other reviews, and if so, the components and frequency of such audits. Additionally, we seek comment on what recourse, if any, an entity denied access should have.

28. *Cost to Use Database.* We seek comment on any ways we can minimize the cost of using a reassigned numbers database so as to encourage usage, including by small business callers. We note that commenters on the *NOI* largely agree that service providers should be compensated for the costs of reporting data to a reassigned numbers database, but callers argue that any cost recovery mechanism should be reasonable so that access to the data will be affordable.⁴¹ How should the Commission balance these interests?

29. *Database Use and TCPA Compliance.* We seek comment on how use of a reassigned numbers database should intersect with TCPA compliance. In response to comments filed on the *NOI* by the U.S. Chamber of Commerce,⁴² we make clear that we are not proposing to mandate that callers use a reassigned numbers database in order to comply with the TCPA.⁴³

30. Rather, we seek comment on whether the Commission should adopt a safe harbor from TCPA liability for those callers that choose to use a reassigned numbers database. Some commenters, for example, urge the Commission to adopt a safe harbor from TCPA violations for robocallers that inadvertently make calls to reassigned numbers after checking a comprehensive reassigned numbers database.⁴⁴ Other commenters argue that the Commission should instead adopt a safe harbor for callers using existing commercial solutions.⁴⁵ We seek comment on these views. If we were to adopt a safe harbor from TCPA violations, under what circumstances should callers be permitted to avail themselves of the safe harbor?⁴⁶ We also seek detailed comment on whether section 227 of the Act provides us with authority to adopt such a safe harbor—what provisions, precisely, would allow the agency to create a safe harbor?⁴⁷ Does the Commission have more authority to craft a safe harbor from our own enforcement

⁴⁰ See NCTA Comments at 5; NRF Comments at 12; RILA Comments at 17-18.

⁴¹ See, e.g., AFSA Comments at 3; Blackboard Comments at 9; CUNA Comments at 3; NAFICU Comments at 1-2; NCHER Comments at 4; NRECA Comments at 5; NRF Comments at 12; RILA Comments at 19-20.

⁴² See USCC Comments at 3 (“There is no evidence or indication that Congress intended that TCPA compliance would require company to . . . monitor a database of reassigned numbers . . .”).

⁴³ We do not propose to rely on the TCPA to authorize or establish a reassigned numbers database. Nor could we mandate that callers use such a database. Although the TCPA authorized the Commission to establish a database for other purposes, see 47 U.S.C. § 227(c)(3), it does not authorize other databases, and the Commission may not exceed the metes and bounds of the statute. See, e.g., *Bais Yaakov of Spring Valley v. FCC*, 852 F.3d 1078, 1082 (D.C. Cir. 2017) (invalidating the FCC’s requirement of opt-out notices on solicited fax advertisements because “Congress has not authorized” the FCC to require such notices “[a]nd that is all we need to know”).

⁴⁴ See, e.g., ABA Reply Comments at 6-8; Anthem Comments at 2; Comcast Comments at 13-14.

⁴⁵ See, e.g., CTIA Comments at 7; CenturyLink Reply Comments at 4; ETA Comments at 2. We seek comment below on a potential TCPA safe harbor for callers that use a reassigned numbers database under a voluntary reporting approach. See *infra* para. 55.

⁴⁶ See, e.g., USCC Comments at 3 (arguing that a caller should be able to avail itself of a safe harbor from TCPA violations whenever it “(1) accesses and scrubs against that database/query system in a reasonable timeframe (*i.e.*, every 30 days), and (2) has policies and procedures (such as training) to ensure that customer records are updated to reflect phone number reassignments.”).

⁴⁷ 47 U.S.C. § 227.

authority than from the private right of action contained in the TCPA? Does section 251(e) of the Act provide independent or additional authority for such a safe harbor? If we were to establish such a safe harbor, what precisely would it protect a caller from? Liability from all reassigned-number calls? Liability from good-faith reassigned-number calls? Liability from reassigned-number calls but only when the database's information was either untimely or inaccurate?

B. Approaches to Database Administration

31. In the *Reassigned Numbers NOI*, we suggested four potential mechanisms for service providers to report reassigned number information and for callers to access that information.⁴⁸ Most commenters addressing this issue favored a single, FCC-designated database,⁴⁹ while others favored making the data available through commercial data aggregators.⁵⁰ We seek further comment on these options below. Specifically, we seek comment on whether we should: (1) require service providers to report reassigned number information to a single, FCC-designated database; (2) require service providers to report such information to one or more commercial data aggregators; or (3) allow service providers to report such information to commercial data aggregators on a voluntary basis. We also seek comment on any alternative approaches that commenters believe we should consider. Regardless of the approach, we seek to balance callers' need for comprehensive and timely reassigned number information with the need to minimize the reporting burden placed on service providers.

1. Mandatory Reporting to Single Database

32. We seek detailed comment on whether the Commission should establish and select an administrator of a single reassigned numbers database. Under this approach, we would mandate that service providers report reassigned number information to the database, and allow eligible users to query the database for such information. As discussed below, we seek comment on how the single database should be established, who should administer it, and how it should be funded. We also seek comment on which service providers should be required to report information, the requirements that should apply to such providers, and whether and how they should be able to recover their reporting costs. Finally, we seek comment on the effectiveness, costs, and benefits of the single database approach.

33. *Establishment and Administration of Single Database.* We seek comment on how complicated it would be to establish a single reassigned numbers database. Would it be necessary to develop a completely new database or would it be possible to expand or modify one of the existing numbering databases overseen by the Commission to accommodate the data that callers need? Are there any economies of scale or scope that could be achieved under the latter approach?

34. One possibility would be to modify the Number Portability Administration Center (NPAC), which is used to facilitate local number portability.⁵¹ In response to the *NOI*, however, iconectiv explains

⁴⁸ *Reassigned Numbers NOI*, 32 FCC Rcd at 6013, paras. 16-19. The four approaches identified were for service providers to: (1) report reassigned number information to an FCC-designated database; (2) report such information to commercial data aggregators or to callers directly; (3) operate their own queriable databases; or (4) make reassigned number reports available to the public. *See id.*

⁴⁹ *See, e.g.*, AFSA Comments at 3; Blackboard Comments at 8; Comcast Comments at 11; CUNA Comments at 3; Insights Association Comments at 4; NAFICU Comments at 1; NRF Comments at 6; NCTA Comments at 4; RILA Comments at 15.

⁵⁰ *See, e.g.*, Tatango Comments at 11; Vibes Comments at 9.

⁵¹ The Local Number Portability Administrator (LNPA) oversees the NPAC, which consists of hardware and software platform(s) that host a national information database and serve as the central coordination point of local number portability function. *See, e.g., Telephone Number Portability*, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 8352 (1996) (establishing rules designed to implement local number portability); *Telephone Number Portability*, Second Report and Order, 12 FCC Rcd 12281 (1997) (adopting the recommendation of the North American Numbering Council to, among other things, establish seven regional number portability databases); *Telephone Number Portability*, Third Report and Order, 13 FCC Rcd 11701 (1997)

(continued....)

that the NPAC currently lacks information about all number reassignments⁵² and therefore cautions that the “suitability of extending the NPAC to serve as a reassigned number database warrants a great deal more consideration prior to making such a decision.”⁵³ What factors should we consider in making such a decision and what processes should we follow in establishing a single database? For example, should we consult with the North American Numbering Council (NANC), as some commenters suggest?⁵⁴

35. We also seek comment on which entities have the expertise to serve as the administrator of a central reassigned numbers database. Could the LNPA or a different numbering administrator (such as the NANPA⁵⁵ or the Pooling Administrator)⁵⁶ serve such a role? Or could an entirely different vendor serve this role? What factors should we take into account in selecting a reassigned numbers database administrator?

36. *Funding.* How should an FCC-designated reassigned numbers database be funded? For example, should the Commission establish a charge to database users to help cover the costs of establishing and maintaining the database? If so, how should the charge be set (*e.g.*, per query, a flat fee or some other basis) and how should the billing and collection process work? To the extent that such fees do not cover all of the costs of establishing and maintaining the database, should we recover the remaining costs from reporting service providers? We note that section 251 of the Act provides that the “cost of establishing telecommunications numbering administration arrangements . . . shall be borne by all telecommunications carriers on a competitively neutral basis as determined by the Commission.”⁵⁷ How would this statutory provision affect our approach? To the extent that fees collected from database users exceed the costs of establishing and maintaining the reassigned numbers database, we seek comment on whether such fees could be used to offset the costs of numbering administration more

(Continued from previous page) _____

(determining how the costs associated with local number portability should be borne by carriers). The current LNPA is Neustar, Inc., and transition is underway to a new LNPA, Telcordia Technologies, Inc. d/b/a iconectiv. *Telcordia Technologies, Inc. Petition to Reform Amendment 57 and to Order a Competitive Bidding Process for Number Portability Administration et al.*, Order, 31 FCC Rcd 8406, para. 1 (2016), *aff’d sub nom, Neustar Inc. v. FCC*, No. 15-1080 (D.C. Cir. 2017) (approving iconectiv as the new LNPA).

⁵² See iconectiv Comments at 7 (“[T]he NPAC is an exception database that has phone numbers that have been ported or pooled, and are presentably [sic] routable by Location Routing Number (LRN), although not necessarily assigned in every case. Further, while all pooled numbers are available in the NPAC, it is not known which among them are assigned unless they are also ported.”).

⁵³ iconectiv Comments at 7; see also ATIS Reply Comments at 3-4 (arguing that the NPAC is not a suitable mechanism for reporting reassigned numbers because “[n]umber portability allows customers to retain their telephone numbers while number reassignment assumes that the customer changes their telephone number”).

⁵⁴ See NTCA Comments at 3; CTIA Comments at 11-13; ETA Comments at 3; iconectiv Comments at 8. *But see* CUNA Comments at 5 (“Deferring action while [the] NANC deliberates is an unnecessary prescription for delay.”).

⁵⁵ The NANPA, currently Neustar, Inc., is responsible for the neutral administration of NANP numbering resources, subject to directives from regulatory authorities in the twenty countries that share the Plan. See, *e.g.*, *North American Numbering Plan Administration*, Order, 19 FCC Rcd 16982 (2004); *COCAG*, Section 13, at 51-52. The NANPA’s responsibilities include assignment of Plan resources, and in the U.S. and its territories, coordination of area code relief planning and collection of utilization and forecast data.

⁵⁶ The Pooling Administrator (PA), currently Neustar, Inc., is responsible for the overall administration of pooled numbering resources, including thousands-block pooling in areas where it has been ordered or implemented, and maintains and plans for adequate pool inventory numbering resources for the short and long term. *COCAG* at 54. In addition, the PA also serves as the Routing Number Authority, which manages and assigns non-dialable numbers used in telephony. See, *e.g.*, Letter from Thomas J. Navin, Chief, Wireline Competition Bureau, Federal Communications Commission, to Thomas M. Koutsky, Chair, North American Numbering Council (Jun. 28, 2007); Contract for Pooling Administration Services for the Federal Communications Commission, FCC Contract No FCC13C0007, Change Order # 19 (awarded through Contract Modification 16 on June 17, 2011).

⁵⁷ 47 U.S.C. § 251(e)(2).

generally.

37. *Covered Service Providers.* We seek comment on which service providers should be required to report data to a single, FCC-designated reassigned numbers database. Should all service providers—including wireless, wireline, interconnected VoIP, and non-interconnected VoIP providers—be required to report data? Should the reporting requirements also apply to text messaging providers to the extent that they do not also provide voice service?

38. Alternatively, should we require all service providers that receive numbers directly from the NANPA to report data on those numbers? In response to the *NOI*,⁵⁸ several commenters note that some service providers, such as resellers and interconnected VoIP providers that do not obtain numbers directly from the NANPA, might not have knowledge of certain changes in the status of a number if they do not have control over the provision of the number.⁵⁹ Tatango therefore argues that, consistent with the Commission's existing number utilization reporting requirements,⁶⁰ the obligation to report data about a number to a reassigned numbers database should be imposed on the entity that obtained the number directly from the NANPA.⁶¹ We seek comment on this view. We also seek comment on whether to afford covered service providers the flexibility to contractually delegate those requirements to the service provider that indirectly receives numbers.⁶²

39. Additionally, we seek comment on whether we should exempt certain service providers from the obligation to report data to an FCC-designated reassigned numbers database without undermining its overall comprehensiveness. For example, NTCA asks that the Commission exempt rural service providers from this requirement, at least initially, because of their limitations in resources and staff.⁶³ Are there other types of providers, such as those offering only telecommunications relay services, that should be exempted from mandatory reporting? We seek comment on whether we should adopt any such exemptions, the relevant eligibility criteria, and the effect of the exemption on the goal of providing comprehensive numbering information to callers that want it. Are there other measures short of an exemption that would lessen the reporting burden, while still achieving that goal?

40. *Requirements for Covered Service Providers.* We seek comment on the reporting requirements that should apply to covered service providers under a single database approach. In particular, we seek comment on: (1) the specific data that covered service providers should be required to report; (2) how often they should be required to report such information; and (3) the format in which they should be required to report it.⁶⁴ In adopting such requirements, we seek to balance callers' need for comprehensive and timely reassigned number data with the need to minimize the reporting burden on service providers. We also seek comment on the costs and benefits of these reporting requirements,

⁵⁸ *Reassigned Numbers NOI*, 32 FCC Rcd at 6011-12, para. 13.

⁵⁹ See Tatango Comments at 9; Tracfone Comments at 2.

⁶⁰ See 47 CFR § 52.15(f)(5) (requiring all “reporting carriers” to submit to the NANPA a utilization report of their current inventory of numbering resources); see also *id.* § 52.15(f)(2) (defining reporting carriers as telecommunications carriers that receive numbering resources from the NANPA, the Pooling Administrator, or another telecommunications carrier). In 2015, the Commission adopted a process to allow interconnected VoIP service providers to obtain direct access to numbering resources, subjecting those interconnected VoIP service providers that are approved for such access to the Commission's utilization reporting requirements. See *Numbering Policies for Modern Communications et al.*, Report and Order, 30 FCC Rcd 6839 (2015) and 47 CFR § 52.7(i).

⁶¹ See Tatango Comments at 9.

⁶² See Tatango Comments at 9 (asserting that, in some circumstances, it may be more efficient and less costly for the service provider that was indirectly assigned a number to report a change in the status of the number).

⁶³ NTCA Comments at 3-4.

⁶⁴ See *supra* paras. 11-23 (discussing the type of data that callers need from a reassigned numbers database, the frequency with which they need such information, and the format in which they need such information).

including specific cost estimates. Additionally, are there any unique reporting burdens faced by small and/or rural service providers, and if so, how should they be addressed? For example, should the Commission permit small providers to report data less frequently than larger providers, as NTCA suggests?⁶⁵ Or start reporting at a later time? Furthermore, are there other requirements for covered service providers that we should adopt? For example, is there a risk that customer proprietary network information (CPNI) could be disclosed without customer consent,⁶⁶ and if so, how could that risk be addressed?

41. *Cost Recovery for Covered Service Providers.* Should covered service providers be compensated for some or all of their costs of reporting information to an FCC-designated reassigned numbers database? Commenters recognize that service providers will incur operational costs to provide the required data.⁶⁷ For example, CTIA emphasizes that its members may need to develop new database solutions and/or incur operational expenses associated with modifying existing systems.⁶⁸ Would service providers' costs ultimately be borne by their subscribers, as NCLC suggests?⁶⁹ If covered service providers should be permitted to recover some or all of their costs of reporting data, how should they be compensated and what limits, if any, should be set on such compensation?

42. *Other Implementation Issues and Implementation Timeline.* We seek comment on any other issues related to the feasibility or implementation of a single, FCC-designated reassigned numbers database. We also seek comment on an implementation timeline for establishing such a database. What steps would need to be taken and approximately how long would they take?

43. *Costs and Benefits.* We seek comment on the effectiveness, costs, and benefits of the single database approach. We also seek comment on its advantages and disadvantages compared to existing solutions and the alternatives discussed below. In particular, we believe that a single database approach would be more comprehensive and therefore, more effective, in addressing the reassigned numbers problem, than existing commercial solutions. Additionally, requiring service providers to report to, and allowing eligible users to query from, a single, centralized database would likely be more efficient and cost-effective than an approach that involves multiple commercial data aggregators.⁷⁰ Some commenters contend that a single database would also serve as an "authoritative source" of reassigned number information and could better facilitate establishment of a safe harbor from TCPA violations.⁷¹ Another commenter points out that in contrast to commercial databases that might cease operations, a single, FCC-designated database would better enable the Commission to oversee quality of and access to the data.⁷² At the same time, however, developing such a database could require substantially more time and expenditures than an approach that relies on commercial data aggregators.⁷³ We seek comment on these views and on any other factors that commenters believe we should consider when evaluating a single, FCC-designated database as a solution to the reassigned numbers problem.

⁶⁵ NTCA Comments at 4.

⁶⁶ CPNI cannot be disclosed without customer consent and must be disclosed as directed by the customer. *See* 47 CFR §§ 64.2001-12.

⁶⁷ *See, e.g.,* AFSA Comments at 4; Comcast Comments at 16; CTIA Comments at 14; NCLC *et al.* Comments at 7.

⁶⁸ CTIA Comments at 14.

⁶⁹ NCLC *et al.* Comments at 7.

⁷⁰ *See* ABA Reply Comments at 6; Comcast Comments at 12; RILA Comments at 15-16.

⁷¹ *See* NRF Comments at 6-7; RILA Comments at 9-10.

⁷² NCTA Comments at 4.

⁷³ *See* Adva Mobile Reply Comments at 3; *see also* CTIA Comments at 13-14.

2. Mandatory Reporting to Commercial Data Aggregators

44. As an alternative to the single database approach discussed above, we seek comment on whether we should require service providers to report reassigned number information to commercial data aggregators. Under this approach, we expect that service providers would enter into bilateral agreements with data aggregators for purposes of reporting data, and as a result, there would be multiple reassigned numbers databases that callers could query. We seek comment on the criteria and process for becoming a qualifying data aggregator to which service providers would report data; which service providers should be required to report data, the requirements they should be subject to, and the appropriate cost recovery for these covered service providers; contractual and other issues that might arise between data aggregators and service providers; and the feasibility and implementation issues associated with this approach. We also seek comment on the costs and benefits of this approach.

45. *Qualifying Data Aggregators.* We believe that service providers should be required to report reassigned number data only to those commercial data aggregators that meet specific eligibility or qualification criteria (*e.g.*, certain baseline or operational standards). We seek comment on this view. If commenters agree, how should we define a “qualifying data aggregator” for this purpose and what criteria should such an entity satisfy? For example, should a data aggregator be required to: (1) establish internal controls to ensure that the data it receives will be used solely to respond to callers’ queries and not for any marketing or other commercial purpose; (2) maintain records of callers’ queries; (3) ensure data security and privacy; and (4) establish internal controls to accurately respond to such queries? We seek comment on these potential criteria and any others that commenters believe are necessary to ensure reliable and secure databases.

46. We also seek comment on the process for becoming a qualifying data aggregator. For instance, should a data aggregator be required to register with or seek approval from the Commission? Additionally, we seek comment on how to ensure compliance with the qualification criteria. For example, should service providers require that any criteria placed on the qualifying data aggregator, such as those referenced above, be addressed within the bilateral contract between the parties? Are there other ways that the Commission can ensure that a qualifying data aggregator meets the requisite criteria? Should a qualifying data aggregator be required to undergo regular audits and file with the Commission an auditor’s certification that it complies with the required criteria? Further, how should service providers be expected to know which data aggregators are qualifying data aggregators? Should the Commission maintain a list or registry of such entities and if so, how and when should it be updated?

47. *Covered Service Providers.* We seek comment on which service providers should be required to report reassigned number data to commercial data aggregators. Should the same universe of providers be subject to reporting regardless of whether we require reporting to commercial data aggregators or to a single, FCC-designated database?⁷⁴ Why or why not?

48. *Reporting to Single or Multiple Data Aggregators.* Under this approach, should covered service providers be required to report reassigned number data to some or all qualifying data aggregators, and how would this requirement work in practice? Alternatively, should we require covered service providers to report information to only one qualifying data aggregator which would in turn share the information with other qualifying data aggregators? What would be the parameters of such required data-sharing arrangements? What are the potential benefits and drawbacks of such an approach and how would it work in practice?

49. *Other Requirements for Covered Service Providers.* We seek comment on the other requirements that should apply to covered service providers under this approach. Should the same reporting and other requirements that would apply under the single database approach discussed in section III.B.1 above⁷⁵ apply under this approach as well? Are there different or additional requirements for

⁷⁴ See *supra* paras. 37-39.

⁷⁵ See *supra* para. 40.

covered service providers that we should adopt under mandatory reporting to data aggregators?

50. *Cost Recovery for Covered Service Providers.* We seek comment on whether covered service providers should be permitted to recover some or all of their reporting costs under this approach. If so, how they should be compensated and what limits, if any, should be set on such compensation.

51. *Contractual Issues.* As discussed above, under this approach, we anticipate that service providers would enter into bilateral agreements with data aggregators for purposes of reporting data. We seek comment on how negotiation of these agreements would work in practice. Are there contractual, business, or other concerns that would need to be addressed in order to rely on this approach as a solution to the reassigned numbers problem?

52. *Other Feasibility or Implementation Issues and Implementation Timeline.* We seek comment on any other issues related to the feasibility or implementation of mandatory reporting to commercial data aggregators that commenters believe we should consider. For example, how should callers be expected to learn about the multiple reassigned numbers databases that would result from this approach? We also seek comment on a timeline for implementing this approach. What steps would need to be taken and approximately how long would they take?

53. *Costs and Benefits.* We seek comment on the effectiveness, costs, and benefits of mandatory reporting to commercial data aggregators as well as its advantages and disadvantages compared to the other approaches discussed herein and compared to existing commercial solutions. For example, an approach involving commercial data aggregators would enable those entities to leverage their existing infrastructure and services and likely make reassigned numbers databases available more quickly and with less upfront expenditures than a single, FCC-designated database approach.⁷⁶ On the other hand, mandatory reporting to multiple data aggregators may be less efficient and cost-effective for both service providers and callers than a single database approach.⁷⁷ We seek comment on these views and on any other factors that commenters believe we should consider in evaluating mandatory reporting to data aggregators as a solution to the reassigned numbers problem.

3. Voluntary Reporting to Commercial Data Aggregators

54. We seek comment on whether, as a second alternative, we should allow service providers to report reassigned number data to commercial data aggregators on a voluntary basis. Under this approach, callers could then use commercial data aggregators to determine whether a phone number has been reassigned. As discussed below, we seek comment on whether, and if so, how a voluntary reporting approach could be structured to be more effective than existing solutions at addressing the reassigned numbers problem.

55. *Incentives to Encourage Effective Databases.* As discussed above, we believe that an effective reassigned numbers database must contain information that is both comprehensive and timely.⁷⁸ We seek comment on whether reassigned number solutions that are available in the marketplace today are comprehensive and timely, and, if not, what efforts the FCC could undertake to incentivize improvement of these solutions. For example, CTIA and others argue that the Commission should adopt a safe harbor from TCPA violations for those callers that use existing commercial solutions. They further suggest that the safe harbor would lead to widespread use of existing solutions by callers, which would in turn create more competition among commercial data aggregators, spur those data aggregators to pay service providers to induce them to report data, and result in more comprehensive and reliable databases.⁷⁹ Do commenters agree with this view? Commenters that advocate adoption of a safe harbor should explain in

⁷⁶ See *supra* para. 43 & note 72.

⁷⁷ See *supra* note 71

⁷⁸ See *supra* para. 10.

⁷⁹ See, e.g., CTIA Comments at 8-9; CenturyLink Reply Comments at 4; ETA Comments at 3.

detail the Commission's legal authority to take such action. If the Commission were to adopt a safe harbor, under what circumstances should callers be allowed to avail themselves of the safe harbor? For example, how often would a caller need to check a reassigned numbers database under a safe harbor?⁸⁰ And what parameters, in terms of comprehensiveness and timeliness of the data, would a reassigned numbers database used by such a caller need to satisfy? For instance, would a database need to have a certain percentage of service providers' data before a caller could use it under the safe harbor? Would coverage of 90 percent of allocated numbers be sufficient? 95 percent? 99 percent? Would, as with the mandatory reporting approach, a data aggregator need to meet specific qualifying criteria, including certification?⁸¹ We also seek comment on whether there are there other incentives, along with or in addition to a safe harbor, that the Commission could create to encourage the development of comprehensive and timely reassigned numbers databases under a voluntary reporting approach.

56. *Reporting.* Under a voluntary reporting approach, we anticipate that service providers would enter into bilateral commercial agreements with data aggregators for purposes of reporting data. Are there ways to improve the reporting infrastructure, including reducing administrative costs and increasing confidence in query results, such as by using distributed ledger technology?⁸² What other actions could the Commission take to better facilitate more widespread reporting by service providers without mandating reporting?

57. *Cost Recovery.* Under this voluntary approach, we expect that service providers would recover their reporting costs from data aggregators and those data aggregators would in turn pass those costs on to callers seeking to query their databases. We seek comment on this view and on any related issues. In particular, we seek comment on how best to ensure that small service providers recover their costs and are able to have their reassigned number data included in these databases.

58. *Costs and Benefits.* We seek comment on the effectiveness, costs, and benefits of voluntary reporting to commercial data aggregators relative to the other approaches discussed above. For example, we anticipate that while a voluntary approach would give service providers more flexibility than a mandatory approach, it would nevertheless result in less comprehensive databases and would therefore be less effective in addressing the reassigned numbers problem than the alternatives discussed above. We seek comment on this view. Additionally, would callers have to pay more or less for database access under a voluntary approach than under the approaches discussed above or under existing commercial solutions? We seek comment on these issues and on any other factors that commenters believe we should consider in evaluating a voluntary reporting approach as a solution to the reassigned numbers problem.

IV. PROCEDURAL MATTERS

59. *Initial Regulatory Flexibility Act Analysis.*—With respect to this *Second Further Notice of Proposed Rulemaking*, an Initial Regulatory Flexibility Analysis (IRFA) is contained in Appendix C. As required by Section 603 of the Regulatory Flexibility Act of 1980, as amended,⁸³ the Commission has prepared an IRFA of the expected impact on small entities of the proposals contained in the *Second Further Notice of Proposed Rulemaking*. Written public comments are requested on the IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments

⁸⁰ See *supra* note 46.

⁸¹ See *supra* paras. 45-46.

⁸² Distributed Ledger Technology, sometimes referred to as “blockchain technology,” refers to a “novel and fast-evolving approach to recording and sharing data across multiple data stores (or ledgers). This technology allows for transactions and data to be recorded, shared, and synchronized across a distributed network of different network participants.” World Bank, Distributed Ledger Technology (DLT) and Blockchain at iv (2017); <http://documents.worldbank.org/curated/en/177911513714062215/pdf/122140-WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf>.

⁸³ See 5 U.S.C. § 603.

on the *Second Further Notice of Proposed Rulemaking*. The Commission will send a copy of the *Second Further Notice of Proposed Rulemaking*, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.⁸⁴

60. *Paperwork Reduction Act.*—The *Second Further Notice of Proposed Rulemaking* contains either new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA).⁸⁵ It 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 are invited to comment on the new or modified information collection requirements contained in this proceeding. In addition, pursuant to the Small Business Paperwork Relief Act of 2002,⁸⁶ we seek specific comment on how we might “further reduce the information collection burden for small business concerns with fewer than 25 employees.”⁸⁷

61. *Ex Parte Rules.—Permit-But-Disclose.* The proceeding this *Second Further Notice of Proposed Rulemaking* initiates shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.⁸⁸ 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 rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission’s *ex parte* rules.

62. *Filing Requirements.—Comments and Replies.* 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).

63. *Electronic Filers:* Comments may be filed electronically using the Internet by accessing the ECFS: <http://apps.fcc.gov/ecfs/>.

64. *Paper Filers:* Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

⁸⁴ See *id.* § 603(a). In addition, the *Second Further Notice of Proposed Rulemaking* and IRFA (or summaries thereof) will be published in the Federal Register.

⁸⁵ Pub. L. No. 104-13.

⁸⁶ Pub. L. No. 107-198.

⁸⁷ 44 U.S.C. § 3506(c)(4).

⁸⁸ 47 CFR §§ 1.1200 *et seq.*

65. Filings can be sent by hand or messenger delivery, 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.

66. All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.

67. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20743.

68. U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

69. *People with Disabilities.* 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).

70. *Availability of Documents.* Comments, reply comments, and *ex parte* submissions will be available for public inspection during regular business hours in the FCC Reference Center, Federal Communications Commission, 445 12th Street, S.W., CY-A257, Washington, D.C., 20554. These documents will also be available via ECFS. Documents will be available electronically in ASCII, Microsoft Word, and/or Adobe Acrobat.

71. *Additional Information.* For additional information on this proceeding, contact Josh Zeldis, Josh.Zeldis@fcc.gov or (202) 418-0715 of the Consumer and Governmental Affairs Bureau, Consumer Policy Division.

V. ORDERING CLAUSES

72. **IT IS ORDERED**, pursuant to the authority contained in Sections 4(i)-(j), 201(b), 227, and 251(e) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i)-(j), 201(b), 227, 251(e), that this *Second Further Notice of Proposed Rulemaking* **IS ADOPTED**.

73. **IT IS FURTHER ORDERED** that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, **SHALL SEND** a copy of this *Second Further Notice of Proposed Rulemaking*, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

List of Commenters

<u>Commenter</u>	<u>Abbreviation</u>
Adva Mobile Corp. <i>et al.</i>	Adva Mobile Corp. <i>et al.</i>
The Alliance for Telecommunications Industry Solutions*	ATIS
Association of Credit and Collection Professionals	ACA International
American Bankers Association**	ABA
American Financial Services Association	AFSA
Anthem, Inc.*	Anthem
Blackboard, Inc.	Blackboard
CenturyLink, Inc.**	CenturyLink
Coalition of Higher Education Assistance Organizations	CHEAO
Comcast Corporation*	Comcast
Consumer Bankers Association**	CBA
Credit Union National Association*	CUNA
CTIA*	CTIA
District of Columbia Public Schools	DCPS
Edison Electric Institute **	EEI
The Electronic Transactions Association	ETA
Genesys Telecommunications Laboratories, Inc. **	GTL
Telcordia Technologies, Inc. d/b/a iconectiv	iconectiv
Insights Association	Insights Association
The Internet Association	Internet Association
National Association of Federally Insured Credit Unions	NAFICU
National Consumer Law Center on behalf of its low-income clients, and Consumer Action, Consumer Federation of America, Consumers Union, National Association of Consumer Advocates, Public Citizen, Public Knowledge, and U.S. PIRG*	NCLC <i>et al.</i>
National Council of Higher Education Resources	NCHER
National Retail Federation	NRF
National Rural Electric Cooperative Association	NRECA
Neustar, Inc.*	Neustar
Noble Systems Corporation*	NSC
NCTA – The Internet & Television Association	NCTA
NTCA – The Rural Broadband Association	NTCA
Professional Association for Customer Engagement	PACE
Retail Industry Leaders Association	RILA
Student Loan Serving Alliance	SLSA
Syniverse Technologies	Syniverse
Tatango, Inc.	Tatango
TracFone Wireless, Inc.	TracFone
U.S. Chamber of Commerce Institute for Legal Reform	USCC
Vibes Media, LLC	Vibes
ZipDX LLC	ZipDX

* Filed both comments and reply comments.

** Filed only reply comments.

APPENDIX B

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended, (RFA),⁸⁹ 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 this *Second Further Notice of Proposed Rulemaking* (Second FNPRM). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Second FNPRM provided on the first page of this document. The Commission will send a copy of the Second FNPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.⁹⁰ In addition, the Second FNPRM and IRFA (or summaries thereof) will be published in the Federal Register.⁹¹

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

2. As required by the Commission's rules, service providers ensure the efficient use of telephone numbers by "recycling" a telephone number that was disconnected by a consumer and reassigning it to a new consumer.⁹² Consumers disconnect their old numbers and change to new telephone numbers for a variety of reasons, including switching wireless providers without porting numbers and getting new wireline telephone numbers when they move. Once a consumer disconnects a number, he or she might not update all parties who have called in the past, including businesses to which the consumer gave prior express consent and other callers from which the consumer expects to receive calls. When that number is reassigned to a new consumer, he or she may receive unwanted calls intended for the previous holder of the number.

3. The problem of unwanted calls to reassigned numbers can have important consequences for both consumers and callers. Beyond annoying the new holder of the reassigned number, a misdirected call can deprive the previous holder of the number of a desired call from their school, health care provider, or financial institution.⁹³ Additionally, in the case of robocalls to reassigned numbers, a good faith caller may be subject to liability for violations of the TCPA.⁹⁴ That threat can have a chilling

⁸⁹ 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

⁹⁰ 5 U.S.C. § 603(a).

⁹¹ *Id.*

⁹² A number is disconnected when it is no longer used to route calls to the disconnecting subscriber of record. *See, e.g.*, Alliance for Telecommunications Industry Solutions, ATIS-0300051 - Central Office Code (NXX) Assignment Guidelines (COCAG) at 46 (2013). Pursuant to the Commission's rules, once a number is disconnected it can be designated as an "aging number" for a period of time and thereafter reassigned to a new subscriber. *See* 47 CFR § 52.15(f)(ii) ("Aging numbers are disconnected numbers that are not available for assignment to another end user or customer for a specified period of time. Numbers previously assigned to residential customers may be aged for no more than 90 days.").

⁹³ *See, e.g.*, District of Columbia Public Schools Comments at 2 ("Recipients of our mass notifications expect them and consider them an essential part of our educational role."); Anthem, Inc. (Anthem) Reply Comments at 1 (explaining that the health care information transmitted by Anthem is welcomed by consumers and leads to better health outcomes); American Bankers Association (ABA) Comments at 1 ("Bankers regularly need to contact their customers with important, beneficial, and time-critical calls . . .").

⁹⁴ *See, e.g.* Blackboard, Inc. (Blackboard) Comments at 2-3; Comcast Corporation (Comcast) Comments at 2; Credit Union National Association (CUNA) Comments at 7; National Association of Federally Insured Credit Unions (NAFICU) Comments at 2; NCTA – The Internet & Television Association (NCTA) Comments at 2; Tatango, Inc. (Tatango) Comments at 3. The TCPA requires robocallers to obtain prior express consent before making robocalls, with the consent requirements varying based on whether the call goes to a wireless or a residential phone number

(continued....)

effect—causing some callers to be overly cautious and stop making wanted, lawful calls out of concern over potential liability for calling a reassigned number.⁹⁵

4. While existing tools can help callers identify number reassignments,⁹⁶ “callers lack guaranteed methods to discover all reassignments” in a timely manner.⁹⁷ Accordingly, in the Second FNPRM, we propose more advanced methods of using numbering data to reduce the number of misdirected calls.

5. Specifically, the Second FNPRM seeks comment on our proposal to create a timely and comprehensive database callers can use to identify phone numbers that have been reassigned to another consumer.⁹⁸ The Second FNPRM also seeks comment on issues associated with three potential mechanisms for service providers to report reassigned number information and for callers to access that information, namely mandatory reporting to a single database,⁹⁹ mandatory reporting to commercial data aggregators,¹⁰⁰ and voluntary reporting to commercial data aggregators.¹⁰¹ The Second FNPRM is particularly interested in comments on the types of providers that should participate, including ways to address reporting for service providers that procure their numbering resources indirectly and providers that should potentially be exempted,¹⁰² cost recovery for service providers,¹⁰³ and the costs and benefits associated with each mechanism.¹⁰⁴ We additionally seek comment on the information to be reported by the service providers, including the specific information a caller would need to avoid misdirecting a call,¹⁰⁵ and the comprehensiveness, timeliness, format, and criteria for user access to database information.¹⁰⁶ Finally, the Commission seeks comment on incentives to better encourage use, comprehensiveness, and timeliness of the database including a potential safe harbor for callers that make use of the information.¹⁰⁷

(Continued from previous page) _____

and whether the call is for telemarketing purposes. *See* 47 U.S.C. § 227(b)(1)(A); 47 CFR § 64.1200(a)(1)-(2); *see also Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991*, CG Docket No. 92-90, Report and Order, 7 FCC Rcd 8752 (1992).

⁹⁵ *See, e.g.*, Blackboard Comments at 4; CUNA Reply Comments at 6.

⁹⁶ *See, e.g.*, Neustar TCPA Compliance Solutions, <https://www.neustar.biz/risk/compliance-solutions/tcpa> (last visited Jan. 9, 2017); Danal TCPA Compliance Solution, <https://tcpaconfidence.com/> (last visited Jan. 9, 2017); Payfone TCPA Compliance, <https://www.payfone.com/> (last visited Jan. 9, 2017); *see also Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991*, Declaratory Ruling and Order, CG Docket No. 02-278, WC Docket No. 07-135, 30 FCC Rcd 7961, 7999 n.254 (2015) (*2015 TCPA Declaratory Ruling*) (citing comments stating that marketplace solutions to inform callers about reassigned numbers are available).

⁹⁷ *See 2015 TCPA Declaratory Ruling*, 30 FCC Rcd at 8007-08, para. 85; *see also id.* at 8092 (Statement of Commissioner O’Rielly) (noting that existing solutions are incomplete and not timely updated).

⁹⁸ Second FNPRM at paras. 8-9.

⁹⁹ *Id.* at paras. 32-43.

¹⁰⁰ *Id.* at paras. 44-53.

¹⁰¹ *Id.* at paras. 54-58.

¹⁰² *Id.* at paras. 37-39, 47.

¹⁰³ *Id.* at paras. 41, 50, 57.

¹⁰⁴ *Id.* at paras. 43, 53, 58.

¹⁰⁵ *Id.* at paras. 11-16.

¹⁰⁶ *Id.* at paras. 17-30.

¹⁰⁷ *Id.* at paras. 29, 55.

B. Legal Basis

6. The proposed and anticipated rules are authorized under 4(i), 227 and 251(e) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 227 and 251.

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

7. 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.¹⁰⁸ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”¹⁰⁹ In addition, the term “small business” has the same meaning as the term “small-business concern” under the Small Business Act.¹¹⁰ 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.¹¹¹

8. The proposed safe harbor from liability for violating the prohibitions relating to telephone solicitations using autodialers, artificial and/or prerecorded messages applies to a wide range of entities, including potentially all entities that use the telephone to advertise. Thus, we expect that the safe harbor proposal could have a significant economic impact on a substantial number of small entities. For instance, funeral homes, mortgage brokers, automobile dealers, newspapers and telecommunications companies could all be affected.

9. In 2013, there were approximately 28.8 million small business firms in the United States, according to SBA data.¹¹² Determining a precise number of small entities that would be subject to the requirements proposed in this NPRM is not readily feasible. Therefore, we invite comment about the number of small business entities that would be subject to the proposed safe harbor in this proceeding. After evaluating the comments, the Commission will examine further the effect the proposed safe harbor might have on small entities, and will set forth our findings in the final Regulatory Flexibility Analysis.

10. The descriptions and estimates of small entities affected by the remaining proposed rules is detailed below.

1. Wireline Carriers

11. *Wired Telecommunications Carriers.* The U.S. Census Bureau defines this industry as “establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband internet services. By exception, establishments providing satellite television distribution services using facilities

¹⁰⁸ See 5 U.S.C. § 603(b)(3).

¹⁰⁹ See 5 U.S.C. § 601(6).

¹¹⁰ See 5 U.S.C. § 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.”

¹¹¹ See 15 U.S.C. § 632.

¹¹² See Small Business Administration, Office of Advocacy Pamphlet at page 1 (June 2016); https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf.

and infrastructure that they operate are included in this industry.”¹¹³ The SBA has developed a small business size standard for Wired Telecommunications Carriers, which consists of all such companies having 1,500 or fewer employees.¹¹⁴ Census data for 2012 shows that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees.¹¹⁵ Thus, under this size standard, the majority of firms in this industry can be considered small.

12. *Local Exchange Carriers (LECs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for local exchange services. The closest applicable size standard under SBA rules is for the category Wired Telecommunications Carriers. The U.S. Census Bureau defines this industry as “establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.”¹¹⁶ Under that size standard, such a business is small if it has 1,500 or fewer employees.¹¹⁷ Census data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees.¹¹⁸ Consequently, the Commission estimates that most providers of local exchange service are small businesses.

13. *Incumbent Local Exchange Carriers (Incumbent LECs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The closest applicable size standard under SBA rules is for the category Wired Telecommunications Carriers. The U.S. Census Bureau defines this industry as “establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.”¹¹⁹ Under that size standard, such a business is small if it has 1,500 or fewer employees.¹²⁰ Census data for 2012 show that there were 3,117 firms that operated that year. Of this

¹¹³ U.S. Census Bureau, 2012 NAICS Definitions, “517110 Wired Telecommunications Categories”; <http://www.census.gov/cgi-bin/sssd/naics/naicsrch>.

¹¹⁴ See 13 CFR § 120.201, NAICS Code 517110.

¹¹⁵ 2012 U.S. Economic Census, NAICs Code 517110, at http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table.

¹¹⁶ U.S. Census Bureau, 2012 NAICS Definitions, “517110 Wired Telecommunications Categories”; <http://www.census.gov/cgi-bin/sssd/naics/naicsrch>.

¹¹⁷ 13 CFR § 121.201, NAICS code 517110.

¹¹⁸ 2012 U.S. Economic Census, NAICs Code 517110, at http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ5&prodType=table.

¹¹⁹ U.S. Census Bureau, 2012 NAICS Definitions, “517110 Wired Telecommunications Categories”; <http://www.census.gov/cgi-bin/sssd/naics/naicsrch>.

¹²⁰ 13 CFR § 121.201, NAICS code 517110.

total, 3,083 operated with fewer than 1,000 employees.¹²¹ Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses.

14. *Competitive Local Exchange Carriers (Competitive LECs), Competitive Access Providers (CAPs), Shared-Tenant Service Providers, and Other Local Service Providers.* Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. The U.S. Census Bureau defines this industry as “establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.”¹²² Under that size standard, such a business is small if it has 1,500 or fewer employees.¹²³ Census data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees.¹²⁴ Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, shared-tenant service providers, and other local service providers are small entities.

15. We have included small incumbent LECs in this present RFA analysis. As noted above, a “small business” under the RFA is one that, *inter alia*, meets the pertinent small business size standard (*e.g.*, a telephone communications business having 1,500 or fewer employees), and “is not dominant in its field of operation.”¹²⁵ The SBA’s Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not “national” in scope.¹²⁶ We have therefore included small incumbent LECs in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

16. *Interexchange Carriers.* Neither the Commission nor the SBA has developed a small business size standard specifically for providers of interexchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. The U.S. Census Bureau defines this industry as “establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks. Transmission facilities may be based on a

¹²¹ 2012 U.S. Economic Census, NAICs Code 517110, at http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ5&prodT ype=table.

¹²² U.S. Census Bureau, 2012 NAICS Definitions, “517110 Wired Telecommunications Categories”; <http://www.census.gov/cgi-bin/sssd/naics/naicsrch>.

¹²³ 13 CFR § 121.201, NAICS code 517110.

¹²⁴ 2012 U.S. Economic Census, NAICs Code 517110, at http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ5&prodT ype=table.

¹²⁵ 5 U.S.C. § 601(3).

¹²⁶ Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, Federal Communications Commission (May 27, 1999). The Small Business Act contains a definition of “small business concern,” which the RFA incorporates into its own definition of “small business.” 15 U.S.C. § 632(a); 5 U.S.C. § 601(3). SBA regulations interpret “small business concern” to include the concept of dominance on a national basis. 13 CFR § 121.102(b).

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.”¹²⁷ Under that size standard, such a business is small if it has 1,500 or fewer employees.¹²⁸ Census data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees.¹²⁹ Consequently, the Commission estimates that the majority of interexchange carriers are small entities.

17. *Cable System Operators (Telecom Act Standard)*. The Communications Act also contains a size standard for small cable system operators, which is “a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 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.”¹³⁰ There are approximately 52,403,705 cable video subscribers in the United States today.¹³¹ Accordingly, an operator serving fewer than 524,037 subscribers shall be deemed a small operator if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed \$250 million in the aggregate.¹³² Based on available data, we find that all but nine incumbent cable operators are small entities under this size standard.¹³³ We note that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million.¹³⁴ Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million, 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.

18. *Other Toll Carriers*. Neither the Commission nor the SBA has developed a size standard 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. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. The U.S. Census Bureau defines this industry as “establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband internet

¹²⁷ U.S. Census Bureau, 2012 NAICS Definitions, “517110 Wired Telecommunications Categories”; <http://www.census.gov/cgi-bin/sssd/naics/naicsrch>.

¹²⁸ 13 CFR § 121.201, NAICS code 517110.

¹²⁹ 2012 U.S. Economic Census, NAICS Code 517110, at http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ5&prodType=table.

¹³⁰ 47 CFR § 76.901 (f) and notes ff. 1, 2, and 3.

¹³¹ See SNL KAGAN at www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx.

¹³² 47 CFR § 76.901(f) and notes ff. 1, 2, and 3.

¹³³ See SNL KAGAN at <https://www.snl.com/Interactivex/TopCableMSOs.aspx>.

¹³⁴ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority’s finding that the operator does not qualify as a small cable operator pursuant to Section 76.901(f) of the Commission’s rules. See 47 CFR § 76.901(f).

services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.”¹³⁵ Under that size standard, such a business is small if it has 1,500 or fewer employees.¹³⁶ Census data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees.¹³⁷ Thus, under this category and the associated small business size standard, the majority of other toll carriers can be considered small.

2. Wireless Carriers

19. *Wireless Telecommunications Carriers (except Satellite)*. Since 2007, the Census Bureau has placed wireless firms within this new, broad, economic census category.¹³⁸ Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.¹³⁹ For the category of Wireless Telecommunications Carriers (except Satellite), Census data for 2012 show that there were 967 firms that operated for the entire year. Of this total, 955 firms had fewer than 1,000 employees.¹⁴⁰ Thus under this category and the associated size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities. Similarly, according to internally developed Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service (PCS), and Specialized Mobile Radio (SMR) services.¹⁴¹ Of this total, an estimated 261 have 1,500 or fewer employees.¹⁴² Thus, using available data, we estimate that the majority of wireless firms can be considered small.

20. *Satellite Telecommunications Providers*. The category of Satellite Telecommunications “comprises establishments 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.”¹⁴³ This category has a small business size standard of \$32.5 million or less in average annual receipts, under SBA rules.¹⁴⁴ For this category, Census Bureau data for 2012 show that there were a total of 333 firms that operated for the entire year.¹⁴⁵ Of this total, 299 firms had annual receipts of under \$25 million.¹⁴⁶

¹³⁵ U.S. Census Bureau, 2012 NAICS Definitions, “517110 Wired Telecommunications Categories”; <http://www.census.gov/cgi-bin/sssd/naics/naicsrch>.

¹³⁶ 13 CFR § 121.201, NAICS code 517110.

¹³⁷ 2012 U.S. Economic Census, NAICs Code 517110, at http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ5&prodTpe=table.

¹³⁸ U.S. Census Bureau, 2012 NAICS Definitions, “517210 Wireless Telecommunications Categories (Except Satellite)”; <http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517210&search=2012%20NAICS%20Search>.

¹³⁹ 13 CFR § 121.201, NAICS code 517210 (2012 NAICS). The now-superseded, pre-2007 CFR citations were 13 CFR § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

¹⁴⁰ 2012 U.S. Economic Census, NAICs Code 517210, at http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ5&prodTpe=table.

¹⁴¹ *Trends in Telephone Service*, tbl. 5.3.

¹⁴² *Id.*

¹⁴³ U.S. Census Bureau, 2012 NAICS Definitions, “517410 Satellite Telecommunications,” <http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517410&search=2012>.

¹⁴⁴ 13 CFR § 121.201, NAICS Code 517410.

¹⁴⁵ U.S. Census Bureau, 2012 Economic Census, Subject Series: Information, “Establishment and Firm Size,” NAICS code 517410.

Consequently, we estimate that the majority of satellite telecommunications firms are small entities.

21. *All Other Telecommunications.* All other telecommunications comprises, *inter alia*, “establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Establishments providing Internet services or voice over Internet protocol services via client-supplied telecommunications connections are also included in this industry.”¹⁴⁷ The SBA has developed a small business size standard for the category of All Other Telecommunications.¹⁴⁸ Under that size standard, such a business is small if it has \$32.5 million in annual receipts.¹⁴⁹ For this category, Census Bureau data for 2012 show that there were a total of 1,442 firms that operated for the entire year.¹⁵⁰ Of this total, 1,400 had annual receipts below \$25 million per year.¹⁵¹ Consequently, we estimate that the majority of all other telecommunications firms are small entities.

3. Resellers

22. *Toll Resellers.* The Commission has not developed a definition for toll resellers. The closest NAICS Code Category is Telecommunications Resellers. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure. Mobile virtual network operators (MVNOs) are included in this industry.¹⁵² The SBA has developed a small business size standard for the category of Telecommunications Resellers.¹⁵³ Under that size standard, such a business is small if it has 1,500 or fewer employees.¹⁵⁴ Census data for 2012 show that 1,341 firms provided resale services during that year. Of that number, 1,341 operated with fewer than 1,000 employees.¹⁵⁵ Thus, under this category and the associated small business size standard, the majority of these resellers can be considered small entities. According to Commission data, 881 carriers have reported that they are engaged in the provision of toll resale services.¹⁵⁶ Of this total, an estimated 857 have 1,500 or fewer employees.¹⁵⁷ Consequently, the Commission estimates that the majority of toll resellers are small entities.

(Continued from previous page) _____

¹⁴⁶ *Id.*

¹⁴⁷ U.S. Census Bureau, 2012 NAICS Definitions, “517919 All Other Telecommunications,” <http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517919&search=2012>.

¹⁴⁸ 13 CFR § 121.201, NAICS code 517919.

¹⁴⁹ *Id.*

¹⁵⁰ U.S. Census Bureau, 2012 Economic Census, Subject Series: Information, “Establishment and Firm Size,” NAICS code 517919.

¹⁵¹ *Id.*

¹⁵² <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=517911&search=2012+NAICS+Search&search=2012>.

¹⁵³ 13 CFR § 121.201, NAICS code 517911.

¹⁵⁴ *Id.*

¹⁵⁵ 2012 U.S. Economic Census, NAICS Code 517911, at https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table.

¹⁵⁶ *Trends in Telephone Service*, at tbl. 5.3.

¹⁵⁷ *Id.*

23. *Local Resellers.* The SBA has developed a small business size standard for the category of Telecommunications Resellers. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure. MVNOs are included in this industry.¹⁵⁸ Under that size standard, such a business is small if it has 1,500 or fewer employees.¹⁵⁹ Census data for 2012 show that 1,341 firms provided resale services during that year. Of that number, all operated with fewer than 1,000 employees.¹⁶⁰ Thus, under this category and the associated small business size standard, the majority of these local resellers can be considered small entities.

24. *Prepaid Calling Card Providers.* The SBA has developed a small business size standard for the category of Telecommunications Resellers. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure. MVNOs are included in this industry.¹⁶¹ Under that size standard, such a business is small if it has 1,500 or fewer employees.¹⁶² Census data for 2012 show that 1,341 firms provided resale services during that year. Of that number, all operated with fewer than 1,000 employees.¹⁶³ Thus, under this category and the associated small business size standard, the majority of these prepaid calling card providers can be considered small entities.

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

25. The Second FNPRM seeks comment on its proposal to make one or more databases available to provide callers with the comprehensive and timely information they need to avoid calling reassigned numbers.¹⁶⁴ We seek to minimize the burden associated with reporting, recordkeeping, and other compliance requirements for the proposal. The proposal under consideration could result in additional costs to regulated entities. This proposal would necessitate that some voice service providers create new processes or make changes to their existing processes that would impose some additional costs to those service providers. We believe that service providers already track phone number status information,¹⁶⁵ and we therefore do not anticipate that these costs will be excessive. In addition, as indicated in more detail below, the Second FNPRM also contemplates a cost recovery mechanism for expenses incurred by service providers.¹⁶⁶

¹⁵⁸ <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=517911&search=2012+NAICS+Search&search=2012>.

¹⁵⁹ 13 CFR § 121.201, NAICS code 517911.

¹⁶⁰ U.S. Census Bureau, 2012 Economic Census, Subject Series: Information, “Establishment and Firm Size,” NAICS code 517911.

¹⁶¹ <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=517911&search=2012+NAICS+Search&search=2012>.

¹⁶² 13 CFR § 121.201, NAICS code 517911.

¹⁶³ U.S. Census Bureau, 2012 Economic Census, Subject Series: Information, “Establishment and Firm Size,” NAICS code 517911.

¹⁶⁴ Second FNPRM at paras.8-9.

¹⁶⁵ See, e.g., Comcast Reply Comments at 4-5 (noting that “claims that establishing a database would be too burdensome because voice providers do not track disconnections and reassignments are simply incorrect. Comcast routinely tracks such information in providing voice services—and, indeed, it is difficult to imagine how a provider could offer a viable voice service *without* tracking such information.”)

¹⁶⁶ Second FNPRM at paras. 41, 50, 57.

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

26. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for 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 small entities.¹⁶⁷

27. As indicated above, the Second FNPRM seeks comment on a proposal to make one or more databases available so that callers can discover reassignments prior to making a call. The Commission has examined both the economic burden this proposal may have on callers and service providers and the considerable benefits to consumers and callers a solution of reassigned number database can provide. Consumers are currently receiving a significant number of unwanted calls that are an annoyance and expend wasted time while other consumers are not getting the information that they solicited. In addition, callers are wasting considerable resources calling the wrong number and incurring potential TCPA liability. The Second FNPRM seeks to significantly reduce the number of unwanted calls to those that receive reassigned numbers by informing callers that use a database solution of the change in assignment. The Second FNPRM also seeks comment on potential ways to allow service providers to recoup their costs associated with reporting number reassignment information.¹⁶⁸ If adopted, this cost-recovery mechanism could negate any service provider costs associated with the provisioning of phone number reassignment data. We seek comment on the specific costs of the measures we discuss in the Second FNPRM, and ways we might further mitigate any implementation costs, including by making allowances for small and rural voice service providers and small business callers that might choose to use a reassigned number solution.¹⁶⁹

28. The Commission expects to consider the economic impact on small entities, as identified in comments filed in response to the Second FNPRM and this IRFA, in reaching its final conclusions and taking action in this proceeding.

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

29. None.

¹⁶⁷ 5 U.S.C. § 603(c).

¹⁶⁸ See *supra* note. 166.

¹⁶⁹ Second FNPRM at 28 (seeking comment on ways to minimize costs so as to encourage small business callers to use a reassigned number database), 40 (seeking comment on whether smaller service providers should be able to report data less frequently and potential unique reporting burdens for small and rural service providers), 57 (seeking comment on ways to encourage small service provider participation through cost recovery).