6712-01

#### FEDERAL COMMUNICATIONS COMMISSION

**47 CFR Part 52** 

[WC Docket Nos. 13-97, 04-36, 07-243, 10-90; CC Docket Nos. 95-116, 01-92, 99-200; FCC 13-51] Numbering Policies for Modern Communications; IP-Enabled Services; Telephone Number Requirements for IP-Enabled Services Providers; Telephone Number Portability et al.

**AGENCY:** Federal Communications Commission.

**ACTION:** Proposed rule.

SUMMARY: In this document, the Federal Communications Commission (Commission) propose to promote innovation and efficiency by allowing interconnected Voice over Internet Protocol (VoIP) providers to obtain telephone numbers directly from the North American Numbering Plan Administrator (NANPA) and the Pooling Administrator (PA), subject to certain requirements. We anticipate that allowing interconnected VoIP providers to have direct access to numbers will help speed the delivery of innovative services to consumers and businesses, while preserving the integrity of the network and appropriate oversight of telephone number assignments. The accompanying Notice of Inquiry further seeks comment on a range of issues regarding our long-term approach to numbering resources. The relationship between numbers and geography—taken for granted when numbers were first assigned to fixed wireline telephones—is evolving as consumers turn increasingly to mobile and nomadic services. We seek comment on these trends and associated Commission policies.

DATES: Comments are due on or before [INSERT DATE 30 DAYS AFTER DATE OF

PUBLICATION IN THE FEDERAL REGISTER]. Reply comments are due on or before [INSERT

DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may submit comments, identified by [WC Docket Nos. 13-97, 04-36, 07-243, 10-90 and CC Docket Nos. 95-116, 01-92, 99-200], by any of the following methods:

- Federal Communications Commission's Web Site: <a href="http://fjallfoss.fcc.gov/ecfs2/">http://fjallfoss.fcc.gov/ecfs2/</a>. Follow the instructions for submitting comments.
- People with Disabilities: Contact the FCC to request reasonable accommodations (accessible format documents, sign language interpreters, CART, etc.) by e-mail: FCC504@fcc.gov or phone: 202-418-0530 or TTY: 202-418-0432.

For detailed instructions for submitting comments and additional information on the rulemaking process, see the SUPPLEMENTARY INFORMATION section of this document.

**FOR FURTHER INFORMATION CONTACT:** Marilyn Jones, Wireline Competition Bureau, Competition Policy Division, (202) 418-1580, or send an email to <a href="marilyn.jones@fcc.gov">marilyn.jones@fcc.gov</a>.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Notice of Proposed Rulemaking (NPRM) in WC Docket Nos. 13-97, 04-36, 07-243, 10-90 and CC Docket Nos. 95-116, 01-92, 99-200, FCC 13-51, adopted and released April 18, 2013. The full text of this document is available for public inspection during regular business hours in the FCC Reference Information Center, Portals II, 445 12th Street, SW, Room CY-A257, Washington, DC 20554. The document may also be purchased from the Commission's duplicating contractor, Best Copy and Printing, Inc., 445 12th Street, SW, Room CY-B402, Washington, DC 20554, telephone (800) 378-3160 or (202) 863-2893, facsimile (202) 863-2898, or via the Internet at <a href="http://www.bcpiweb.com">http://www.bcpiweb.com</a>. It is available on the Commission's Web site at <a href="http://www.fcc.gov">http://www.fcc.gov</a>.

#### I. BACKGROUND

2. The Communications Act of 1934, as amended (the Act), grants the Commission plenary authority over the North American Numbering Plan (NANP) within the United States. In its Numbering Resource Optimization (NRO) proceeding, the Commission adopted several optimization measures that allow it to monitor more closely how telephone numbers are used within the NANP. These measures also promote more efficient allocation and use of numbers by tying a carrier's ability to obtain them more closely to its actual need for numbers to serve its customers. In particular, to combat the inefficient use of numbers, § 52.15(g)(2)(i) of the Commission's

rules requires an applicant for telephone numbers to provide evidence that it is authorized to provide service in the area in which it is requesting those numbers. The Commission interpreted this rule in its NRO First Report and Order as requiring evidence of either state certification or a Commission license.

- 3. Interconnected VoIP service enables users, over broadband connections, to receive calls that originate from the public switched telephone network (PSTN) or other VoIP users, and to terminate calls to the PSTN or other VoIP users. However, the Commission has not addressed the classification of interconnected VoIP services, and thus retail interconnected VoIP providers in many, but not all, instances take the position that they are not subject to regulation as telecommunications carriers, nor can they directly avail themselves of various rights under sections 251 and 252 of the Act.
- 4. In order to provide interconnected VoIP service, a provider must offer consumers NANP telephone numbers; otherwise, a customer on the PSTN would not have a way to dial the interconnected VoIP customer using his PSTN service. Interconnected VoIP providers often cannot obtain telephone numbers directly from the numbering administrators as they cannot provide the evidence of certification required by § 52.15(g)(2)(i)—they typically do not hold state certifications or Commission licenses. Thus, these providers generally obtain NANP telephone numbers by purchasing wholesale services from a competitive local exchange carrier (CLEC), and then using these services to interconnect with the PSTN in order to send and receive certain types of traffic between the VoIP provider's network and the carrier networks.
- 5. The Commission has acted to ensure consumer protection, public safety, and other important policy goals in orders addressing interconnected VoIP services, without classifying those services as telecommunications services or information services under the Communications Act.

#### II. NOTICE OF PROPOSED RULEMAKING

#### A. Direct Access to Numbers by Interconnected VoIP Providers

6. As part of our focused ongoing effort to modernize our rules during a period of significant technology transition, we propose to modify our rules to allow interconnected VoIP providers to obtain numbers directly from the number administrators, subject to a variety of requirements to ensure continued network integrity, allow oversight and enforcement of our numbering regulations, and protect the public interest. We expect that granting VoIP providers direct access to numbers—subject to the number utilization provisions we propose below—will enhance the effectiveness of our number conservation efforts, and will reduce costs and inefficiencies that arise

today through the mandatory use of carrier-partners. We anticipate that these proposed rule changes will encourage providers to develop and deploy innovative new technologies and services that benefit consumers.

- 7. We invite general comment on permitting interconnected VoIP providers to obtain phone numbers directly from the number administrators, as opposed to through carrier partners. Do commenters agree that allowing interconnected VoIP providers direct access to numbers will spur the introduction of innovative new technologies and services, increase efficiency, and facilitate increased choices for American consumers? Are there benefits to requiring carrier-partners? Are there alternate ways to accomplish these goals? We ask commenters who disagree with our proposal to address other ways the Commission's numbering policies can be utilized to achieve the outlined benefits.
- 8. We note that in October 2010, the Twenty-First Century Communications and Video Accessibility Act (CVAA) became law. The CVAA codified the Commission's definition of "interconnected VoIP service" contained in § 9.3 of the Commission's rules, "as such section may be amended from time to time." We seek comment on whether any amendments to the Commission's definition of interconnected VoIP service are needed to allow direct access to numbers by interconnected VoIP providers. If so, should the amendments apply to all of the Commission's requirements that involve interconnected VoIP providers or should the Commission use the amended definition of interconnected VoIP solely for purposes of number administration?
- 9. In various sections of the NPRM, we seek comment on: the type of documentation that interconnected VoIP providers should provide in order to obtain numbers; the numbering administration requirements that should apply to such providers; and enforcement of our numbering rules. In other parts, we discuss and seek comment on commenters' concerns raised in the record, such as databases, call routing and termination, intercarrier compensation, IP interconnection, local number portability, number cost allocation and transitioning to direct access if interconnected VoIP providers are granted direct access to numbers, other entities that potentially could gain access to numbers, and our legal authority for imposing proposed numbering administration and other requirements on interconnected VoIP providers.

#### B. Direct Access to Numbers for Other Purposes

#### 1. Innovative Uses of Numbers

10. We seek comment on whether the Commission should expand access to numbers beyond the proposal regarding interconnected VoIP providers. For example, should the Commission expand access to numbers

to VoIP providers (regardless of whether they are interconnected or one-way)? We seek comment on the types of services and applications that use numbers today, and that are likely to do so in the future. Is the lack of access to numbers a barrier to deployment of innovative services? Twilio states that making numbers more broadly available to other communications providers will lower the cost of accessing numbers and providing telecommunications services, and will encourage competition and innovation. We seek comment on these assertions.

- 11. We seek comment on the potential benefits and risks of expanding direct access to numbers. For example, would extending access to numbers accelerate number exhaust and if so, what steps could we take to control number exhaust? What safeguards or countermeasures should the Commission utilize, and should these be specific to innovative providers? We note above that allowing interconnected VoIP providers direct access to numbers could enhance the ability to oversee number use and control exhaust. Do these same benefits apply to other types of innovative service providers that today only receive indirect access to numbers? We also seek comment on how we can maintain the integrity and oversight of our numbering system if we broadly extend direct access to numbers. For example, we seek comment on the numbers that should be provided to these other entities. Should the Commission limit distribution in some fashion? Should the Commission permit these other entities to obtain only non-geographic numbers? We note that the Alliance for Telecommunications Industry Solutions' (ATIS) Industry Numbering Committee (INC) reported on its recent efforts, at the September NANC meeting, to revise the guidelines for assignment of non-geographic numbers to reflect increased demand for their use with machine-to-machine applications. Which machine uses require a telephone number and why? Which ones do not? As an example, could some uses simply require an IP address or device ID to be assigned? Should machine-tomachine uses be assigned one type of number, with common 10-digit area code numbers reserved for voice communications or SMS? We seek comment generally on relevant numbering limitations that should apply to innovative providers.
- 12. There is a wide array of services and providers that today rely on indirect access to numbers. We recognize that those uses are likely to change and expand in unpredictable ways in the future. Are there distinguishing or limiting factors that should govern whether and how specific services or providers receive certain types of numbers? For example, should the Commission prioritize access to numbers by certain types of providers, or to services that are primarily (or exclusively) voice services? We seek comment on the relevant criteria the Commission should consider when deciding whether and on what terms to allow direct access to numbers.

- 13. If we grant interconnected VoIP providers and other types of entities direct access to numbers, should we establish the same conditions and criteria, regardless of the service or technology? For example, should we impose the same documentation requirements and enforcement provisions on interconnected VoIP providers and other entities?
- 14. Twilio states that the conditions Vonage identifies in its request for waiver, including utilization and optimization requirements, are appropriate for access by other VoIP providers. We seek comment on whether these limitations are sufficient for innovative providers. What protections are necessary in order to combat potential abuses by innovative providers? What safeguards should the Commission adopt in order to promote an orderly and efficient use of numbers by innovative providers? Finally, we seek comment on the rule changes necessary to effectively allow other carriers to have access to numbers. How would the proposed rule changes in this Notice need to be modified in order for innovative providers to have access to numbers?

#### 2. Access to p-ANI Codes for Public Safety Purposes

- 15. We seek comment on whether the Commission should modify § 52.15(g)(2)(i) of our rules to allow VPC providers direct access to p-ANI codes, for the purpose of providing 911 and E911 service. VPC providers are entities that help interconnected VoIP providers deliver 911 calls to the appropriate public safety answering point.
- 16. Under § 52.15(g)(2)(i) of our rules, applicants for numbers, including p-ANI codes, must provide evidence that they are authorized to provide service in the area in which they are requesting numbers. However, in October 2008, as part of its implementation of the NET 911 Act, the Commission granted interconnected VoIP providers the right to access p-ANI codes, without such authorization, for the purpose of providing 911 and E911 service.
- 17. We seek comment on whether § 52.15(g)(2)(i) should be modified to allow all providers of VPC service to directly access p-ANI codes. Would allowing VPC providers access to p-ANI codes enhance public safety by further ensuring that emergency calls are properly routed to trained responders of the PSAPs? Are there unique technical characteristics of p-ANI codes that make them different from the numbers currently included in § 52.15(g)(2)(i). Are there any cost benefits to allowing VPC providers direct access to p-ANI codes? Furthermore, would such access help encourage the continued growth of interconnected VoIP services?

- 18. In the <u>NET 911 Order</u>, the Commission determined that it has the authority to regulate VPC providers so they can perform their obligations under the NET 911 Act. We seek comment on whether there are distinctions the Commission should consider between VPC providers and interconnected VoIP providers with respect to the need to access p-ANI codes. Are there any technical or policy reasons why VPC providers should be denied direct access to p-ANI codes while interconnected VoIP providers have access under the Commission's <u>NET 911 Order?</u>
- 19. We also seek comment on whether any evidence of authorization should be required for VPC providers to access p-ANI codes. TCS argued, in seeking a waiver of our rule, that if state competitive local exchange carrier certification is required, then obtaining one state certification should be adequate for a waiver. Should § 52.15(g)(2)(i) be modified to require VPC providers to provide the RNA with state certification from at least one state? Alternatively, should a "national authorization" be provided to VPC providers from a public safety organization? Should the Commission consider any other factors, such as whether VPC providers are current on state and local emergency fees and any appropriate universal service fund contributions in granting access to p-ANI codes? Are there other obligations on which we seek comment above for VoIP provider access to numbers that should apply as well to VPC providers?

# C. Legal Authority

20. Section 251(e)(1) of the Act gives the Commission plenary authority over that portion of the NANP that pertains to the United States, and the Commission retains "authority to set policy with respect to all facets of numbering administration in the United States." The Commission has concluded that the plenary numbering authority set forth in section 251(e)(1) of the Act provides ample authority for the Commission to extend numbering-related requirements to interconnected VoIP providers that obtain telephone numbers directly or indirectly, regardless of the statutory classification of interconnected VoIP service. Thus, because the Commission has plenary authority over the administration of NANP numbers in the United States, any entity that participates in that administration—including VoIP providers that obtain numbers, whether or not they are carriers—must adhere to the Commission's numbering rules. We believe that this rationale applies equally to the situation here. Thus, we believe that the Commission has authority under section 251(e)(1) to extend the numbering requirements discussed above to interconnected VoIP providers, and seek comment on this analysis.

- 21. We also believe that the Commission has additional authority under Title I of the Act to impose numbering obligations on interconnected VoIP providers. Ancillary authority may be employed when "(1) the Commission's general jurisdictional grant under Title 1 covers the regulated subject and (2) the regulations are reasonably ancillary to the Commission's effective performance of its statutorily mandated responsibilities." As to the first predicate, as we have concluded in numerous orders, interconnected VoIP services fall within the subjectmatter jurisdiction granted to the Commission in the Act. As to the second predicate, we seek comment on whether imposing numbering obligations on interconnected VoIP providers would be reasonably ancillary to the Commission's performance of particular statutory duties, such as those under sections 251 and 201 of the Act. For example, adopting numbering obligations for interconnected VoIP providers that obtain direct access to numbers is necessary to ensure a level playing field and foster competition by eliminating barriers to, and incenting development of, innovative IP services. We thus seek comment on whether, for these or other reasons, imposing numbering obligations on interconnected VoIP providers that get direct access to numbers are reasonably ancillary to the Commission's responsibilities to ensure that numbers are made available on an "equitable" basis, to advance the number-portability requirements of section 251, or to help ensure just and reasonable rates and practices for voice telecommunications services regulated under section 201 through market discipline from interconnected VoIP services. We also seek comment on other possible bases for the Commission to exercise ancillary authority here.
- 22. We note further that our proposed rules are consistent with other statutory provisions governing the Commission. For example, section 706(a) of the Telecommunications Act of 1996 directs the Commission to encourage the deployment of advanced telecommunications capability to all Americans by using measures that "promote competition in the local telecommunications market." Permitting interconnected VoIP providers to obtain direct access to telephone numbers may encourage more VoIP providers to enter the market, enabling consumers to enjoy more competitive service offerings. This will in turn spur consumer demand for these services, thereby increasing demand for broadband connections and consequently encouraging more broadband investment and deployment consistent with the goals of section 706.

#### III. NOTICE OF INQUIRY

23. In the above Notice, we proposed a set of rules that would allow interconnected VoIP providers to obtain telephone numbers directly from number administrators rather than through intermediate carriers, subject to certain requirements. In this Notice of Inquiry (NOI), we seek initial comment on a broader range of numbering

issues that result from ongoing transitions from fixed telephony to increased use of mobile services, from TDM to IP technologies, and from geography-based intercarrier compensation to bill-and-keep, focusing particularly on whether telephone numbers should remain associated with particular geographies.

- 24. With the development of mobile services and IP technology, the way that consumers use telephone numbers has evolved. Some services have already broken the historical tie between a number and a specific device. For example, Skype permits users to register a telephone number that routes to the Skype service, and Google Voice permits users to register a telephone number that acts as an overlay on a user's existing telephony services, allowing selective routing of calls from certain numbers, and listening in on voicemails before picking up the phone. Other services use a single number for multiple devices. See Nathan Ingram, iOS 6 unifies your Apple ID and phone number for improved iMessage and Facetime support, THE VERGE (June 11, 2012, 2:32 PM), http://www.theverge.com/2012/6/11/3078598/ios-6-unified-apple-id-phone-number ("Now, if someone calls your phone number for Facetime, you'll be able to answer on your Mac or iPad. The same goes for Messages if you get an iMessage on your phone, it'll be delivered to your Mac and other iOS devices, even if the sender sent the message to your cell phone number and not your Apple ID email.").
- 25. In light of these changes, in this Notice we seek comment on some of the important recommendations made by the Technological Advisory Council (TAC) regarding the future of numbering. See Technological Advisory Council, Presentation to the Federal Communications Commission, at 60 (2012) (recommending that the Commission "[i]nitiate rulemaking on the full range and scope of issues with numbers/identifiers"), available at <a href="http://transition.fcc.gov/bureaus/oet/tac/tacdocs/meeting121012/TAC12-10-12FinalPresentation.pdf">http://transition.fcc.gov/bureaus/oet/tac/tacdocs/meeting121012/TAC12-10-12FinalPresentation.pdf</a>. In particular, the TAC recommended that the Commission consider "[f]ully decoupl[ing] geography from number." We seek comment on the specifics of such a transition, including how it would affect public safety communications, access to communications networks by Americans with disabilities, and reliability in routing of communications and interconnection.
- Aside from the geography-related issues addressed in the foregoing sections, the TAC and others have raised issues concerning number administration more generally. The memorability, ubiquity, convenience, and universality of telephone numbers as identifiers suggest that they will remain relevant for quite a while. Other than shifting away from geographic assignment, should the Commission be considering long-term changes to the basic telephone numbering system?

#### IV. PROCEDURAL MATTERS

# A. <u>Ex Parte</u> Rules – Permit-But-Disclose

27. The proceeding this Notice initiates shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's exparte rules. See 47 CFR 1.1200 et seq. Persons making exparte 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 § 1.1206(b). In proceedings governed by § 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.

#### **B.** Comment Filing Procedures

- 28. Pursuant to §§ 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 and second pages of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998).
  - Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://fjallfoss.fcc.gov/ecfs2/.

- 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.
- 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.
- 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.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12<sup>th</sup>
   Street, SW, Washington DC 20554.
- 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).

# C. Initial Regulatory Flexibility Analysis

29. As required by the Regulatory Flexibility Act of 1980 (RFA), the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules proposed in this document. See 5 U.S.C. 603. The analysis is found in Appendix B. We request written public comment on the analysis. Comments must be filed by the same dates as listed in the first page of this document, and must have a separate and distinct heading designating them as responses to the IRFA. The

Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this Notice, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.

## D. Paperwork Reduction Analysis

30. This NPRM seeks comment on a potential new or revised information collection requirement. If the Commission adopts any new or revised information collection requirement, the Commission will publish a separate notice in the Federal Register inviting the public to comment on the requirement, as required by the Paperwork Reduction Act of 1995, Public Law 104-13 (44 U.S.C. 3501-3520). In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), the Commission seeks specific comment on how it might "further reduce the information collection burden for small business concerns with fewer than 25 employees."

#### V. INITIAL REGULATORY FLEXIBILITY ANALYSIS

As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this Notice of Proposed Rulemaking (NPRM). Written 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 NPRM. The Commission will send a copy of the NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). In addition, the NPRM and IRFA (or summaries thereof) will be published in the Federal Register.

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

32. The NPRM proposes to remove unnecessary regulatory barriers to innovation and efficiency by allowing interconnected VoIP providers to obtain telephone numbers directly from the NANPA and the PA, subject to certain requirements. Telephone numbers are a valuable and limited resource, and access to and use of such numbers must be managed judiciously in order to ensure that they remain available and to protect the efficient and reliable operation of the telephone network. At the same time, the Commission is attempting to modernize its rules in light of significant and ongoing technology transitions in the delivery of voice services, with the goal of promoting innovation, investment, and competition for the ultimate benefit of consumers and businesses. In light of these twin concerns, the proposed rules allowing interconnected VoIP providers to have direct access to numbers will help modernize the Commission's policies of fostering innovation and competition and speeding the delivery of

innovative services to consumers and businesses, while also preserving the integrity of the telephone network and ensuring appropriate oversight of telephone number assignments. To ensure the efficient and judicious management of telephone numbers and promote further innovation and competition, the NPRM seeks comment on these proposed rules, including the requirements that must be met in order to obtain direct access the numbers, and potential issues involving intercarrier compensation, VoIP interconnection, and LNP obligations under the proposed rules.

#### 1. Direct Access to Numbers by Interconnected VoIP Providers

- 33. The NPRM first proposes to modify the Commission's rules to allow interconnected VoIP providers to obtain numbers directly from the NANPA and the PA, subject to a variety of requirements to ensure continued network integrity, allow oversight and enforcement of our numbering regulations, and protect the public interest. The NPRM seeks comment generally on permitting interconnected VoIP providers to obtain phone numbers directly from the number administrators and on whether allowing these parties direct access to numbers will spur the introduction of innovative new technologies and services, increase efficiency, and facilitate increased choices for American consumers. The NPRM also seeks comment on whether there are alternate ways to accomplish these goals and whether there are benefits to requiring carrier-partners.
- 34. In October 2010, the CVAA codified the Commission's definition of "interconnected VoIP service" in Section 9.3 of the Commission's rules, "as such section may be amended from time to time." See Pub. L. 111-260, section 101, adding definition of "interconnected VoIP service" to Section 3 of the Act, codified at 47 U.S.C. 153(25). The Senate Report reiterates that this term "means the same as it does in title 47 of the Code of Federal Regulations, as such title may be amended from time to time." S. Rep. No. 111–386, at 6 (2010) ("Senate Report"). The House Report is silent on this issue. H.R. Rep. No. 111-563 (2010) ("House Report"). The NPRM therefore seeks comment on whether any amendments to the Commission's definition of interconnected VoIP service are needed to allow direct access to numbers by interconnected VoIP providers.

#### 2. Documentation Required to Obtain Numbers

35. The NPRM notes that under § 52.15(g)(2)(i) of the rules, an applicant for telephone numbers must provide the number administrator with evidence of the applicant's authority to provide service, such as a license issued by the Commission or a CPCN issued by a state regulatory commission. Interconnected VoIP providers may be unable to provide the evidence required by this rule because states often refuse to certify VoIP providers. After

the Commission required interconnected VoIP providers to comply with the same E911 requirements as carriers, the Bureau recognized that VoIP providers would not be able to provide the same documentation as certificated carriers to obtain the non-dialable numbers necessary to provide E911 service. In that case, the Bureau permitted the administrator that disseminates p-ANI codes to accept documentation different than that required by certificated carriers. To ensure continued compliance with part 52 of the Commission's rules and with the NET 911 Act, an interconnected VoIP provider must demonstrate that it provides VoIP service and must identify the jurisdiction(s) in which it provides service. See Letter from Sharon E. Gillett, Chief, Wireline Competition Bureau, Federal Communications Commission, to Betty Ann Kane, Chair, North American Numbering Council and Ms. Amy L. Putnam, Director, Number Pooling Services, Neustar, Inc. (Dec. 14, 2010). The Bureau allowed this documentation to be in the form of pages 2 and 36 of the FCC Form 477.

36. Given these issues, the NPRM seeks comment on what, if any, documentation interconnected VoIP providers should be required to provide to the number administrator to receive numbers. Specifically, comment is sought on whether interconnected VoIP providers should be required to demonstrate that they do or plan to offer service in a particular geographic area in order to receive numbers associated with that area. Comment is sought on whether data regarding the provision of interconnected VoIP services from FCC Form 477 would service this role, or whether there are alternative means for interconnected VoIP providers to demonstrate, absent state certification, that they are providing services in the area for which the numbers are being requested. Comment is further sought on whether the Commission should adopt a process whereby it will provide the certification required by § 52.15(g)(2)(i), but only to the extent a state commission lacks authority to do so or represents that it has a policy of not doing so. The NPRM asks whether certification requirements should be different for providers of facilities-based interconnected VoIP, which is typically offered in a clearly defined geographic area, and over-thetop interconnected VoIP, which can be used anywhere that has a broadband connection. Comment is also sought on whether certification would permit the Commission to exercise forfeiture authority without first issuing a citation. The NPRM further seeks comment on the costs and burdens imposed on small entities from the rules resulting from this requirement, and how those onuses might be ameliorated. Lastly, the NPRM asks whether there are other issues or significant alternatives that the Commission should consider to ease the burden of these proposed measures on small entities.

# 3. Numbering Administration Requirements for Interconnected VoIP Providers

- 37. Telecommunications carriers are required to comply with a variety of Commission and state number optimization requirements and are expected to follow industry guidelines. In the SBCIS Waiver Order, the Commission imposed these requirements on SBCIS as a condition of its authorization to obtain telephone numbers directly from the number administrators. The NPRM proposes to impose these same number utilization and optimization requirements and industry guidelines and practices that apply to carriers, on interconnected VoIP providers that obtain direct access to numbers. See 47 CFR Part 52. These requirements include, inter alia, adhering to the numbering authority delegated to state commissions for access to data and reclamation activities, and filing NRUF Reports. Requiring interconnected VoIP providers that obtain numbers directly from the numbering administrators to comply with the same numbering requirements and industry guidelines as carriers will help alleviate many concerns about numbering exhaust and will enable the Commission to more effectively monitor the VoIP providers' number utilization. The NPRM seeks comment on these requirements and on their efficacy in conserving numbers and protecting consumers. One reason numbers that interconnected VoIP providers obtain from CLECs are not reported as "intermediate numbers" is that some reporting carriers classify interconnected VoIP providers as the "end user," because the interconnected VoIP provider is the customer of the wholesale carrier. The NPRM therefore seeks comment on how to revise the Commission's definition of "intermediate numbers" or "assigned numbers" to ensure consistency among all reporting providers.
- 38. The NPRM proposes to allow interconnected VoIP providers to obtain telephone numbers only from rate centers subject to pooling, in order to reduce waste. The NPRM seeks comment on this proposal and any concerns it may raise. Comment is also sought on whether it makes sense to differentiate between traditional carriers and interconnected VoIP providers in terms of the rate centers from which they can request numbers, and whether this approach raises anti-competitive or public policy concerns. The NPRM seeks further comment on how this approach will affect existing VoIP customers with numbers not in these rate centers, if at all. Comment is sought on whether this approach is appropriately tailored to address the problems of waste and number exhaust, and whether there are any alternative measures that would be more effective in dealing with these issues. The NPRM also details an alternative proposal by the California PUC in which the Commission would grant states the right to

specify which rate centers are available for VoIP number assignment. The NPRM seeks comment, in particular, on this alternative proposal.

- 39. In conjunction with these recommendations, the California PUC proposes a system in which all calls to VoIP providers are deemed to be local calls for numbering administration purposes. Comment is sought on the feasibility of this plan and the method by which the Commission might implement it. The NPRM also seeks comment on any drawbacks posed by this system to VoIP providers and their customers.
- 40. Under the Commission's rules, carriers must demonstrate "facilities readiness" before they can obtain initial numbering resources, which helps to ensure that carriers are not building inventories before they are prepared to offer service. Section 52.15(g)(2)(ii) of the Commission's rules requires that an applicant for initial numbering resources is or will be capable of providing service within sixty (60) days of the activation date of the numbering resources. 47 CFR 52.15(g)(2)(ii). The NPRM proposes to extend these "facilities readiness" requirements to interconnected VoIP providers who obtain direct access to numbers. Comment is sought on whether requiring interconnected VoIP providers to submit evidence that they have ordered an interconnection service pursuant to a tariff is appropriate evidence of "facilities readiness" or whether there are better ways to demonstrate compliance with this requirement. Comment is sought further on whether the Commission should modify this requirement to allow more flexibility, and if so, how.
- 41. In the <u>SBCIS Waiver Order</u>, the Commission required SBCIS to file any requests for numbers with the Commission and the relevant state commission at least 30 days prior to requesting numbers from the number administrators. The 30-day notice period allows the Commission and relevant state commission to monitor the VoIP providers' numbers and to take measures to conserve resources, if necessary, such as determining which rate centers are available for number assignments. The NPRM seeks comment on whether to impose this requirement on all interconnected VoIP providers that obtain direct access to numbers.
- 42. In addition to complying with the Commission's existing numbering requirements and the obligations set forth in the SBCIS Waiver Order, Vonage offered several commitments as a condition of obtaining direct access to numbers. Specifically, Vonage offered to: (1) maintain at least 65 percent number utilization across its telephone number inventory; (2) offer IP interconnection to other carriers and providers; and (3) provide the Commission with a transition plan for migrating customers to its own numbers within 90 days of commencing that migration and every 90 days thereafter for 18 months. Vonage indicates that these commitments will ensure

efficient number utilization and facilitate Commission oversight. The NPRM seeks comment on whether to impose some or all of these requirements on interconnected VoIP providers.

- 43. To enhance the ability of state commissions to effectively oversee numbers, which will in turn promote better number utilization, the Wisconsin PSC suggests that the Commission require interconnected VoIP providers to do the following in order to obtain telephone numbers: (1) provide the relevant state commission with regulatory and numbering contacts upon first requesting numbers in that state; (2) consolidate and report all numbers under its own unique Operating Company Number (OCN); (3) provide customers with the ability to access all N11 numbers in use in a state; and (4) maintain the original rate center designation of all numbers in its inventory. The NPRM seeks comment on this proposal and whether additional oversight of the financial and managerial aspects of interconnected VoIP providers is needed. In particular, comment is sought on how providers of nomadic VoIP service could comply with a requirement to provide access to the locally-appropriate N11 numbers.
- 44. The NPRM further seeks comment on whether the proposal to allow direct access to numbers for interconnected VoIP providers might affect competition, and if so, how.

# 4. Enforcement of Interconnected VoIP Providers' Compliance with Numbering Rules

- 45. The NPRM notes that in order for the Commission to exercise its forfeiture authority for violations of the Act and its rules without first issuing a warning, the wrongdoer must hold (or be an applicant for) some form of authorization from the Commission, or be engaged in activity for which such an authorization is required. A Commission authorization is not currently required to provide interconnected VoIP service. The NPRM therefore seeks comment on whether the Commission should implement a certification or blanket authorization process applicable to interconnected VoIP providers that elect to obtain direct access to numbers. Comment is also sought on whether Commission certification would be necessary and appropriate for all providers, not just those that cannot obtain certifications from state commissions. Alternatively, comment is sought on whether it would be less administratively burdensome if the Commission amended its rules to establish "blanket" authorization for interconnected VoIP providers for access to numbering resources.
- 46. In addition, the NPRM seeks comment on whether there are ways to ensure that VoIP providers are subject to the same penalties and enforcement processes as traditional common carriers. More specifically, comment is sought on whether VoIP providers must consent to be subject to the same monetary penalties as

common carriers as a condition of obtaining direct access to numbers. Comment is also sought on whether the Commission can and should require VoIP providers to waive any additional process protections that traditional common carriers would not receive. Lastly, the NPRM seeks comments on whether VoIP providers should be prohibited from obtaining direct access to numbers if they are "red-lighted" by the Commission for unpaid debts or other reasons. The NPRM asks if there are any other reasons for which VoIP providers should be deemed ineligible to obtain numbers.

#### 5. Databases, Call Routing and Termination

- The NPRM also seeks comment on the routing of calls by interconnected VoIP providers that use their own telephone numbers. Specifically, the NPRM explains that interconnected VoIP provider switches do not appear in the LERG, the database which enables carriers to send traffic to, and receive traffic from, a given telephone number. The NPRM notes that some commenters claim that, without association to a switch, carriers will not know where to route calls, likely resulting in end user confusion and interference with emergency services and response. Other commenters have responded that marketplace solutions from companies such as Level 3 or Neutral Tandem can be employed to solve these problems by, for instance, designating the switch of a carrier partner in the LERG and in the NPAC database as the default routing locations for traffic bound for numbers assigned to interconnected VoIP providers in order to route calls originated in the PSTN. The NPRM seeks comment generally on whether providing interconnected VoIP providers direct access to numbers will hinder or prevent call routing or tracking, and how such complications can be prevented or minimized. The NPRM also seeks comment on whether the marketplace solutions described by the commenters will be adequate to properly route calls by interconnected VoIP providers, absent a VoIP interconnection agreement. The NPRM further asks whether the Commission should require interconnected VoIP providers to maintain carrier partners to ensure that calls are routed properly.
- 48. The NPRM seeks comment on the routing limitations that interconnected VoIP providers currently experience as a result of having to partner with a carrier in order to get numbers, and on the role and scalability of various industry databases in routing VoIP traffic directly to the VoIP provider over IP links. Specifically, the NPRM asks what restrictions are imposed by the administrators of the various database services on access to the databases, and on the practices that service providers may need to alter to increase interconnection and routing efficiency. Specifically, the NPRM asks whether listing a non-facilities-based interconnected VoIP provider in the Alternate Service Provider Identification (ALT SPID) field in the NPAC database is sufficient to allow a provider to

route calls directly to a VoIP provider if the VoIP provider has a VoIP interconnection agreement. Lastly, the NPRM seeks comment on how numbering schemes and databases integral to the operation of PSTN call routing will need to evolve to operate well in IP-based networks.

#### 6. Intercarrier Compensation

- 49. In the <u>USF/ICC Transformation Order</u>, the Commission adopted a default uniform national bill-and-keep framework as the ultimate intercarrier compensation end state for all telecommunications traffic exchanged with a LEC, and established a measured transition that focused initially on reducing certain terminating switched access rates. As the NPRM notes, interconnected VoIP providers with direct access to numbers could enter into agreements to interconnect with other providers. The NPRM seeks comment on how to address any ambiguities in intercarrier compensation payment obligations that may be introduced by granting interconnected VoIP providers direct access to numbers. The NPRM also seeks comment on whether granting interconnected VoIP providers direct access to numbers would improve the accuracy and utility of call signaling information for traffic originated by customers of interconnected VoIP providers. The NPRM asks further whether any intercarrier compensation impacts would be temporary, given the ongoing transition toward a bill-and-keep intercarrier compensation framework.
- 50. The NPRM also seeks comment on the regulatory status of competitive tandem providers, and in particular, whether any portions of competitive operations are regulated by the states or Commission. If not, the NPRM asks what intercarrier compensation obligations apply, and to what entity, for traffic that a VoIP provider originates or terminates in partnership with a competitive tandem provider that is not certified by the Commission or any state commission.

#### 7. VoIP Interconnection

51. The NPRM seeks comment generally on the effect that direct access to numbers will have on the industry's transition to direct interconnection in IP, and on the status of IP interconnection for VoIP providers today. The NPRM also asks how many VoIP interconnection agreements currently exist and how parties to those agreements treat technical issues. Comment is further sought on whether access to numbers will increase call routing efficiency when one of the providers is a VoIP provider, and whether such efficiency will affect the likelihood of parties entering into agreements for VoIP interconnection.

52. The NPRM also seeks comment on the extent to which its proposals would promote IP interconnection. As stated in the NPRM, the Commission expects that granting VoIP providers direct access to numbers would facilitate several types of VoIP interconnection, including interconnection between over-the-top VoIP providers and cable providers, interconnection between two over-the-top providers, and interconnection between cable providers. Comment is sought on this analysis, and on whether granting VoIP providers direct access to numbers will encourage IP-to-IP interconnection by eliminating disincentives to interconnect in IP format and lowering the costs associated with implementing IP-to-IP interconnection agreements. The NPRM further asks whether direct access to numbers will affect the rights and obligations of service providers with regards to VoIP interconnection.

# 8. Local Number Portability Obligations

- 53. The NPRM proposes to modify the Commission's rules to include language specifying that users of interconnected VoIP services should enjoy the benefits of local number portability without regard to whether the VoIP provider obtains numbers directly or through a carrier partner. The NPRM seeks comment on this proposal.
- In the VoIP LNP Order, the Commission clarified that carriers "must port-out NANP telephone numbers upon valid requests from an interconnected VoIP provider (or from its associated numbering partner)."

  Some CLECs have argued that a port directly to a non-carrier interconnected VoIP provider (that has not been certificated by a state), is not a "valid port request," so there is no obligation to port directly to a non-carrier interconnected VoIP provider. The NPRM proposes rules that will better reflect this obligation by making clear the requirement to port directly to a non-carrier interconnected VoIP provider upon request. This proposed rule change should eliminate any argument that a request to port to a VoIP provider is invalid merely because the ported-to entity is a VoIP provider. In doing so, the proposed rule will benefit users of interconnected VoIP services by increasing the ease of portability.
- 55. The NPRM also notes that the Commission has established geographic limits on the extent to which a provider must port numbers. The NPRM seeks comment on the geographic limitations, if any, that should apply to ports between a wireline carrier and an interconnected VoIP provider that has obtained its numbers directly from the number administrators, or between a wireless carrier and an interconnected VoIP provider that has obtained its numbers directly from the number administrators. The NPRM asks further whether geographic limits on porting directly between an interconnected VoIP provider and another carrier are necessary. Comment is also sought on

whether, as a practical matter, interconnected VoIP providers will need to partner with a carrier numbering partner to port numbers in some or all instances, even if they are granted direct access to numbers.

#### 9. Transitioning to Direct Access

56. On a general level, the NPRM seeks comment on whether the changes proposed herein should be adopted on a gradual or phased-in basis. More specifically, the NPRM asks what timeframes would be appropriate for a graduated transition, and what period of time would permit the industry to adjust to the proposed changes. Comment is also sought on what steps the Commission should take to ensure that any transition to direct access to numbers by interconnected VoIP providers occurs without unnecessary disruption to consumers or the industry.

#### 10. Innovative Uses of Numbers

57. The NPRM notes that beyond interconnected VoIP providers, an increasingly wide array of services and applications rely on telephone numbers as the addressing system for communications, including home security systems, payment authorization services, text messaging services, and telematics. The NPRM therefore seeks comment on whether the Commission should expand access to numbers beyond the proposal regarding interconnected VoIP providers. Specifically, the NPRM asks whether access to numbers should be expanded to one-way VoIP providers. The NPRM also seeks comment on the types of services and applications that use numbers today and that are likely to do so in the future. Comment is further sought on the potential benefits and risks of expanding direct access to numbers, and any safeguards or countermeasures that could be employed to counteract any conceivable downsides. The NPRM also asks whether there are distinguishing or limiting factors that should govern whether and how specific services or providers receive certain types of numbers. Comment is sought on whether the same criteria and conditions should be implemented regardless of the service or technology offered if interconnected VoIP providers and other types of entities are granted direct access to numbers.

# 11. Access to p-ANI Codes for Public Safety Purposes

58. The NPRM seeks comment on whether the Commission should modify § 52.15(g)(2)(i) of its rules to allow VoIP Positioning Center (VPC) providers direct access to numbers, specifically p-ANI codes, for the purpose of providing 911 and E911 service. In the Waiver Order, the Commission found good cause to grant the petition of TeleCommunication Systems, Inc. (TCS), allowing it direct access to p-ANI codes from the RNA in states where it is unable to obtain certification while the Commission adopts final rules for direct access to numbers. The NPRM asks whether all VPC providers should be allowed direct access to p-ANI codes. Comment is further

sought on whether there are any costs or benefits to allowing VPC providers direct access to p-ANI codes, and whether such access would help to encourage the continued growth of interconnected VoIP services. The NPRM also asks whether there are any technical or policy reasons why VPC providers should be denied direct access to p-ANI codes. Lastly, the NPRM asks whether any evidence of authorization should be required for VPC providers to access p-ANI codes.

### 12. Legal Authority

59. The NPRM also seeks comment on the Commission's legal authority to adopt the various requirements proposed. Comment is sought on the Commission's plenary authority under section 251(e)(1) of the Act to impose the various proposed requirements on interconnected VoIP providers obtaining direct access to numbers. The NPRM also asks whether imposing numbering obligations on interconnected VoIP providers would be reasonably ancillary to the Commission's performance of particular statutory duties, such as those under sections 251 and 201 of the Act, to allow the Commission to impose such obligations under its Title I ancillary authority.

#### B. Legal Basis

- 60. The legal basis for any action that may be taken pursuant to the NPRM is contained in sections 1, 3, 4, 201-205, 251, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. 151, 153, 154, 201-205, 251, and 303(r).
  - C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will

    Apply
- 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. See 5 U.S.C. 603(b)(3). The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." See 5 U.S.C. 601(6). In addition, the term "small business" has the same meaning as the term "small-business concern" under the Small Business Act. See 5 U.S.C. 601(3). 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. See 15 U.S.C. 632.
- 62. **Small Businesses**. A small business is an independent business having less than 500 employees. Nationwide, there are a total of approximately 27.9 million small businesses, according to the SBA. Affected small entities as defined by industry are as follows.

- 63. **Wired Telecommunications Carriers**. 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. According to Census Bureau data for 2007, there were 3,188 firms in this category, total, that operated for the entire year. Of this total, 3144 firms had employment of 999 or fewer employees, and 44 firms had employment of 1000 employees or more. Thus, under this size standard, the majority of firms can be considered small.
- 64. **Local Exchange Carriers (LECs)**. Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. According to Commission data, 1,307 carriers reported that they were incumbent local exchange service providers. Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees. Consequently, the Commission estimates that most providers of local exchange service are small entities that may be affected by the rules and policies proposed in the NPRM.
- has developed a size standard for small businesses specifically applicable to incumbent local exchange services.

  The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. According to Commission data, 1,307 carriers reported that they were incumbent local exchange service providers. Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by rules adopted pursuant to the NPRM.
- 66. We have included small incumbent LECs in this present RFA analysis. As noted above, a "small business" under the RFA is one that, <u>inter alia</u>, meets the pertinent small business size standard (<u>e.g.</u>, a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation." The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not "national" in scope. We have therefore included small incumbent LECs in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

- (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. Under that size standard, such a business is small if it has 1,500 or fewer employees. According to Commission data, 1,442 carriers reported that they were engaged in the provision of either competitive local exchange services or competitive access provider services. Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees and 186 have more than 1,500 employees. In addition, 17 carriers have reported that they are Shared-Tenant Service Providers, and all 17 are estimated to have 1,500 or fewer employees. In addition, 72 carriers have reported that they are Other Local Service Providers. Of the 72, seventy have 1,500 or fewer employees and two have more than 1,500 employees.

  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 that may be affected by rules adopted pursuant to the NPRM.
- standard for small businesses specifically applicable to interexchange services. The closest applicable size standard under SBA rules is for Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees. According to Commission data, 359 companies reported that their primary telecommunications service activity was the provision of interexchange services. Of these 359 companies, an estimated 317 have 1,500 or fewer employees and 42 have more than 1,500 employees. Consequently, the Commission estimates that the majority of interexchange service providers are small entities that may be affected by rules adopted pursuant to the NPRM.
- 69. **Local Resellers**. The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees. According to Commission data, 213 carriers have reported that they are engaged in the provision of local resale services. Of these, an estimated 211 have 1,500 or fewer employees and two have more than 1,500 employees. Consequently, the Commission estimates that the majority of local resellers are small entities that may be affected by rules adopted pursuant to the NPRM.

- Toll Resellers. The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees. According to Commission data, 881 carriers have reported that they are engaged in the provision of toll resale services. Of these, an estimated 857 have 1,500 or fewer employees and 24 have more than 1,500 employees. Consequently, the Commission estimates that the majority of toll resellers are small entities that may be affected by rules adopted pursuant to the NPRM.
- 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. Under that size standard, such a business is small if it has 1,500 or fewer employees.

  According to Commission data, 284 companies reported that their primary telecommunications service activity was the provision of other toll carriage. Of these, an estimated 279 have 1,500 or fewer employees and five have more than 1,500 employees. Consequently, the Commission estimates that most Other Toll Carriers are small entities that may be affected by the rules and policies adopted pursuant to the NPRM.
- Wireless Telecommunications Carriers (except Satellite). Since 2007, the SBA has recognized wireless firms within this new, broad, economic census category. Prior to that time, such firms were within the now-superseded categories of Paging and Cellular and Other Wireless Telecommunications. Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees. For this category, census data for 2007 show that there were 1,383 firms that operated for the entire year. Of this total, 1,368 firms had employment of 999 or fewer employees and 15 had employment of 1000 employees or more. Similarly, according to Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service (PCS), and Specialized Mobile Radio (SMR)
  Telephony services. Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees. Consequently, the Commission estimates that approximately half or more of these firms can be considered small. Thus, using available data, we estimate that the majority of wireless firms can be considered small.

- 73. Paging (Private and Common Carrier). In the Paging Third Report and Order, we developed a small business size standard for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments. A "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years. The SBA has approved these small business size standards. According to Commission data, 291 carriers have reported that they are engaged in Paging or Messaging Service. Of these, an estimated 289 have 1,500 or fewer employees, and two have more than 1,500 employees. Consequently, the Commission estimates that the majority of paging providers are small entities that may be affected by our action. An auction of Metropolitan Economic Area licenses commenced on February 24, 2000, and closed on March 2, 2000. Of the 2,499 licenses auctioned, 985 were sold. Fifty-seven companies claiming small business status won 440 licenses. A subsequent auction of MEA and Economic Area ("EA") licenses was held in the year 2001. Of the 15,514 licenses auctioned, 5,323 were sold. One hundred thirty-two companies claiming small business status purchased 3,724 licenses. A third auction, consisting of 8,874 licenses in each of 175 EAs and 1,328 licenses in all but three of the 51 MEAs, was held in 2003. Seventyseven bidders claiming small or very small business status won 2,093 licenses. The current number of small or very small business entities that hold wireless licenses may differ significantly from the number of such entities that won in spectrum auctions due to assignments and transfers of licenses in the secondary market over time. In addition, some of the same small business entities may have won licenses in more than one auction. A fourth auction of 9,603 lower and upper band paging licenses was held in the year 2010. Twenty-nine bidders claiming small or very small business status won 3,016 licenses. On February 1, 2013, the Wireless Telecommunications Bureau announced an auction of 5,905 lower and upper band paging licenses to commence on July 16, 2013, and sought comment for the procedures to be used for this auction.
- 74. **Cable and Other Program Distribution.** Since 2007, these services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: "This industry comprises 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 telecommunications networks. Transmission facilities may be based on a single technology or a

combination of technologies." The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. According to Census Bureau data for 2007, there were a total of 955 firms in this previous category that operated for the entire year. Of this total, 939 firms had employment of 999 or fewer employees, and 16 firms had employment of 1000 employees or more. Thus, under this size standard, the majority of firms can be considered small and may be affected by rules adopted pursuant to the NPRM.

- 75. **Cable Companies and Systems**. The Commission has developed its own small business size standards, for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers, nationwide. The Commission determined that this size standard equates approximately to a size standard of \$100 million or less in annual revenues. Industry data indicate that, of 1,076 cable operators nationwide, all but eleven are small under this size standard. In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers. Industry data indicate that, of 7,208 systems nationwide, 6,139 systems have under 10,000 subscribers, and an additional 379 systems have 10,000-19,999 subscribers. Thus, under this second size standard, most cable systems are small and may be affected by rules adopted pursuant to the NPRM.
- 76. Cable System Operators. The 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." The Commission has determined that an operator serving fewer than 677,000 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. Industry data indicate that, of 1,076 cable operators nationwide, all but ten are small under this size standard. 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, and therefore we are unable to estimate more accurately the number of cable system operators that would qualify as small under this size standard.
- 77. **Internet Service Providers**. Since 2007, these services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: "This industry comprises 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

telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies." The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. According to Census Bureau data for 2007, there were 3,188 firms in this category, total, that operated for the entire year. Of this total, 3,144 firms had employment of 999 or fewer employees, and 44 firms had employment of 1000 employees or more. Thus, under this size standard, the majority of firms can be considered small. In addition, according to Census Bureau data for 2007, there were a total of 396 firms in the category Internet Service Providers (broadband) that operated for the entire year. Of this total, 394 firms had employment of 999 or fewer employees, and two firms had employment of 1000 employees or more. Consequently, we estimate that the majority of these firms are small entities that may be affected by rules adopted pursuant to the NPRM.

- 18. Internet Publishing and Broadcasting and Web Search Portals. Our action may pertain to interconnected VoIP services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled services. The Commission has not adopted a size standard for entities that create or provide these types of services or applications. However, the Census Bureau has identified firms that "primarily engaged in (1) publishing and/or broadcasting content on the Internet exclusively or (2) operating Web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format (and known as Web search portals)." The SBA has developed a small business size standard for this category, which is: all such firms having 500 or fewer employees. According to Census Bureau data for 2007, there were 2,705 firms in this category that operated for the entire year. Of this total, 2,682 firms had employment of 499 or fewer employees, and 23 firms had employment of 500 employees or more. Consequently, we estimate that the majority of these firms are small entities that may be affected by rules adopted pursuant to the NPRM.
- 79. **All Other Information Services**. The Census Bureau defines this industry as including "establishments primarily engaged in providing other information services (except news syndicates, libraries, archives, Internet publishing and broadcasting, and Web search portals)." Our action pertains to interconnected VoIP services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled services. The SBA has developed a small business size standard for this category; that size standard is \$7.0 million or less in average annual receipts.

According to Census Bureau data for 2007, there were 367 firms in this category that operated for the entire year. Of these, 334 had annual receipts of under \$5.0 million, and an additional 11 firms had receipts of between \$5 million and \$9,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

"establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Establishments providing Internet services or Voice over Internet Protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry." The SBA has developed a small business size standard for this category; that size standard is \$30.0 million or less in average annual receipts.

According to Census Bureau data for 2007, there were 2,383 firms in this category that operated for the entire year. Of these, 2,305 establishments had annual receipts of under \$10 million and 84 establishments had annual receipts of \$10 million or more. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

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

- 81. In the NPRM, the Commission proposes to require interconnected VoIP providers seeking direct access to numbers to submit specific documentation, a requirement which may necessitate filing FCC Form 477 with the Commission. The NPRM further proposes to require these providers to comply with the same numbering obligations and industry guidelines as traditional common carriers. Specifically, interconnected VoIP providers will be required under § 52.15(f)(6) to file usage forecast and utilization (NRUF) reports on a semi-annual basis. Compliance with these reporting obligations may affect small entities, and may include new administrative processes.
- 82. In the NPRM, the Commission also proposes to allow interconnected VoIP providers to obtain telephone numbers only from rate centers subject to pooling. The NPRM further suggests imposing a "facilities readiness" requirement on interconnected VoIP providers seeking direct access to numbers under § 52.15(g)(2)(ii) of

the Commission's rules. Under this proposal, providers would be required to provide evidence that they have ordered an interconnection service pursuant to a tariff that is generally available to other providers of IP-enabled voice services. The NPRM also proposes to require interconnected VoIP providers to file any requests for numbers with the Commission and relevant state commission at least 30 days prior to requesting numbers from the number administrators.

- 83. In the NPRM, the Commission further proposes to require all interconnected VoIP providers seeking direct access to numbers to: (1) maintain at least 65 percent number utilization across its telephone number inventory; (2) offer IP interconnection to other carriers and providers; and (3) provide the Commission with a transition plan for migrating customers to its own numbers within 90 days of commencing that migration and every 90 days thereafter for 18 months. Moreover, the NPRM proposes to require these providers to: (1) provide the relevant state commission with regulatory and numbering contacts upon first requesting numbers in that state; (2) consolidate and report all numbers under its own unique Operating Company Number (OCN); (3) provide customers with the ability to access all N11 numbers in use in a state; and (4) maintain the original rate center designation of all numbers in its inventory.
- 84. In addition, the Commission proposes to amend its rules to establish "blanket" authorization for interconnected VoIP providers for access to numbering resources, or, in the alternative, to require interconnected VoIP providers to obtain a certification from the Commission before gaining direct access to numbering resources. The NPRM also proposes rules that will make clear the requirement to port directly to a non-carrier interconnected VoIP provider upon request. Compliance with these reporting obligations may affect small entities, and may include new administrative processes. We note parenthetically that in the NPRM, the Commission seeks comment on the benefits and burdens of these proposals, on the costs that these proposals are likely to impose on small entities, and how those onuses might be ameliorated. In some instances, the NPRM asks further whether there are other issues or significant alternatives that the Commission should consider to ease the burden of these proposed measures on small entities
  - E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant
    Alternatives Considered
- 85. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among

others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rules for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities." See 5 U.S.C. 603(c)(1)-(c)(4).

- 86. The Commission is aware that some of the proposals under consideration will impact small entities by imposing costs and administrative burdens. For this reason, the NPRM proposes a number of measures to minimize or eliminate the costs and burdens generated by compliance with the proposed rules.
- 87. First, the NPRM proposes to require only those interconnected VoIP providers seeking direct access to numbers to comply with the same numbering requirements and industry guidelines as traditional common carriers, including filing semi-annual NRUF reports under § 52.15(f)(6) of the Commission's rules. Although the NPRM proposes to require such providers to submit specific documentation as a condition of obtaining numbers, the Commission has attempted to minimize this burden by proposing that this documentation take the form of pages 2 and 36 of FCC Form 477. Since interconnected VoIP providers are already required to file this form with the Commission, this proposal should not have a significant economic impact on small entities. Moreover, the NPRM further seeks comment on the costs and burdens imposed on small entities from the rules resulting from this requirement, and on how those onuses might be ameliorated. It also asks whether there are other issues or significant alternatives that the Commission should consider to ease the burden of these proposed measures on small entities
- 88. The NPRM also proposes to impose a "facilities readiness" requirement on interconnected VoIP providers seeking direct access to numbers. Although this may obligate providers to provide evidence that they have ordered an interconnection service pursuant to a tariff, the NPRM seeks comment on whether there are better ways to demonstrate compliance with this requirement, and whether the Commission should modify this requirement to allow providers more flexibility.
- 89. The NPRM also proposes to require interconnected VoIP providers seeking direct access to numbers to: (1) maintain at least 65 percent number utilization across its telephone number inventory; (2) offer IP interconnection to other carriers and providers; and (3) provide the Commission with a transition plan for migrating customers to its own numbers within 90 days of commencing that migration and every 90 days thereafter for 18

months. Because the Commission recognizes that some of these requirements may place an administrative burden and exert an economic impact on small entities, it seeks comment on whether it should impose these requirements on interconnected VoIP providers to begin with. Moreover, these requirements are only extended to those interconnected VoIP providers seeking direct access to numbers.

- 90. The NPRM proposes to require interconnected VoIP providers seeking direct access to numbers to: (1) provide the relevant state commission with regulatory and numbering contacts upon first requesting numbers in that state; (2) consolidate and report all numbers under its own unique Operating Company Number (OCN); (3) provide customers with the ability to access all N11 numbers in use in a state; and (4) maintain the original rate center designation of all numbers in its inventory. While these requirements may impose administrative burdens on small entities, the Commission has limited them to interconnected VoIP providers seeking direct access to numbers. Additionally, the NPRM seeks comment on how providers of nomadic VoIP services could comply with a requirement to provide access to the locally-appropriate N11 numbers, in order to better ease the burden on such entities.
- 91. Although the NPRM proposes to require interconnected VoIP providers to obtain a certification from the Commission before gaining direct access to numbering resources, it also proposes, in the alternative, to amend the Commission's rules to establish "blanket" authorization for interconnected VoIP providers for access to numbering resources. This proposed alternative would decrease the administrative and cost burdens imposed on small entities.
- 92. The Commission expects to consider the economic impact on small entities, as identified in comments filed in response to the NPRM, in reaching its final conclusions and taking action in this proceeding. The proposed reporting requirements in the NPRM could have an economic impact on both small and large entities. However, the Commission believes that any impact of such requirements is outweighed by the accompanying benefits to the public and to the operation and efficiency of the telecommunications industry.
  - F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules
  - 93. None.

VI. ORDERING CLAUSES

94. Accordingly, IT IS ORDERED that pursuant to sections 1, 3, 4, 201-205, 251, and 303(r) of the

Communications Act of 1934, as amended, 47 U.S.C. 151, 153, 154, 201-205, 251, 303(r), the NOTICE OF

PROPOSED RULEMAKING is hereby ADOPTED.

95. IT IS FURTHER ORDERED that pursuant to sections 1, 3, 4, 201-205, 251, and 303(r) of the

Communications Act of 1934, as amended, 47 U.S.C. 151, 153, 154, 201-205, 251, 303(r), the NOTICE OF

INQUIRY is hereby ADOPTED.

96. IT IS FURTHER ORDERED that the Commission's Consumer Information Bureau, Reference

Information Center, SHALL SEND a copy of this NOTICE OF PROPOSED RULEMAKING, including the Initial

Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of Small Business Administration.

List of Subjects in 47 CFR Part 52

Communications common carriers, Telecommunications, Telephone.

FEDERAL COMMUNICATIONS COMMISSION.

Marlene H. Dortch, Secretary.

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 CFR part 52 as follows:

# **PART 52 – NUMBERING**

1. The authority citation for part 52 continues to read as follows:

Authority: Sections 1, 2, 4, 5, 48 Stat. 1066, as amended; 47 U.S.C. 151, 152, 154, 155 unless otherwise noted. Interpret or apply secs. 3, 4, 201-05, 207-09, 218, 225-27, 251-52, 271 and 332, 48 Stat. 1070, as amended, 1077; 47 U.S.C. 153, 154, 201-05, 207-09, 218, 225-27, 251-52, 271 and 332 unless otherwise noted.

# **Subpart A – Scope and Authority**

- 2. Amend § 52.5 as follows:
- a. Remove paragraph (i);
- b. Redesignate paragraphs (d) through (h) as paragraphs (f) through (j);
- c. Redesignate paragraphs (b) and (c) as paragraphs (c) and (d);
- d. Add new paragraphs (b) and (e); and
- e. Revise newly redesignated paragraphs (i) and (j).

The additions and revisions read as follows:

## § 52.5 Definitions.

\* \* \* \* \*

(b) Interconnected voice over Internet Protocol (VoIP) service provider. The term

"interconnected VoIP service provider" is an entity that provides interconnected VoIP service, as that term is defined in 47 U.S.C. 153(25).

\* \* \* \* \*

(e) <u>Service provider</u>. The term "service provider" refers to a telecommunications carrier or other entity that receives numbering resources from the NANPA, a Pooling Administrator or a telecommunications carrier for the purpose of providing or establishing telecommunications service. For the purposes of this part, the term "service provider" shall include an interconnected VoIP service provider.

\* \* \* \* \*

- (i) <u>Telecommunications carrier or carrier.</u> A "telecommunications carrier" or "carrier" is any provider of telecommunications services, except that such term does not include aggregators of telecommunications services (as defined in 47 U.S.C. 226(a)(2)). For the purposes of this part, the term "telecommunications carrier" or "carrier" shall include an interconnected VoIP service provider.
- (j) <u>Telecommunications service</u>. The term "telecommunications service" refers to the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used. For purposes of this part, the term "telecommunications service" shall include interconnected VoIP service as that term is defined in 47 U.S.C. 153(25).3.
- 3. Amend § 52.15 by revising paragraphs (g)(2)(i) and (ii) to read as follows:

#### **Subpart B – Administration**

# § 52.15 Central office code administration.

\* \* \* \* \*

- (g) \* \* \*
- (2) \* \* \*
- (i) The applicant is authorized to provide service in the area for which the numbering resources are being requested; and the applicant is or will be capable of providing service within sixty (60) days of the numbering resources activation date.

(ii) Interconnected VoIP service providers may use the appropriate pages of their most recent FCC Form 477 submission as evidence of authorization to provide service in the area for which resources are being requested. Interconnected VoIP service providers must also provide the relevant state commission with regulatory and numbering contacts upon first requesting numbers in that state.

\* \* \* \* \*

# § 52.16 [Amended]

4. Amend § 52.16 by removing paragraph (g).

# § 52.17 [Amended]

5. Amend § 52.17 by removing paragraph (c).

# **Subpart C – Number Portability**

# § 52.21 [Amended]

6. Amend § 52.21 by removing paragraph (h) and redesignating paragraphs (i) through (w) as (h) through (v).

# § 52.32 [Amended]

- 7. Amend § 52.32 by removing paragraph (e).
- 8. Amend § 52.33 by revising paragraph (b) to read as follows:

# § 52.33 Recovery of carrier-specific costs directly related to providing long-term number portability.

\* \* \* \* \*

- (b) All telecommunications carriers other than incumbent local exchange carriers may recover their number portability costs in any manner consistent with applicable state and federal laws and regulations.
- 9. Amend § 52.34 by adding paragraph (c) to read as follows:

§ 52.34 Obligations regarding local number porting to and from interconnected VoIP or

**Internet-based TRS providers.** 

\* \* \* \* \*

(c) Telecommunications carriers must facilitate an end-user customer's valid number portability

request either to or from an interconnected VoIP or VRS or IP Relay provider. "Facilitate" is

defined as the telecommunication carrier's affirmative legal obligation to take all steps necessary

to initiate or allow a port-in or port-out itself, subject to a valid port request, without

unreasonable delay or unreasonable procedures that have the effect of delaying or denying

porting of the NANP-based telephone number.

§ 52.35 [Amended]

10. Amend §52.35 by removing paragraph (e)(1) and redesignating paragraphs (e)(2) and (3) as (e)(1) and

(2).

§ 52.36 [Amended]

11. Amend § 52.36 by removing paragraph (d).

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