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

In the Matter of	)	
	)	
Rural Call Completion	)	WC Docket No. 13-39

REPORT AND ORDER AND FURTHER NOTICE OF PROPOSED RULEMAKING

Adopted: October 28, 2013 **Released: November 8, 2013**

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By the Commission: Acting Chairwoman Clyburn and Commissioners Rosenworcel and Pai issuing separate statements.

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I. INTRODUCTION

1. In this Order, we adopt rules to address significant concerns about completion of long-distance calls to rural areas. Doing so will help ensure that long-distance calls to *all* Americans, including rural Americans, are completed. The record in this proceeding leaves no doubt that completion rates for long-distance calls to rural areas are frequently poor—whether the call is significantly delayed, the called party's phone never rings, the caller hears false busy signals, or there are other problems.[1] These failures have significant and immediate public interest ramifications, causing rural businesses to lose customers, cutting families off from their relatives in rural areas, and creating potential for dangerous delays in public safety communications in rural areas.[2]

2. The rules that we adopt today are a critical step to eliminating this significant problem by improving the Commission's ability to monitor the delivery of long-distance calls to rural areas, aiding enforcement action in connection with providers' call completion practices as necessary, as well as aiding consumers and industry by adopting a rule prohibiting false ring signaling. In the Further Notice of Proposed Rulemaking (Further Notice), we seek comment on additional measures that may help the Commission ensure a reasonable and nondiscriminatory level of service to rural areas.

II. BACKGROUND

3. The Commission initiated this rulemaking in February 2013 to help address problems in the completion of long-distance telephone calls to rural customers. This followed a series of Commission actions to address rural call completion concerns over the past several years. As discussed in greater detail below, since 2007 the Commission has:

- Adopted the *USF/ICC Transformation Order*, which, among other things, reaffirmed the prohibition on call blocking; made clear that carriers' blocking of VoIP-PSTN traffic is prohibited; clarified that interconnected and one-way VoIP providers are prohibited from blocking voice traffic to or from the PSTN; and adjusted over a period of time many terminating switched access charges[3] as part of transition to a bill-and-keep regime;[4]

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[1] *See Developing a Unified Intercarrier Compensation Regime, Establishing Just and Reasonable Rates for Local Exchange Carriers*, CC Docket No. 01-92, WC Docket No. 07-135, Declaratory Ruling, 27 FCC Rcd 1351, 1356, para. 12 n.37 (Wireline Comp. Bur. 2012) (*2012 Declaratory Ruling*). The problems manifest themselves in a variety of ways, including lengthy periods of dead air on the calling party's end after dialing a number, audible ringing tones on the calling party's end when the called party's telephone never rings at all, false busy signals, inaccurate intercept messages, the inability of one or both parties to hear the other when the call does go through, and calls simply not arriving at their destinations. *See, e.g.*, Letter from Richard A. Askoff, Counsel for the National Exchange Carrier Association (NECA), Michael Romano, Counsel for National Telecommunications Cooperative Association (NTCA), Stuart Polikoff, Vice President of Regulatory Policy and Business Development, Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO), and Derrick Owens, Director of Government Affairs, Western Telecommunications Alliance, to Theresa Z. Cavanaugh and Margaret Dailey, Investigations and Hearings Division, Enforcement Bureau, FCC (filed June 13, 2011) (*June 2011 NECA, et al. Letter*).

[2] *See, e.g.*, Letter from Shirley Bloomfield, Chief Executive Officer, National Telecommunications Cooperative Association, to Hon. Julius Genachowski, Chairman, FCC, WC Docket Nos. 10-90, 07-135, 05-337, 03-109, CC Docket Nos. 01-92, 96-45, GN Docket No. 09-51 at 2-3 (filed Sept. 20, 2011) (*September 2011 NTCA Letter*).

[3] The terms "access charge" or "access rates" as used in this Order refer to "Access Reciprocal Compensation" as that term is defined in section 51.903(h) of the Commission's rules. *See* 47 C.F.R. § 51.903(h).

[4] *See Connect America Fund, A National Broadband Plan for Our Future, Establishing Just and Reasonable Rates for Local Exchange Carriers, High-Cost Universal Service Support, Developing an Unified Intercarrier Compensation Regime, Federal-State Joint Board on Universal Service, Lifeline and Link-Up, Universal Service Reform-Mobility Fund*, WC Docket Nos. 10-90, 07-135, 05-337, 03-109, CC Docket Nos. 01-32, 96-45, GN Docket No. 09-51, WT Docket No. 10-208, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd

(continued . . .)

- Issued two Declaratory Rulings clarifying that carriers are prohibited from blocking, choking, reducing, or restricting traffic in any way, including to avoid termination charges,[5] and clarifying the scope of the Commission's prohibition on blocking, choking, reducing, or restricting telephone traffic which may violate section 201 or 202 of the Communications Act of 1934, as amended (the Act);[6]
- Established a Rural Call Completion Task Force to investigate the growing problems associated with calls to rural customers;[7]
- Held a workshop to identify specific causes of rural call completion problems and discuss potential solutions with key stakeholders;[8]
- Established dedicated avenues for rural consumers and carriers to inform the Commission about call completion problems; and
- Investigated and pursued enforcement of providers not complying with the statute and/or our rules, including a consent decree as well as an enforcement advisory regarding rural call completion problems.[9]

We describe in greater detail the Commission's most significant actions, which inform the legal and policy actions that we take in this Order.

4. *USF/ICC Transformation Order.* On November 18, 2011, the Commission released the *USF/ICC Transformation Order*, which, among other things, established a number of new rules requiring carriers to adjust, over a period of years, many of their terminating switched access charges effective every July 1, as part of a transition to a bill-and-keep regime.[10] The Commission capped the vast majority of interstate and intrastate switched access rates as of December 29, 2011.[11] Price cap and rate-of-return carriers were required to make comparable reductions to certain intrastate switched access rates in 2012 and 2013 if specified criteria were met.[12] Beginning in 2014, price cap and rate-of-return carriers begin a series of rate reductions to transition certain terminating interstate and intrastate switched access rates to

(Continued from previous page)
17663 (2011) (*USF/ICC Transformation Order*), *pets. for review pending sub nom. In re: FCC 11-161*, No. 11-9900 (10th Cir. filed Dec. 8, 2011).

[5] *Establishing Just and Reasonable Rates for Local Exchange Carriers; Call Blocking by Carriers*, WC Docket No. 07-135, Declaratory Ruling and Order, 22 FCC Rcd 11629 (Wireline Comp. Bur. 2007) (*2007 Declaratory Ruling*).

[6] *2012 Declaratory Ruling*; *see also* 47 U.S.C. §§ 201-202.

[7] *See FCC Launches Rural Call Completion Task Force to Address Call Routing and Termination Problems in Rural America*, News Release (rel. Sept. 26, 2011).

[8] *See FCC Announces Agenda for October 18 Rural Call Completion Workshop*, Public Notice, 26 FCC Rcd 14351, n.6 (2011) (*Workshop Public Notice*), recording *available at* http://www.fcc.gov/events/rural-call-completion-workshop (last accessed Oct. 25, 2013).

[9] *See*, *e.g.*, *Level 3 Communications, LLC*, EB-12-IH-0087, Order, 28 FCC Rcd 2274 (*Level 3 Consent Decree*); Rural Call Completion, FCC Enforcement Advisory, 28 FCC Rcd 10347 (Enforcement Bur. 2013) (*Rural Call Completion Enforcement Advisory*).

[10] *See USF/ICC Transformation Order*, 26 FCC Rcd at 17934-35, para. 801 (stating that although many of the switched access rate elements are subject to the transition adopted, other rates are not being specifically reduced at this time); *see also id.* at 18109-15, paras. 1297-1314 (seeking comment on the appropriate transition for rate elements not reduced in the *USF/ICC Transformation Order*).

[11] *Id.* at 17934-35, para. 801 and Figure 9. For price cap carriers, all intrastate rates are capped as of the effective date, while for rate-of-return carriers, only terminating intrastate access rates are capped. *Id.*

[12] *See* 47 C.F.R. §§ 51.907(b)-(c), 51.909(b)-(c).

bill-and-keep.[13] The price cap transition occurs over six years and the rate-of-return transition over nine years.[14]

5. The *USF/ICC Transformation Order* also re-emphasized the Commission's longstanding prohibition on call blocking.[15] The Commission reiterated that call blocking has the potential to degrade the reliability of the nation's communications network and that call blocking harms consumers.[16] The Commission also made clear that the general prohibition on call blocking by carriers applies to VoIP-to-PSTN traffic.[17] Finally, the Commission prohibited call blocking by providers of interconnected VoIP services as well as providers of "one-way" VoIP services.[18]

6. In addition, the Commission adopted rules to address so-called "phantom traffic," that is, traffic that terminating networks receive that lacks certain identifying information for calls. The lack of such basic information to accompany calls has also resulted in calls being delivered without the correct caller identification, which is a common call quality complaint in rural areas. In the *USF/ICC Transformation Order*, the Commission found that service providers in the call path were intentionally removing or altering identifying information to avoid paying the terminating rates that would apply if the call were accurately signaled and billed.[19] The Commission adopted rules requiring telecommunications carriers and providers of interconnected VoIP service to include the calling party's telephone number in

[13] *See id.* §§ 51.907(d), 51.909(d).

[14] *See id.* §§ 51.907, 51.909. The price cap transition and the rate-of-return transition do not reach precisely the same pricing points for terminating tandem-switched transport. *Id*.

[15] *USF/ICC Transformation Order*, 26 FCC Rcd at 17903, 18028-29, paras. 734, 973-974

[16] *Id*. at 17903, para. 734. In a January 5, 2012 blog post on the Commission's web site, the chiefs of the Wireline Competition Bureau and Public Safety and Homeland Security Bureau described ways that the Commission has been working on rural call completion issues. Sharon Gillett and Jamie Barnett, *New Year Solutions for Rural Call Completion Problems*, FCC (Jan. 5, 2012), *available at* http://www.fcc.gov/blog/new-year-solutions-rural-call-completion-problems (last accessed Oct. 25, 2013).

[17] *USF/ICC Transformation Order*, 26 FCC Rcd at 18028-29, paras. 973-974. For purposes of the *USF/ICC Transformation Order*, "VoIP-PSTN traffic" is traffic exchanged over PSTN facilities that originates and/or terminates in IP format. The Commission used the term "VoIP-PSTN" as shorthand, recognizing that carriers have been converting portions of their networks to IP technology for years. *See, e.g.*, *USF/ICC Transformation Order*, 26 FCC Rcd at 18005-06, para. 940 & n.1891; *IP-Enabled Services; E911 Requirements for IP-Enabled Service Providers*, WC Docket Nos. 04-36, 05-196, First Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 10245, 10257-59, para. 24 & n.77 (2005) (*VoIP 911 Order*), *aff'd sub nom. Nuvio Corp. v. FCC*, 473 F.3d 302 (D.C. Cir. 2006); *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report to Congress, 13 FCC Rcd 11501, 11541-43, para. 84 (1998).

[18] *Id.* at 18029, para. 974; *see also* 47 U.S.C. § 153(25) (stating that "interconnected VoIP service" has the meaning provided in section 9.3 of the Commission's rules); 47 C.F.R. § 9.3 (defining interconnected VoIP service as a service that, *inter alia*, allows users "to receive calls that originate on the [PSTN] *and* to terminate calls to the [PSTN]" (emphasis added)); *USF/ICC Transformation Order*, 26 FCC Rcd at 18029, para. 974 (noting that one-way VoIP services allow customers to receive calls from, or place calls to, the PSTN, but not both). The Communications Act defines "non-interconnected VoIP service" as a service that enables real-time voice communications that originate from or terminate to the user's location using Internet protocol or any successor protocol, requires Internet protocol compatible customer premises equipment, and does not include any service that is an interconnected VoIP service. 47 U.S.C. § 153(36). Our use of the term "one-way VoIP" in this Order is consistent with the definition of "non-interconnected VoIP service" in the Communications Act, to the extent such service offers the capability to place calls to or receive calls from the PSTN.

[19] *USF/ICC Transformation Order*, 26 FCC Rcd at 17890, para. 703.

all call signaling, and required intermediate providers to pass this signaling information, unaltered, to the next provider in a call path.[20]

7. *2012 Declaratory Ruling.* In 2012, the Wireline Competition Bureau issued a declaratory ruling to clarify the scope of the Commission's prohibition on blocking, choking, reducing, or restricting telephone traffic in response to continued complaints about rural call completion issues from rural associations, state utility commissions, and consumers.[21] The *2012 Declaratory Ruling* made clear that practices used for routing calls to rural areas that lead to call termination and quality problems may violate the prohibition against unjust and unreasonable practices in section 201 of the Act[22] or may violate the carriers' section 202 duty to refrain from unjust or unreasonable discrimination in practices, facilities, or services.[23] The *2012 Declaratory Ruling* also noted that carriers may be subject to liability under section 217 of the Act for the actions of their agents or other persons acting for or employed by the carriers.[24] The Bureau stated that the practices causing rural call completion problems "adversely affect the ubiquity and reliability of the nation's communications network and threaten commerce, public safety, and the ability of consumers, businesses, and public health and safety officials in rural America to access and use a reliable network."[25]

8. *The Notice.* In February 2013, the Commission adopted a Notice of Proposed Rulemaking (*Notice*) seeking comment on proposed reporting and data retention requirements. The *Notice* proposed rules requiring facilities-based originating long-distance voice service providers to collect, retain, and report to the Commission data on call answer rates.[26] The *Notice* also proposed rules requiring facilities-based originating long-distance voice service providers to collect and retain information on call attempts and to periodically analyze call completion data and report the results to the Commission. The *Notice* proposed rules requiring facilities-based originating long-distance providers with more than 100,000 retail long-distance subscribers (business or residential)[27] to file quarterly reports

[20] *Id.* at 17894, 17897-98, paras. 711, 719-720; *see also* 47 C.F.R. § 64.1601(a). The *USF/ICC Transformation Order* also applied the calling party number signaling rules to interconnected VoIP traffic, stating that "[f]ailure to include interconnected VoIP traffic in our signaling rules would create a large and growing loophole as the number of interconnected VoIP lines in service continues to grow." *Id.* at 17896, para. 717. Accordingly, the *USF/ICC Transformation Order* requires VoIP service providers to transmit the telephone number of the calling party for all traffic destined for the PSTN that they originate. If they are intermediate providers in a call path, they must pass, unaltered, signaling information they receive indicating the telephone number, or billing number if different, of the calling party. *Id.* at 17896, para. 717. Service providers originating interstate or intrastate traffic on the public switched telephone network (PSTN), or originating interstate or intrastate interconnected VoIP traffic destined for the PSTN, are required to transmit the telephone number associated with the calling party number (CPN) or charge number (CN) to the next provider in the call path. Intermediate providers must pass signaling information they receive from other providers unaltered, to subsequent providers in the call path.

[21] *2012 Declaratory Ruling*, 27 FCC Rcd 1351.

[22] 47 U.S.C. § 201(b) ("All charges, practices, classifications, and regulations for and in connection with such communication service, shall be just and reasonable, and any such charge, practice, classification, or regulation that is unjust or unreasonable is declared to be unlawful . . . .").

[23] *Id.* § 202(a) ("It shall be unlawful for any common carrier to make any unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities, or services . . . .").

[24] *2012 Declaratory Ruling*, 27 FCC Rcd at 1352, para. 4; 47 U.S.C. § 217.

[25] *2012 Declaratory Ruling*, 27 FCC Rcd at 1355, para. 11.

[26] *Rural Call Completion*, WC Docket No. 13-39, Notice of Proposed Rulemaking, 28 FCC Rcd 1569, 1575, para. 20 (2013) (*Notice*).

[27] *Id.* at 1579, para. 31.

that measure the call answer rate for each rural operating company number (OCN)[28] to which 100 or more calls were attempted during a calendar month, and to report on specific categories of call attempts.[29] The *Notice* also proposed requiring originating long-distance providers to measure the overall call answer rate for nonrural call attempts[30] to permit comparisons between long-distance calls in rural versus nonrural local exchanges.

9. *Public Notice Seeking Comment on List of Rural OCNs*. On April 18, 2013, the Wireline Competition Bureau released a Public Notice seeking comment on which rural OCNs covered providers should include in the proposed quarterly reports on call completion performance.[31] The Public Notice invited comment on the completeness and suitability of a list of rural OCNs compiled by the National Exchange Carrier Association (NECA) and posted on NECA's web site.[32]

10. *Enforcement Activity*. The Commission's Enforcement Bureau is also actively responding to rural call completion problems. In March 2013, Level 3 Communications, LLC (Level 3) entered into a consent decree terminating the Enforcement Bureau's investigations into possible violations of sections 201(b) and 202(a) of the Act with respect to Level 3's call completion practices to rural areas, including its use and monitoring of intermediate providers.[33] On July 19, 2013, the Enforcement Bureau issued an advisory to long-distance providers to take consumer complaints about rural call completion seriously.[34] The advisory gave examples of plainly insufficient provider responses and warned that "[g]oing forward, the FCC may take enforcement action against providers that submit such patently deficient responses to informal complaints."[35]

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[28] *Id.* at 1575, para. 20 n.44. An operating company number is a four-place alphanumeric code that uniquely identifies providers of local telecommunications service. *See* Alliance for Telecommunications Industry Solutions, *ATIS Telecom Glossary* (*ATIS Telecom Glossary*), *available at* http://www.atis.org/glossary/definition.aspx?id=2065 (last accessed Oct. 25, 2013).

[29] *Notice*, 28 FCC Rcd at 1575-77, paras. 20-25. A "call attempt" (or "attempted call") is a call that results in transmission by the reporting entity toward the terminating provider of the initial call setup message, regardless of the voice call signaling and transmission technology used. *Id.* at 1576, para. 20 n.45. The *Notice* proposed to categorize long-distance call attempts according to call source type and terminating provider type, and proposed that data collection requirements cover, at a minimum, the following source-termination categories of long-distance call traffic: originating provider to rural telephone company (including rural CLEC), originating provider to nonrural LEC (including nonrural CLEC), first facilities-based provider to rural telephone company (including rural CLEC), and first facilities-based provider to nonrural LEC (including nonrural CLEC). *Id.* at 1577, para. 25. The *Notice* proposed to use a "call answer rate" as the basic measure of call completion performance. An "answered call attempt" means a call attempt that is answered by the called party, including, for example, by voicemail, answering machine, or fax machine. *Id.* at 1578, para. 27. Subject to certain exclusions, the Commission proposed to calculate a call answer rate as "the number of call attempts that result in an answer divided by the total number of calls attempted, expressed as a percentage." *Id.* at 1578-79, paras. 27-30.

[30] *Id.* at 1576, para. 20.

[31] *See Wireline Competition Bureau Announces Deadlines for Comments on Rural Call Completion Notice of Proposed Rulemaking, Invites Comment on List of Rural Operating Carrier Numbers*, WC Docket No. 13-39, Public Notice, 28 FCC Rcd 5190 (Wireline Comp. Bur. 2013) (*List of OCNs Public Notice*). The *List of OCNs Public Notice* was published in the Federal Register on May 7, 2013. 78 Fed. Reg. 26572.

[32] *List of OCNs Public Notice*, 28 FCC Rcd at 5190-91. The list of OCNs on NECA's website can be found at: http://www.neca.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=8874&libID=8894 (last accessed Oct. 25, 2013).

[33] *Level 3 Consent Decree*, 28 FCC Rcd at 2274, para. 1.

[34] *Rural Call Completion Enforcement Advisory*, 28 FCC Rcd at 10347, para. 1.

[35] *Id.* at 2-3 (citing as examples of such patently insufficient responses: "[The rural complainant] does not have an account with [our company]. Additionally, the number experiencing problems is also not [our] number; it is her (continued . . .)

11. In addition to conducting ongoing investigations of several long-distance providers, the Commission has been addressing daily operational problems reported by rural customers and carriers so that incoming long-distance calling to customers of rural incumbent local exchange carriers (LECs) is promptly restored. We have established dedicated avenues for rural customers and carriers to inform the Commission about these call completion problems. A web-based complaint intake focuses on the rural call completion problems of residential and business customers, instructs such customers how to file complaints with the Commission, and links to the Commission's standard 2000B complaint form.[36] Separately, a dedicated email intake provides a "hot email line" for rural telephone companies to alert the Commission of systemic problems receiving calls from a particular originating long-distance provider and facilitates provider-to-provider resolution.

12. Many key stakeholders acknowledge that call termination issues to rural service areas are serious and widespread and have collaborated to propose industry solutions. For example, in October 2011, stakeholders attended the Commission's Rural Call Completion Task Force's workshop to identify and discuss potential solutions.[37] In 2012, the Alliance for Telecommunications Industry Solutions (ATIS) released the *Intercarrier Call Completion/Call Termination Handbook* outlining standards and practices of the industry relevant to ensuring call completion.[38] In August 2013, ATIS and NECA announced a voluntary Joint National Call Testing Project offering providers the opportunity to test call completion issues identified on calls destined to many areas served by rural local exchange carriers.[39] The testing project will facilitate cooperative trouble resolution efforts with originating, intermediate and terminating carriers.[40] Finally, we note that some providers have devoted substantial time and resources to analyzing rural call completion performance. We applaud these and other efforts by stakeholders and encourage the continued support of the industry to undertake further efforts to diagnose problems in call routing, cooperate on finding solutions, and adopt best practices aimed at solving the rural call completion problem.

III. DISCUSSION

13. Even with the significant Commission actions described above, the record leaves no doubt that the problems of completing calls to rural areas, particularly areas served by rural incumbent

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landline number;" and "We have contacted the [rural complainant] and have successfully resolved this matter by advising [her] that due to living in a rural area she will experience service issues."); *see also* 47 U.S.C. § 208; 47 C.F.R. § 1.717.

[36] *See Rural Call Completion: Problems with Long Distance or Wireless Calling to Rural Areas*, *FCC Encyclopedia*, http://www.fcc.gov/encyclopedia/problems-long-distance-or-wireless-calling-rural-areas (last accessed Oct. 25, 2013).

[37] *See FCC Announces Agenda for October 18 Rural Call Completion Workshop*, Public Notice, 26 FCC Rcd 14351, n.6 (2011) (*Workshop Public Notice*), recording *available at* http://www.fcc.gov/events/rural-call-completion-workshop (last accessed Aug. 23, 2013).

[38] *See* Alliance for Telecommunications Industry Solutions, *Intercarrier Call Completion/Call Termination Handbook* (2012) (*ATIS Handbook*), *available at* https://www.atis.org/docstore/product.aspx?id=26780 (last accessed Oct. 25, 2013). For example, among other things, the *ATIS Handbook* proposes ways to better manage intermediate providers and prohibit looping (not handing the call to the same carrier who sent the call); suggests that originating carriers should maintain capacity to complete calls using their own networks; discourages false signaling information; recommends that any additional intermediate provider should be bound to the same standards as the first; provides recommendations on reporting; and encourages the development of a service provider contact directory (which includes IXC carrier-to-carrier contact points).

[39] *See* Press Release, ATIS and NECA Join Forces to Help Address Call Completion Issues (Aug. 23, 2013), available at http://www.atis.org/PRESS/pressreleases2013/082313.asp.

[40] *Id.*

local exchange carriers (ILECs) continue to be frequent and pervasive throughout rural America.[41] The inability to complete calls reliably threatens public safety and contravenes the public interest. We conclude that additional Commission action and enforcement are necessary to address these problems.

14. *Scope of the problems*. The record indicates that rural call completion problems are serious and widespread. NTCA has argued that "the call completion epidemic results in 'dire consequences' to consumers, economic development, and public safety across the nation."[42] The problems manifest themselves in lengthy periods of dead air on the calling party's end after dialing a number, audible ringing tones on the calling party's end when the called party's telephone never rings at all, false busy signals, inaccurate intercept messages, and the inability of one or both parties to hear the other when the call does go through.[43] The record contains substantial evidence that these problems persist; some state that they are worsening.[44] We also continue to receive information on the nature and extent of the rural call completion problem. For example, we have received examples of life-threatening call failures, including a situation where an on-call surgeon was unable to receive a call from a hospital for emergency surgery and a 911 call center was unable to do emergency call backs.[45] We also continue to take in individual complaints from consumers and rural telephone companies affected by these issues.[46]

[41] For purposes of this Order, "rural area" is defined as the service area of an incumbent local exchange carrier that is a rural telephone company, as defined in 47 U.S.C. § 153.

[42] NTCA et al. Reply at 1; *see also, e.g.*, Iowa Network Services, Inc. Reply at 2-3 (stating that "the integrity of our nation's telecommunications network is under attack and that a strong Commission response is urgently required in order to avoid dire economic and human injury"); Letter from Richard A. Askoff, Counsel for the National Exchange Carrier Association (NECA), Michael Romano, Counsel for NTCA, Stuart Polikoff, Vice President of Regulatory Policy and Business Development, Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO), and Derrick Owens, Director of Government Affairs, Western Telecommunications Alliance, to Theresa Z. Cavanaugh and Margaret Dailey, Investigations and Hearings Division, Enforcement Bureau, FCC (filed June 13, 2011) (*June 2011 NECA, et al. Letter*); *September 2011 NTCA Letter* at 1, 3; Letter from James Bradford Ramsey, Counsel for the National Association of Regulatory Utility Commissioners, to Hon. Julius Genachowski, Chairman, FCC, WC Docket Nos. 10-90, 07-135, 05-337, 03-109, CC Docket Nos. 01-92, 96-45, GN Docket No. 09-51 at 2 (filed Sept. 29, 2011) (*September 2011 NARUC Letter*) (noting that "[o]ne hundred and seventy six rural incumbent local exchange companies in 35 States have reported call termination issues for both voice calls and faxes"); Letter from Tim Schram, Chairman, Nebraska Public Service Commission, Kevin Gunn, Chairman, Missouri Public Service Commission, Ellen Anderson, Chair, Minnesota Public Utilities Commission, Travis Kavulla, Chairman, Montana Public Service Commission, Gary Hanson, Chairman, and Chris Nelson, Vice Chairman, South Dakota Public Utilities Commission, John Quackenbush, Chairman, Orjakor Isiogu, Commissioner, and Greg White, Commissioner, Michigan Public Service Commission, and Christopher Petrie, Secretary and Chief Counsel, Wyoming Public Service Commission, to Hon. Julius Genachowski, Chairman, FCC, WC Docket Nos. 10-90, 07-135, 05-337, 03-109, CC Docket Nos. 01-92, 96-45, GN Docket No. 09-51 at 2 (filed Dec. 1, 2011) (*December 2011 State PSCs Letter*).

[43] *See, e.g.*, Letter from Richard A. Askoff, Counsel for the National Exchange Carrier Association (NECA), Michael Romano, Counsel for National Telecommunications Cooperative Association (NTCA), Stuart Polikoff, Vice President of Regulatory Policy and Business Development, Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO), and Derrick Owens, Director of Government Affairs, Western Telecommunications Alliance, to Theresa Z. Cavanaugh and Margaret Dailey, Investigations and Hearings Division, Enforcement Bureau, FCC (filed June 13, 2011) (*June 2011 NECA, et al. Letter*).

[44] *See, e.g.*, Independent LECs Comments at 4-6; NARUC Comments at 2-3; INS Reply at 2; PSCW Comments at 1-2; Joint State Commissions Comments at 1-2; Rural Associations Comments at 2-5; NASUCA Comments at 1, 5; COMPTEL Comments at 1-2; NJ Rate Counsel Comments at ii, 3-5; ACA Comments at 2; California PUC Comments at 2-4; Western Telecom Associations Comments at 3-4; ANPI Reply at 5; Inteliquent Reply at 2-3.

[45] *See* Letter from Jill Canfield to Marlene H. Dortch, Secretary, FCC, WC Docket No. 13-39 at 1-2 (filed Aug. 19, 2013) (describing ongoing rural call completion problems); *see also* Letter from Helen E. Disenhaus to Marlene H. Dortch, Secretary, FCC, WC Docket No. 13-39 (filed July 22, 2013) (providing presentation on HyperCube's analysis of four rural areas experiencing call completion problems); Letter from Jill Canfield to Marlene H. Dortch,

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15. Although some commenters question whether the problems are serious or widespread and whether there is a need for Commission action, these comments are largely unsubstantiated and are inconsistent with the significant evidence and real-world Commission experience to the contrary.[47] We find the views of rural carriers and our state partners more persuasive, given their direct experience with complaints about call completion performance.[48] We therefore find a sufficient basis for proceeding with the rules we adopt today, and can revisit these rules in the future as warranted by the data we will be collecting, which should provide evidence regarding the scope and extent of call completion problems over time.

16. *Causes of the Problems.* There appear to be multiple factors that cause rural call completion problems. Rural associations posit that the call completion problems may arise from the manner in which originating providers set up the signaling and routing of their calls, and that many of these call routing and termination problems can be attributed to intermediate providers.[49] They argue that

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Secretary, FCC, WC Docket No. 13-39 (filed Apr. 19, 2013) (providing presentation on different instances of rural call completion problems and potential causes of failed calls); *see also* Rural Associations Reply at 8 (noting that "consumer complaints are only the 'tip of the iceberg'").

[46] The Commission has also established an email box for carriers to alert the Rural Call Completion Task Force about call completion problems in real-time and has established a web page for consumers with information about rural call completion issues and online intake for complaints. *See* http://www.fcc.gov/encyclopedia/problems-long-distance-or-wireless-calling-rural-areas (last visited Oct. 25, 2013).

[47] As of September 30, 2013, the Commission has received 728 consumer complaints related to rural call completion problems in 2013, many involving multiple originating providers. The Commission also has ongoing investigations and a consent decree with Level 3. *See Level 3 Consent Decree*, 28 FCC Rcd at 2274, para. 1; Sprint Comments at 5; *see also* XO Communications Reply at 3-4 ("the proposed rules, which were based on anecdotal evidence, are premature and their value is far from clear"); Verizon Comments at 3 ("More businesses may reside in non-rural locations, and those entities will almost always have a voicemail or other answering service to answer every call not answered by a person, thus impacting call answer rates. Many wireless callers in rural areas may be roaming on another carrier's network or may be more distant from the nearest cell tower, thus leading to a greater frequency of call set-up delay or dropped calls."); *see also* HyperCube Comments at 2; VON Coalition Comments at 8; TWC Comments at 4-5; Sprint Comments at 4-9; AT&T Comments at 2; Verizon Comments at 2-3 (all claiming that the rural call completion problem is not serious and that there is no need for the proposed rules).

[48] *See, e.g.*, Rural Associations Reply at 6-7; Letter from Colin Sandy, Government Relations Counsel, National Exchange Carrier Association, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 07-135, 11-39, CC Docket No. 01-92 at 1-2 (filed Nov. 15, 2012); Letter from James Bradford Ramsay, Counsel for National Association of Regulatory Utility Commissioners, to Hon. Julius Genachowski, Chairman, FCC, WC Docket Nos. 10-90, 07-135, 05-337, 03-109, CC Docket Nos. 01-92, 96-45, GN Docket No. 09-51 at 2 (filed Sept. 26, 2012) (*September 2012 NARUC Letter*); *May 2012 NECA, et al. Letter* at 1-2; *December 2011 State PSCs Letter* at 1-3; *September 2011 NARUC Letter* at 1-3 (noting that rural telecommunications providers have also reported complaints from a hospital having difficulty contacting patients)*; September 2011 NTCA Letter* at 1-3; Letter from Richard A. Askoff, Counsel for the National Exchange Carrier Association (NECA), Michael Romano, Counsel for National Telecommunications Cooperative Association (NTCA), Stuart Polikoff, Vice President of Regulatory Policy and Business Development, Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO), and Derrick Owens, Director of Government Affairs, Western Telecommunications Alliance, to Theresa Z. Cavanaugh and Margaret Dailey, Investigations and Hearings Division, Enforcement Bureau, FCC at 3-4 & Appx. A (filed June 13, 2011) (*June 2011 NECA, et al. Letter*); Letter from Michael Romano, Counsel for the National Telecommunications Cooperative Association, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 07-135, 11-39, CC Docket No. 01-92, at 7 (filed Mar. 11, 2011).

[49] *See* Rural Associations Reply at 7 (providing examples of reasons why calls "were failing, delayed, or completed with poor quality, [as] including call looping, improper routing, faulty routing table set-up, and improper compression," and noting that "[t]hese are now widely understood by the industry as significant contributing factors to rural call completion problems"). The Commission also previously has cited evidence that completion rates of long-distance calls to some rural telephone company service areas can be poor, even where overall performance of the intermediate provider appears acceptable. *See 2012 Declaratory Ruling* 27 FCC Rcd at 1356, para. 12 n.37.

least cost routing carriers offer terminating services at low rates, and that some least cost routing carriers may provide inferior service for a low rate.[50]

17. One key reason for the increased problems in rural areas is that a call to a rural area is often handled by numerous different providers in the call's path. Given the particularly high rates long-distance providers incur to terminate long-distance calls to rural rate-of-return carriers,[51] long-distance providers have additional incentives to reduce the per-minute cost of calls. For example, the disparity between interstate rates can be 5-6 cents per minute for rate-of-return areas and just over half a cent per minute for price cap areas.[52] As a result, there is greater incentive for the long-distance provider to hand off the call to an intermediate provider that is offering to deliver it cheaply —and potentially less incentive to ensure that calls to rural areas are actually completed properly. The prevalence of these problems accords with providers' incentives to engage in blocking or degrading traffic, or similar behavior, in an effort to minimize their intercarrier compensation payments, which has been long recognized by the Commission.[53] While the Commission's comprehensive reform of intercarrier compensation will alleviate some of these price differences in the long-term, it likely will continue to be more costly to complete calls to rate-of-return carriers while the transition to bill-and-keep is implemented over the next several years.

18. The Commission has determined that call blocking is an unjust and unreasonable practice under section 201(b) of the Act, and the Wireline Competition Bureau has made clear that carriers' rural call routing practices that lead to call termination and quality problems may violate the prohibition against

[50] *See, e.g.*, *June 2011 NECA, et al. Letter* at 3; *September 2011 NTCA Letter* at 3; Letter from David Lewis, Chief Executive Officer for ANPI, LLC, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 03-109, 05-337, 07-135, 10-90, CC Docket Nos. 96-45, 01-92, WT Docket No. 96-45, GN Docket No. 09-51 at 1 (filed Dec. 21, 2012).

[51] A rate-of-return carrier is "any incumbent local exchange carrier not subject to price cap regulation." 47 C.F.R. § 54.5; *see also* 47 C.F.R. § 61.3(ff) (defining price cap regulation).

[52] *See*, *e.g.*, Letter from Joe A. Douglas, Vice President Government Relations, NECA, to Marlene Dortch, Secretary, FCC, CC Docket Nos. 96-45, 80-286, GN Docket No. 09-51 (filed Dec. 30, 2010) (providing a table of interstate rates and minutes of use for rate-of-return carriers); *see also USF/ICC Transformation Order*, 26 FCC Rcd at 17929-30, para. 791 (describing the widely varying range of interstate and intrastate terminating access rates and the resulting incentive for "arbitrage and pervasive competitive distortions within the industry"). Prior to the rate freeze under the *USF/ICC Transformation Order*, interstate rates could vary considerably between carriers subject to rate-of-return versus price cap regulation. *Compare Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers*, CC Docket Nos. 96-262 and 94-1, Sixth Report and Order, *Low-Volume Long-Distance Users*, CC Docket No. 99-249, Report and Order, *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Eleventh Report and Order, 15 FCC Rcd 12962 (2000) (adopting access reforms for price cap carriers), *aff'd in part, rev'd in part, and remanded in part*, *Texas Office of Public Util. Counsel et al. v. FCC*, 265 F.3d 313 (5th Cir. 2001) (subsequent history omitted) *with Multi-Association Group (MAG) Plan for Regulation of Interstate Services of Non-Price Cap Incumbent Local Exchange Carriers and Interexchange Carriers, Federal-State Joint Board on Universal Service, Access Charge Reform for Incumbent Local Exchange Carriers Subject to Rate-of-Return Regulation, Prescribing the Authorized Rate of Return for Interstate Services of Local Exchange Carriers*, CC Docket Nos. 96-45, 98-77, 98-166, 00-256, Second Report and Order and Further Notice of Proposed Rulemaking Fifteenth Report and Order in CC Docket No. 96-45, and Report and Order in CC Docket Nos. 98-77 and 98-166, 16 FCC Rcd 19613 (2001) (adopting access reforms for rate-of-return carriers). The rules adopted in the *USF/ICC Transformation Order* will reduce these rate differences by adjusting over a period of time the terminating switched access charges as part of a transition to a bill-and-keep regime. *See USF/ICC Transformation Order*, 26 FCC Rcd at 17934-35, para. 801. The series of terminating interstate switched access rate reductions will begin in July 2014. *See* 47 C.F.R. §§ 51.907(d), 51.909(d).

[53] *See, e.g.*, *2007 Declaratory Ruling*, 22 FCC Rcd at 11629, para. 1; *2012 Declaratory Ruling*, 27 FCC Rcd at 1354, para. 7; *see also 2012 Declaratory Ruling*, 27 FCC Rcd at 1354, para. 9 ("In September 2011, the Commission created the Rural Call Completion Task Force to address and investigate the growing problem of calls to rural customers that are being delayed or failing to connect.").

unjust and unreasonable practices in section 201(b) of the Act.[54] In the *USF/ICC Transformation Order*, the Commission extended its longstanding prohibition on call blocking to providers of interconnected and one-way VoIP service.[55] We emphasize that interconnected and one-way VoIP service providers may violate this prohibition if they block, choke, reduce, or restrict traffic on calls placed to customers of rural telephone companies.

A. Recording, Retention, and Reporting of Data

1. Scope

19. *Summary*. We adopt recording, retention, and reporting requirements to substantially increase our ability to monitor and redress problems associated with completing calls to rural areas. These rules will also enhance our ability to enforce restrictions against blocking, choking, reducing, or restricting calls. For the reasons set forth below, we find that the recording, retention, and reporting rules should apply to providers of long-distance voice service that make the initial long-distance call path choice for more than 100,000 domestic retail subscriber lines, counting the total of all business and residential fixed subscriber lines and mobile phones and aggregated over all of the providers' affiliates (referred to herein as "covered providers"). In most cases, this is the calling party's long-distance provider. As discussed below, covered providers include LECs, interexchange carriers (IXCs), commercial mobile radio service (CMRS) providers, and VoIP service providers.[56] Finally, we do not apply these rules to intermediate providers.

20. *Covered Providers*. The *Notice* proposed to require facilities-based, originating long-distance voice service providers to comply with recording, retention, and reporting obligations.[57] The *Notice* proposed that if the originating long-distance voice service provider were not facilities-based, the first facilities-based provider in the call-delivery path would be subject to the rules.[58] The Commission's proposal to limit application of the rules to facilities-based providers was premised on the belief that those providers would have the greatest access to call detail information.[59] In response to the proposed categories of covered providers, several commenters urged the Commission to clarify or expand what is considered a covered provider, noting that the first facilities-based provider in a call path is not always the entity with the most direct access to call delivery data.[60] Upon reviewing the record, we agree and

[54] *See, e.g.*, *2012 Declaratory Ruling*, 27 FCC Rcd at 1352, 1355-56, paras. 3-4, 11-13; *USF/ICC Transformation Order*, 26 FCC Rcd at 18028-29, paras. 973-974; *2007 Declaratory Ruling*, 22 FCC Rcd at 11629, para. 1; *see also* 47 U.S.C. § 201(b).

[55] *USF/ICC Transformation Order*, 26 FCC Rcd at 18028-29, paras. 973-974.

[56] The recording, retention, and reporting rules we adopt today apply to providers of interconnected VoIP service, as that term is defined in section 9.3 of the Commission's rules, 47 C.F.R. § 9.3, and to providers of VoIP service that permits users generally to terminate calls to the PSTN, but not to receive calls from the PSTN (one-way VoIP). For ease of reference, in this Order, the terms "VoIP service" or "VoIP services" are sometimes used to refer collectively to interconnected VoIP service and one-way VoIP service.

[57] *See Notice*, 28 FCC Rcd at 1574-75, 1577, paras. 13, 17, 24. For ease of reference, in this Order originating long-distance voice service providers are sometimes referred to simply as "originating providers."

[58] *See Notice*, 28 FCC Rcd at 1575, 1577, paras. 17, 24.

[59] *See Notice*, 28 FCC Rcd at 1575, para. 17.

[60] *See, e.g.*, ACA Comments at 5-6 (arguing that the rules should apply to providers that have a direct role in routing long-distance calls and have access to complete call tracking data); CenturyLink Comments at 13 (stating that focusing on facilities-based providers is too narrow); INS comments at 14 (stating that its non-facilities-based reseller makes the initial routing decisions, only the reseller knows the identity of the intermediary carrier that is responsible for completing the call, and such non-facilities-based entities should be required to report); Missouri PSC Comments at 2 (arguing that responsibilities should lie with the retail long-distance voice service provider, regardless of whether the providers is facilities-based); *see also* Cbeyond *et al*. Comments at 2-3; RCN Reply at 9 (noting that in the process of aggregating traffic before handing it to a provider for long distance carriage, the

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conclude that the entity with the most direct access to call delivery data and the ability to control the call path (either directly or via contract) is the appropriate entity to record, retain, and report the relevant data. Accordingly, we conclude that these rules should apply to providers of long-distance voice service that make the initial long-distance call path choice for more than 100,000 domestic retail subscriber lines, regardless of whether those providers are facilities-based.[61] The 100,000-subscriber-line figure should include the total of all of a provider's business and residential fixed subscriber lines and mobile phones, aggregated over all of the provider's affiliates.[62] By "initial long-distance call path choice," we refer to the static or dynamic selection of the path for a long-distance call based on the called number of the individual call. For facilities-based providers, this decision may include choosing to deliver the call on the provider's own network. This approach will ensure that we impose data-related requirements on the providers that have the relevant information.[63] Examples may illustrate how this rule would work in practice:

- If originating provider A hands all long-distance calls to a single IXC-1 under a 12-month contract, originating provider A is not a "covered provider" for purposes of these rules. If IXC-1 examines the number called in order to select among alternative downstream providers LCR-1, LCR-2, and LCR-3, then IXC-1 would be the covered provider because it is making the initial route selection decision. The intermediate providers LCR-1, LCR-2, and LCR-3 are not covered providers in this example.
- If originating provider B is allocating long distance calls between IXC-2 and IXC-3 based on geographic origination (e.g., different LATAs), volume (e.g., 50% to IXC-2 and 50% to IXC-3), or basic jurisdiction (i.e., all intrastate to IXC-2, and all interstate and international to IXC-3), and IXC-2 and IXC-3 are making the initial route selection among downstream intermediate providers based on the called party number, then IXC-2 and IXC-3 are covered providers but originating provider B is not.[64]
- If originating provider C selects IXC-4 for all long-distance calls where the called number is east of the Mississippi River and selects IXC-5 for long-distance calls where the called number is west of the Mississippi River, then originating provider C is making the initial routing decision based

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originating LEC may carry traffic across exchange or LATA boundaries); Rural Associations Comments at 7-9 (proposing that the Commission clarify the definition of first facilities-based provider to mean the facilities-based originating provider with the ability to choose the call path for routing long-distance calls); Time Warner Comments at 2 (asserting that where an originating LEC or VoIP provider hands off calls originated by its customers to a wholesale or other long-distance service provider, the Commission should require the wholesale or other long-distance provider to comply with these rules because they, not the LEC or VoIP provider, have access to the information regarding long-distance call attempts that is the subject of the proposed recording and reporting rules).

[61] For purposes of this Order, the term "long-distance voice service provider" means any person that is engaged in the provision of interstate interLATA, intrastate interLATA, interstate interexchange, intrastate interexchange, intraLATA toll, inter-MTA interstate and/or inter-MTA intrastate voice services. Carrying call traffic across exchange or LATA boundaries for the purpose of aggregation before handing that traffic from the originating provider to an intermediate provider (*e.g.*, an IXC) does not in itself constitute long distance service.

[62] *See* 47 U.S.C. § 153(2) (defining "affiliate"). If a covered provider does not have retail subscribers—for example because it only provides wholesale services—then it should determine whether it makes the initial call path choice for more than 100,000 originating domestic retail subscriber lines in the aggregate.

[63] We also modify the categories of call attempts to be recorded, retained, and reported to conform to this revised definition of covered provider. *See infra* paras. 49-50.

[64] Notably, a covered provider that also serves as an intermediate provider for other providers may—but need not—segregate its originated traffic from its intermediary traffic in its recording and reporting, given the additional burdens such segregation may impose on such providers.

on the called party's number and is a covered provider, and IXC-4 and IXC-5 are not covered providers with regard to traffic from originating provider C.

21. The *Notice* proposed that the types of providers covered by these rules include LECs, IXCs, CMRS providers, and interconnected VoIP service providers.[65] The Commission also sought comment on whether other types of providers, such as one-way VoIP service providers, should be subject to these rules.[66] We conclude that long-distance voice service providers, including LECs, IXCs, CMRS providers, and interconnected and one-way VoIP service providers, must comply with these rules when they make the initial long-distance call path choice. In order for us to fulfill our statutory obligations, these providers must collect, retain, and report the information required by these rules.

22. Commenters generally support the application of the rules to LECs, IXCs, and CMRS providers.[67] Although some commenters argue that the proposed rules should not apply to interconnected VoIP service providers,[68] there is also significant record support for adopting the proposal to apply the rules to interconnected VoIP service providers.[69] Commission data show that end users are increasingly obtaining service from interconnected VoIP providers, such as cable companies.[70] For the Commission to address the serious public interest harms, we must include the providers that serve approximately one-third of residential customers. Indeed, if we do not apply these rules to providers of VoIP service, other providers could circumvent the rules by working with a VoIP service provider to ensure that the VoIP service provider makes the initial long-distance call path choice. Moreover, data and comments filed in the record indicate that calls that originated with VoIP service providers, like other originating providers, face significant rural call completion issues.[71] Accordingly, interconnected VoIP service providers that

[65] *See Notice*, 28 FCC Rcd at 1574, para. 13.

[66] *Id*.

[67] *See*, *e.g.*, ACA Comments at 5-7 and Reply at 5-6; Inteliquent Reply at 7.

[68] *See* TWC Comments at 4-5 (arguing that the rules should not apply to interconnected VoIP service providers); VON Coalition Comments at 6-7 and Reply at 1-2.

[69] *See, e.g.*, NASUCA Comments at 11-15 (asserting that the increase in call completion failure coincides with the rise of VoIP and involves VoIP providers and that solutions to call completion failure must address VoIP providers); CenturyLink Comments at 13 (arguing that omitting long-distance voice providers using nontraditional technologies would leave a major contributing aspect of the call completion issue unaddressed); ANPI Comments at 9; INS Comments at 14 and Reply at 9-10; NJ Rate Counsel Comments at 11 and Reply at 17-18.

[70] In 2012, the Commission reported that, as of December 31, 2010, 31% of the more than 87 million residential telephone subscriptions in the United States were provided by interconnected VoIP providers—an increase of 21% (from 22.4 million to 27.1 million residential lines) in the last year. *Proposed Extension of Part 4 of the Commission's Rules Regarding Outage Reporting to Interconnected Voice Over Internet Protocol Service Providers and Broadband Internet Service Providers*, PS Docket No. 11-82, Report and Order, 27 FCC Rcd 2650, 2700-01, Appx. B para. 3 (2012). In June 2012, there were 39 million interconnected VoIP subscriptions in the United States, a 16% increase from June 2011. In contrast, switched access lines decreased by 9%. In June 2012, 40% of residential wireline connections were interconnected VoIP. The percentage of total wireline retail local telephone service connections (business and residential) attributable to interconnected VoIP subscriptions was 27.8% in June 2012 (39 million of a total of 141 million); 23.3% in June 2011 (34 million of a total of 146 million); 19.2% in June 2010 (29 million of a total of 151 million); 15.2% in June 2009 (24 million of a total of 157 million; and 13.4% in December 2008 (22 million of a total of 163 million), the first time period for which the FCC received data. Local Telephone Competition: Status as of June 30, 2012, Industry Analysis and Technology Division, Wireline Competition Bureau (rel. June 2013). In 2009, Comcast reported that it was the third largest residential telephone service provider in the United States, exceeded only by AT&T and Verizon. *See* Comcast Now Third Largest Residential Phone Services Provider in the U.S., *available at* https://www.comcast.com/about/pressrelease/pressreleasedetail.ashx?PRID=844 (last visited Oct. 25, 2013).

[71] *See May 2012 NECA, et al. Letter* at 3 (summarizing test call results and showing that calls originated by fixed VoIP providers had total completion and quality problems—including incompletion, poor voice quality, or excessive (continued . . .)

make the initial long-distance call path choice must comply with the recording, reporting, and retention rules we adopt today.[72]

23. For similar reasons, we see no basis for excluding one-way VoIP providers from the scope of our rules. The Commission has described one-way VoIP services as allowing users to receive calls from, or place calls to, the PSTN, but not both;[73] here, where we are concerned about termination issues, we refer to VoIP services that allow users to place calls to the PSTN but not to receive them. One-way VoIP providers have significant numbers of subscribers to their services, and some data suggest that one-way VoIP usage is increasing.[74] Indeed, there is no relevant distinction in our record between "one-way" VoIP and interconnected VoIP, as the rural call completion problem we are addressing here inherently is "one way"—calls terminating to rural areas. The Commission needs data from one-way VoIP providers as well as interconnected VoIP providers in order to obtain a complete picture of the rural call completion problem and address it effectively.[75]

24. *Affiliated Providers*. We note that covered providers may be affiliated with other covered providers. To minimize the burden on such providers, affiliated providers may record, retain, and report the information required herein individually or aggregated to the holding-company level.[76] Furthermore, we do not consider affiliates of a covered provider to be "intermediate providers" of that covered provider for the purposes of these rules.[77]

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call setup time—at a rate of 15.8% to rural areas and that nomadic-VoIP-originated calls had total issues at a rate of 51.6% to rural areas); *supra* note 69. We thus disagree with commenters who argue that these rules should not apply to interconnected or one-way VoIP providers in general, or that there is no evidence that the problems derive from VoIP providers. *See, e.g.*, VON Coalition Comments at 1, 5-7 and Reply at 1-2 (arguing that in the absence of reliable evidence demonstrating that VoIP providers are contributing to rural call completion problems, it makes little sense to subject VoIP providers to burdensome requirements designed to correct such problems); Time Warner Comments at 2 (asserting that intermediate providers and long-distance carriers are the widely acknowledged cause of rural call completion problems, and that there is no evidence that interconnected VoIP providers or other originating providers are responsible for these problems).

[72] We address commenters' arguments regarding the Commission's authority to require that VoIP service providers comply with these rules in section III.A.2. In the *Notice*, the Commission stated that for purposes of this rulemaking, it considered an over-the-top VoIP service provider to be a facilities-based provider. *Notice*, 28 FCC Rcd at 1575, para. 17 n.39. Because we do not limit the scope of these rules to facilities-based providers, as the *Notice* proposed, we need not address comments that raised concerns about with this proposed definition . *See, e.g.*, VON Comments at 7; NASUCA Reply at 13.

[73] *USF/ICC Transformation Order*, 26 FCC Rcd at 18029, para. 974.

[74] *See, e.g.*, Skype S.à.r.l., Amendment No. 2 to Registration Statement (Form S-1) at 67, 132 (Mar. 4, 2011) (reporting 8.8 million worldwide paying subscribers for SkypeIn and SkypeOut one-way services and listing primary competitors as Internet and software companies, telecommunications companies and hardware-based VoIP providers, and small and medium-size enterprise telecommunications services providers); *Earnings Release FY13 Q1 Entertainment & Devices Division*, *Microsoft* (Oct. 18, 2012), http://www.microsoft.com/investor/earningsandfinancials/earnings/segmentresults/EntertainmentAndDevicesDivision/FY13/Q1/performance.aspx (last accessed Oct. 25, 2013) (reporting 120 billion minutes of calls on Skype in that quarter, a 58% increase).

[75] *See May 2012 NECA, et al. Letter* at 2 (citing 2011 and 2012 test results indicating that "[f]ixed VoIP providers showed an improvement in completion rates but an increase in call quality issues. Nomadic VoIP providers also showed overall improvement, but maintain an unacceptably high overall call incompletion rate of 30% and "total issues" rate greater than 50%); *see also supra* notes 69, 71.

[76] To the extent that covered providers choose to file individually by affiliate, they may do so in whatever arrangement they choose. For example, if three covered providers are affiliated, two of those providers may record, retain, and report data together, while the third does so individually.

[77] *See infra* para. 92.

25. *Intermediate Providers*. The *Notice* sought comment on whether we should impose recording, retention, and reporting requirements on intermediate providers and, if so, how.[78] Some commenters argue that the Commission should impose these requirements on intermediate providers to provide the Commission with more data in its efforts to identify sources of call completion problems and incent intermediate providers to ensure high levels of call completion over their networks.[79] Others disagree, questioning whether the benefits produced by these additional data would justify the burden associated with imposing recording, retention, and reporting requirements on a large number of intermediate providers.[80]

26. At this time, we conclude that intermediate providers are not required to comply with the recording, retention, and reporting rules we adopt today. Because the rules extend to providers that make the initial long-distance call path choice, we expect the Commission will obtain the data we need to identify and analyze patterns of call completion problems. In addition, the Act provides that "the act, omission, or failure of any officer, agent, or other person acting for or employed by any common carrier or user, acting within the scope of his employment, shall in every case be also deemed to be the act, omission, or failure of such carrier or user as well as that of the person."[81] Although we decline at this time to require intermediate providers to comply with these rules, the Enforcement Bureau continues to have the authority to investigate and collect additional information from intermediate providers when pursuing specific complaints and enforcement actions. We also remind intermediate providers that our rules already require, within thirty days of the commencement of providing services, telecommunications carriers, certain other providers of telecommunications, interconnected VoIP service providers, and certain non-interconnected VoIP providers to register with the Commission and designate agents for service of process in the District of Columbia.[82] In the attached Further Notice, we seek comment on addressing intermediate providers going forward.[83]

27. *Exception for Smaller Covered Providers*. Consistent with the *Notice*, we require only providers of long-distance voice service that make the initial long-distance call path choice for more than 100,000 domestic retail subscriber lines (counting the total of all business and residential fixed subscriber lines and mobile phones and aggregated over all of the providers' affiliates) to comply with the recording, retention, and reporting rules.[84] Commenters generally supported this approach.[85] Although some

[78] *See Notice*, 28 FCC Rcd at 1577, para. 24.

[79] *See, e.g.*, Bandwidth.com Comments at 6; Level 3 Reply at 3; XO Reply at 12; NCTA Reply at 4; INS Reply at 13 (arguing that the Commission should apply these obligations to intermediate providers because the originating provider cannot track the call path); *see also* Inteliquent Comments at 6 (stating that intermediate providers should provide basic performance reporting unless they certify that they only handoff for on-net terminating, but supporting the Commission's proposal to ensure that originating providers have the incentive to address rural call completion problems related to their customers' calls); Independent LECs Comments at 10 (proposing that intermediate providers furnish detailed performance information at the rural exchange level to a public electronic data exchange).

[80] *See, e.g.*, CenturyLink Comments at 14.

[81] 47 U.S.C. § 217.

[82] *See* 47 C.F.R. § 1.47(h); 47 C.F.R. § 64.1195(a); *Universal Service Contribution Methodology*, WC Docket No. 06-122; CC Docket Nos. 96-45, 98-171, 90-571, 92-237; NSD File No. L-00-72; CC Docket Nos. 99-200, 95-116, 98-170; WC Docket No. 04-36, Report and Order and Notice of Proposed Rulemaking 21 FCC Rcd 7518, 7549 n. 205 (2006) (*2006 Contribution Methodology Order*), *aff'd in part, vacated in part, Vonage Holdings Corp. v. FCC*, 489 F.3d 1232, 1244 (D.C. Cir. 2007).

[83] *See infra* section IV.B.

[84] *See Notice*, 28 FCC Rcd at 1579, para. 31. A covered provider qualifies for this exception only if it and all its affiliates, as defined in section 3(2) of the Act, 47 U.S.C. § 153(2), together made the initial long-distance call path choice for 100,000 or fewer total business and residential subscriber lines or mobile phones as of the last day of the

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commenters argue that this threshold should be lower, doing so would burden many providers with new obligations without significantly improving the data that are filed with the Commission.[86] Exclusion of smaller providers should not compromise our ability to monitor rural call completion problems effectively. A review of fixed and mobile subscription counts reported to the Commission via Form 477 reveals that the 100,000-subscriber-line threshold should capture as much as 95 percent of all callers. Additionally, many providers that have 100,000 or fewer subscriber lines are not covered providers because they are reselling long-distance service from other providers that make the initial long-distance call path choice. Providers that do not meet the 100,000-subscriber-line threshold continue to be subject to the prohibition against blocking calls, the section 201 prohibition against unjust and unreasonable carrier practices, and the section 202 prohibition on unjust and unreasonable discrimination. Finally, although we exempt such providers at this time, the Enforcement Bureau continues to have the authority to investigate and collect additional information from such providers when pursuing specific complaints and enforcement actions. The Commission will continue to look into complaints from rural LECs and consumers and pursue enforcement action where warranted.

2. Legal Authority

28. The *Notice* set out several sources of legal authority that support the proposals to require covered providers to retain and report call completion data, and sought comment on the conclusion that such authority was sufficient to adopt the proposals and "any additional sources of possible authority."[87] We conclude that we have ample direct authority to adopt this Order and the accompanying rules by virtue of sections 1, 4(i), 201(b), 202(a), 218, 220(a), 251(a), and 403 of the Act.[88] We also conclude that we have ancillary authority to apply the requirements adopted in this Order to VoIP service providers as discussed below, to the extent those providers are not otherwise subject to our direct authority under the Act.

29. *Direct Authority.* As an initial matter, call detail records are crucial to the Commission's ability to fulfill its responsibilities under section 201 of the Act. As we have previously made clear, blocking, choking, reducing, or restricting traffic in any way, including to avoid transport and termination charges, generally constitutes an unjust and unreasonable practice under section 201(b) of the Act.[89] The recording, retention, and reporting rules we adopt today will help us identify instances in which long-distance providers or their agents may have violated section 201(b) by blocking or otherwise restricting or degrading calls placed to rural consumers. Once such instances have been identified, we can then

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reporting period. For purposes of this exception, a large business with 100 lines should be counted as 100 subscribers, not as one subscriber.

[85] *See, e.g.*, COMPTEL Comments at 4; USTelecom Comments at 8; ACA Comments at 8, Midcontinent Reply at 6; Rural Associations Comments at 19; CLECs Comments at 3 (supporting the proposed 100,000 threshold as generally providing substantial data without burdening the smaller carriers). The American Cable Association notes that the top ten cable companies account for 95.5% of the 28 million cable phone subscribers. *See* ACA Comments at 8. Midcontinent suggests using 100,000 customers in a Study Area. *See* Midcontinent Reply at 6.

[86] *See, e.g.*, NARUC Comments at 10 and NASUCA Comments at 21 (asserting that this threshold should be lowered); State Assoc. Comments at 7 and NJ Rate Counsel Reply at 21 (suggesting that this threshold be lowered to 10,000); Verizon Comments at 15 (small providers have the same call delivery obligations and should also be covered); Level 3 Comments at 6 (arguing that providers below the threshold will exploit that status).

[87] *See Notice*, 28 FCC Rcd at 1575, para. 19.

[88] *See* 47 U.S.C. §§ 151, 154(i), 201(b), 202(a), 218, 220(a), 251(a), 403. CMRS providers are classified as common carriers to the extent they offer common carrier services. 47 U.S.C. § 332(c)(1)(A).

[89] *See*, *e.g.*, *USF/ICC Transformation Order*, 26 FCC Rcd 17903, 18028-29, paras. 734, 973; *2012 Declaratory Ruling*, 27 FCC Rcd at 1355-57, paras. 11-13; *2007 Declaratory Ruling at* 11631-32, paras. 5-7; *Telecommunications Action Center and Consumer Action v. Central Corp. Int'l Telecharge, Inc.*, Memorandum, Opinion and Order, 4 FCC Rcd 2157, para. 12 (Common Car. Bur. 1989).

intelligently marshal our resources. For example, we can use those data to evaluate provider performance and to inform enforcement actions, where necessary. We anticipate that this prospect of enforcement will help to further deter providers from engaging in unjust or unreasonable practices and hence reduce call completion problems to customers in rural America. Indeed, as providers collect data as required under this Order, many will have greater insight into their performance and that of their intermediate providers than they have had in the past. These data also will enable the Commission to evaluate the need for other steps, whether more specific requirements implementing section 201(b), such as specific standards regarding call completion performance, or other actions. For similar reasons, the records to be reported under our new rules also will aid the Commission's efforts to ensure that provider practices, facilities, or services do not unjustly or unreasonably discriminate against rural localities, which could violate section 202(a).[90]

30. Our authority to adopt these rules also derives from section 251(a) because these rules will allow us to ensure that all Americans in rural and nonrural areas receive the benefits of interconnection.[91] For example, the record reflects that some providers are purchasing voice termination services that are of low quality—both in terms of quality of service and in terms of the reliability of delivery to terminating carriers— and rely on indirect interconnection with rural carriers that is not always reliable.[92] To identify the source of the problems in terminating calls—and to assess whether there is a potential failure of "direct or indirect interconnection" of the sort the Commission can address under section 251(a)(1)—the Commission needs relevant data. Likewise, insofar as individuals with disabilities live in rural areas experiencing call completion problems, these data are likely to be important tools in targeting investigations of whether long distance providers have configured their networks in ways that do not comply with the accessibility requirements adopted under section 255, as required by section 251(a)(2), and if so, what further actions are warranted.[93]

[90] 47 U.S.C. § 202(a).

[91] *See* 47 U.S.C. § 251(a); 47 C.F.R. § 51.100; *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, CC Docket Nos. 95-185, 96-98, 11 FCC Rcd 15499, 15991, paras. 992-997 (1996) (*Local Competition Order*), *aff'd in part and rev'd in part sub nom. Iowa Utils. Bd. v. FCC*, 120 F.3d 753 (8th Cir. 1997), *aff'd in part, rev'd in part, and remanded sub nom. AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999); *see also* INS Comments at 6-7 ("allowing call failures to rural areas to go unresolved denies telephone customers the intended benefits of telecommunications interconnection under Section 251(a)") and Reply at 5 ("new Commission rules that resolve the call completion problem will ensure that consumer[s] receive the benefit of interconnection mandated by Section 251(a)."); NARUC Comments at 9 ("[T]he statutory standard that governs general interconnection obligations between telecommunications carriers and/or other communications providers under 47 U.S.C. § 251(a) is absolute. It does not distinguish between traffic that terminates in rural and urban areas on the network facilities of wireline carriers. Nor does it admit to any justifiable call completion failures . . . .").

[92] *See, e.g.*, HyperCube Comments at 11("HyperCube is concerned that, rather than using access trunks or comparable facilities to deliver traffic directly or indirectly to terminating rural ILECs, some entities attempt to complete long-distance traffic destined for customers or rural ILECs through facilities or services designed for different purposes, such as PRI, SIM boxes or even the rural ILECs' own cable modem facilities."); PSCW Comments at 7 (providing as an example one intrastate call attempt that was traced through Eastern Europe and Singapore and arguing that such routes exist "because each provider is trying to reduce costs by choosing the next leg of the route based on the lowest available price"); INS Reply at 12-13 (providing examples to illustrate the routing practices employed in search of the lowest termination rates).

[93] *See Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996*, Report and Order and Further Notice of Inquiry, 16 FCC Rcd 6417 (1999) (adopting disability access rules under sections 255 and 251(a)(2)); *see also id.* at 6423, para. 12 (finding that "pursuant to section 251(a)(2), a telecommunications carrier may not install network features, functions, or capabilities that do not comply with the accessibility requirements of this Order"); *id.* at 6435-36, para. 37 (pursuant to section 251(a)(2), "telecommunications carriers must not install service logic and databases associated with

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31. Moreover, the Act provides the Commission with ample authority to: (1) inquire into and keep itself apprised of carriers' business management practices; (2) obtain from carriers full and complete information necessary to enable the Commission to perform the duties for which it was created; and (3) prescribe the form for these records and reports.[94] Adopting recording, retention, and reporting rules as described below will allow the Commission to better identify patterns of rural call completion problems and address them in fulfillment of our statutory obligations.[95]

32. Our actions also advance the goals set out in other provisions of the Act. Section 1 of the Act makes clear that the Commission's purposes include "to make available, so far as possible, to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges, for the purpose of the national defense, [and] for the purpose of promoting safety of life and property through the use of wire and radio communications."[96]

33. We disagree with the sole commenter who questioned our jurisdiction to apply recording, retention, and reporting requirements to intrastate long distance calls.[97] Telephone services are jurisdictionally mixed services, and allowing providers to record, retain, and report only interstate information would provide an incomplete picture of the rural call completion problem and leave us poorly equipped to ensure that calls are being properly completed. Indeed, to the extent that our data collection will help us diagnose precisely where rural call failures occur in the network (and that network is used for both intrastate and interstate calls), collecting only a partial picture of rural call completion rates may prevent us from ensuring that interstate calls are properly being completed. In addition, as the Supreme Court has made clear, "[section] 201(b) *explicitly* gives the FCC jurisdiction to make rules governing matters to which the 1996 Act applies," which includes matters covered by section 251(a).[98] We therefore have authority to adopt the data collection, retention, and reporting rules in this Order both for interstate and intrastate traffic.

34. Many commenters support applying the recording and reporting obligations to intrastate as well as interstate long-distance calls.[99] Our state partners, in particular, strongly agree that we should

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routing telecommunications services, whether residing in hardware or software, that do not comply with the accessibility requirements of these rules.").

[94] *See* 47 U.S.C. §§ 218, 220(a) ("The Commission may obtain from [carriers subject to this chapter] and from persons directly or indirectly controlling or controlled by, or under direct or indirect common control with, such carriers full and complete information necessary to enable the Commission to perform the duties and carry out the objects for which it was created"; "The Commission may, in its discretion, prescribe the forms of any and all accounts, records, and memoranda to be kept by carriers subject to this chapter, including the accounts, records, and memoranda of the movement of traffic."); *see also* 47 U.S.C. § 154(i) (the Commission may "perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this chapter, as may be necessary in the execution of its functions"); 47 U.S.C. § 403 (the Commission has "full authority and power at any time to institute an inquiry, on its own motion, in any case and as to any matter or thing concerning which complaint is authorized to be made, to or before the Commission by any provision of this chapter, or concerning which any question may arise under any of the provisions of this chapter, or relating to the enforcement of any of the provisions of this chapter").

[95] *See* 47 U.S.C. §§ 201(b), 202(a).

[96] 47 U.S.C. § 151.

[97] CenturyLink Comments at 9.

[98] *AT&T Corp. v. Iowa Utils Bd.*, 525 U.S. 366, 380 (1999) (emphasis in original); *see also id.* at 379 ("We think that the grant in § 201(b) means what it says: The FCC has rulemaking authority to carry out the 'provisions of this Act,' which include §§ 251 and 252, added by the Telecommunications Act of 1996.").

[99] *See* ITA Reply at 8; INS Reply at 4-5.

apply our requirements to intrastate calls.[100] We look forward to working with our state partners—some of whom may be strained for resources to address these problems themselves—to ensure that customers of rural carriers do not continue to suffer from poor termination rates.

35. *Ancillary Authority*. The Commission has ancillary authority to impose these rules on providers of interconnected and one-way VoIP services, to the extent that they are not already subject to the direct authority just described.[101] Most commenters agree.[102] Ancillary authority may be employed, at the Commission's discretion, when the Act "covers the regulated subject"[103] and the assertion of jurisdiction is "reasonably ancillary to the effective performance of [the Commission's] various responsibilities."[104] Both predicates for ancillary authority are satisfied here.[105]

36. First, the Act gives the Commission jurisdiction over interstate "communication by wire or radio."[106] VoIP service connected to the PSTN is clearly such communication, because it involves transmission of voice by aid of wire, cable, or other like connection and/or transmission of voice by radio.[107] These services are therefore covered by the Commission's general jurisdictional grant under Title I.[108]

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[100] *See, e.g.*, NASUCA Comments at 2, 4-9 and Reply at 8; NARUC Comments at 4, 14; California PUC Comments at 2-3, 6-7; NJ Rate Counsel Reply at 20; PSCW Reply at 3.

[101] *See Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs.*, 545 U.S. 967, 976, 996 (2005) (recognizing that the Commission may impose special regulatory duties on information service providers under its Title I ancillary jurisdiction). The Commission has not determined whether VoIP services should be classified as "telecommunications services" or "information services" under the Communications Act, and we do not decide that issue here. The Act defines "telecommunications service" as "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." 47 U.S.C. § 153(53). "Telecommunications" means "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." *Id.* § 153(50). The Act defines "information service" as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications." *Id.* § 153(24). We note that certain VoIP providers may in any case be subject to the Commission's direct authority as relevant here. For example, the Commission's authority under section 218 of the Act is not limited to the collection of information solely from carriers. *See* 47 U.S.C. § 218 ("The Commission may obtain from [carriers subject to this chapter] and from persons directly or indirectly controlling or controlled by, or under direct or indirect common control with, such carriers full and complete information necessary to enable the Commission to perform the duties and carry out the objects for which it was created.").

[102] *See, e.g.*, ANPI Comments at 9, 11-12; INS Comments at 7-9, 14 and Reply at 9-10; NASUCA Comments at 11-15 and Reply at 12-13, 18; NJ Rate Counsel Comments at 11 and Reply at 17-18; COMPTEL Comments at 3-4. *But see* VON Coalition Comments at 3-7 and Reply at 1-2 (arguing that the Commission has no basis upon which to assert ancillary authority over VoIP providers in this proceeding).

[103] *American Library Ass'n v. FCC*, 406 F.3d 689, 691 (D.C. Cir. 2005); *see also United States v. Southwestern Cable Co.*, 392 U.S. 157, 177-78 (1968) (*Southwestern Cable*); *United States v. Midwest Video Corp.*, 406 U.S. 649, 667-68 (1972); *American Library Ass'n v. FCC*, 406 F.3d 689, 691-93 (D.C. Cir. 2005).

[104] *American Library Ass'n*, 406 F.3d at 692; *Southwestern Cable*, 392 U.S. at 178.

[105] Section 4(i) of the Act also authorizes the Commission to "perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this [Act], as may be necessary in the execution of its functions." 47 U.S.C. § 154(i).

[106] 47 U.S.C. § 152(a).

[107] *See* 47 U.S.C. § 153(40), (59) (defining "radio communication" and "wire communication").

[108] *See VoIP 911 Order*, 20 FCC Rcd at 10262, para. 28. The Commission has previously found it has subject matter jurisdiction over both interconnected VoIP and one-way VoIP connected to the PSTN. *See Reporting Requirements for U.S. Providers of International Telecommunications Services*, *Amendment of Part 43 of the*

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37. Second, requiring providers of VoIP service to comply with these recording, retention, and reporting requirements is "reasonably ancillary to the [FCC's] effective performance of its statutorily mandated responsibilities"[109] under sections 201(b), 202(a), and 251(a)(1). The problems that cause us to impose these requirements relate to terminating LECs—clearly common carriers providing interstate service—that are unable to provide satisfactory service to their customers due to the routing practices of other providers handling the call, thus leaving these terminating LECs susceptible to erroneous complaints that they are engaged in unjust, unreasonable, or otherwise unlawful charges or practices under sections 201(b), 202(a), or a combination thereof. These LECs offer their customers a telephone service that allows the customer to receive long-distance calls from anywhere, but due to other providers' routing practices, interconnection arrangements, and/or network configurations, calls to the rural LECs' customers have experienced significant problems with reliability. The rules we adopt in this Order will help clarify where the blame lies, alleviating the problem of erroneous complaints lodged against terminating rural LECs by helping resolve complaints in an expeditious manner and reducing the burden on all parties, including rural LECs and the Commission. VoIP service constitutes a significant and growing portion of the long-distance telephone market, and according to evidence in the record is also causing some terminating LECs to be unable to ensure their customers a reasonable quality of service.[110] Absent the application of these rules to providers of VoIP service connected to the PSTN, terminating LECs may be suspected of causing rural customers to experience service problems that in fact were caused by VoIP providers or their intermediate providers (and the interconnection arrangements between and among these providers), and may unfairly be the subject of complaints. The prevention of this problem through the periodic reporting of relevant data is reasonably ancillary to the effective performance of our duties under sections 201(b) and 202(a).

38. In addition, if we do not apply these requirements to providers of VoIP service, telecommunications carriers could evade the rules by partnering with a VoIP provider in a way that allows the VoIP provider to make the initial call routing decision, thereby allowing the carrier to circumvent the requirements we adopt today and undermine the purpose of those rules. Such a carrier could therefore arrange for low-cost, low-quality terminations of its customers' calls to the customers of rural LECs without the threat of enforcement action from the Commission. For example, there is evidence on the record that, in at least one instance, a non-facilities-based reseller makes the initial long-distance call path choice.[111] If that reseller making the initial long-distance call path choice uses VoIP technology, in the absence of recording, retention, and reporting requirements for VoIP providers, both it

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Commission's Rules, IB Docket No. 04-112, Second Report and Order, 28 FCC Rcd 575, 598, para. 82 (2013) (stating that the Commission has subject matter jurisdiction over both interconnected VoIP and one-way VoIP); *Connect America Fund, A National Broadband Plan for Our Future, Establishing Just and Reasonable Rates for Local Exchange Carriers, High-Cost Universal Service Support, Developing a Unified Intercarrier Compensation Regime, Federal-State Joint Board on Universal Service, Lifeline and Link-Up, Universal Service Reform - Mobility Fund*, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 07-135, WC Docket No. 05-337, CC Docket No. 01-92, CC Docket No. 96-45, WT Docket No. 10-208, FCC 11-161, Report and Order and Further Notice of Proposed Rulemaking, 28 FCC Rcd 17663, 18013-14, 18029 (2010) (same); *Universal Service Contribution Methodology, Federal-State Joint Board On Universal Service*, WC Docket No. 06-122, CC Docket No. 96-45, Report and Order and Further Notice of Proposed Rulemaking, 21 FCC Rcd 7518, 7542 (2006) (finding that the Commission's subject matter jurisdiction covers interconnected VoIP); *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership*, WC Docket No. 07-38, Report and Order and Further Notice of Proposed Rulemaking, 23 FCC Rcd 9691 (2008) (same).

[109] *American Library Ass'n*, 406 F.3d at 692; *see also Southwestern Cable*, 392 U.S. at 178.

[110] *See supra* paras. 22-23; *see also May 2012 NECA, et al. Letter* at 2, 3 (describing the poor performance of VoIP-originated long-distance call attempts to rural areas during a test call project).

[111] *See* INS Comments at 14 (stating that its non-facilities-based reseller makes the initial routing decisions).

and the customers for which it makes the initial long-distance call path choice would avoid these rules, and the Commission would receive no data on retail long-distance call attempts made by the customers of the providers using the reseller's services. Such circumvention would prevent "the effective performance of [our] statutorily mandated responsibilities" under sections 201(b) and 202(a); therefore extending our rules to cover VoIP long-distance providers and eliminating this opportunity for circumvention is "reasonably ancillary" to the effective performance of our duties for this reason as well.[112]

39. The recording and reporting requirements will also aid the Commission in ensuring that VoIP providers fulfill their obligations pursuant to the call blocking ban extended to one-way and interconnected VoIP service providers in the *USF/ICC Transformation Order*, and the application of the rules we adopt today to providers of VoIP service connected to the PSTN is therefore reasonably ancillary to the same statutory authority that provided the basis for the relevant Commission action in the *USF/ICC Transformation Order*.[113] For these reasons, we conclude that imposing the recording, retention, and reporting requirements meets the second predicate for ancillary authority.

3. Recording and Retention Requirements

40. The *Notice* proposed to require covered providers to record and retain the following information for each long-distance call attempt: calling party number; called party number; date; time of day; whether the call is handed off to an intermediate provider and, if so, which intermediate provider; whether the call is going to a rural carrier and, if so, which rural carrier, as identified by its OCN; whether the call is interstate; and whether the call attempt was answered.[114] We sought comment on this approach and on the degree to which providers typically retain this information in the ordinary course of business.[115] We now conclude that these data—as well as certain cause code information—are necessary to permit us to identify and redress call completion problems.

41. Covered providers must begin recording the required data on the first day of the calendar month that is at least 20 days after the effective date of the information collections in these rules, which will be announced in the Federal Register upon approval of the collections by the Office of Management and Budget (OMB). Thus, for example, if the effective date of the information collections as announced in the Federal Register is on January 5, providers must begin recording the required data on February 1; if the effective date as announced is on January 20, providers must begin recording their data on March 1. The Wireline Competition Bureau will also issue a public notice announcing when providers must begin recording data.

a. Data to be Recorded and Retained

42. On balance, the record supports the categories of call attempt data proposed in the *Notice*.[116] The Rural Associations argue that "this information is or should be readily available to

[112] *See American Library Ass'n*, 406 F.3d at 692.

[113] *See USF/ICC Transformation Order*, 26 FCC Rcd at 18028-29, paras. 973-974 & n.2043.

[114] *See Notice*, 28 FCC Rcd at 1577, 1587, para. 22, Appx. A. The *Notice* stated that an "answered call attempt" means a call attempt that is answered by the called party, including, for example, by voicemail, answering machine, or fax machine. *Id*. at 1578, para. 27. As noted in the Reporting section, *infra* para. 72, we modify the definition of "answered call."

[115] *Id.* at 1577, para. 23.

[116] *See, e.g.*, Vonage Comments at 3 ("Vonage believes that the Commission's proposal[s] concerning reporting and data retention requirements are reasonable and strike the correct balance between the Commission's twin goals of effectively addressing rural call completion issues in a timely manner and not placing an excessive economic burden on service providers."); California PUC Comments at 6 ("[N]ew record-keeping and data collection requirements . . . could help ensure that the Commission has access to the information necessary to investigate and address failures in completing calls to rural consumers.").

providers since it is typically used to calculate bills and [for] call verification as well as to confirm charges assessed by other providers for transport and termination."[117] Although some commenters claim that most carriers do not currently retain the proposed call detail information,[118] or retain only some of the information,[119] we find that the proposed categories of call data are necessary for the Commission to monitor rural call completion problems. Having access to call detail records (CDRs) is essential for carriers to identify patterns of problems and develop effective, targeted solutions. If, for example, these CDRs reveal a particularly low call completion rate to a specific rural OCN, this might indicate an inaccuracy in that provider's routing tables or the presence of a downstream intermediate provider engaged in call blocking. Identifying such patterns would be significantly more difficult without recording and retaining call detail records at the level of granularity required by the rules we adopt today. While we are mindful of the burdens, particularly on providers that do not already collect or retain this information, we find that the information we require is narrowly tailored to give the Commission data necessary to analyze the issue and take action to address call completion problems.

43. We also agree with those commenters that encourage the Commission to require covered providers to record and retain certain signaling cause code information.[120] The information would allow providers and the Commission to calculate and evaluate the statistical significance of a provider's call answer rate, which is the ratio of the number of calls answered to the number of calls attempted. The call answer rate provides valuable information for identifying problem areas but does not distinguish among categories of calls that are not answered.[121] To have a better understanding of the rural call termination problems, having cause codes for unanswered calls will allow us to distinguish among calls that generate busy signals, calls that ring but are not answered, and calls to unassigned numbers,[122] and to identify calls

[117] Rural Associations Reply at 13.

[118] *See, e.g.*, CTIA Comments at 4, 5 ("[I]t is clear that carriers do not collect much of this data today."); COMPTEL Comments at 7 ("[O]riginating providers often do not retain call completion records in the format or for the length of time proposed by the Commission.").

[119] *See* Frontier Comments at 8 ("Frontier already retains six of the eight proposed data points, yet the two that are not industry standard—the information on intermediate providers and the information on whether the called party was assigned to a rural telephone company—would prove difficult to implement."); CenturyLink Comments at 12 (explaining that while some portions of its network currently capture this information, other areas of its legacy network do not).

[120] *See, e.g.*, NARUC Comments at 13; INS Reply at 18. When a terminating provider is successful or unsuccessful in completing a call, it signals a "cause value" giving a precise indication of the event. Within the SS7 signaling framework, cause values can be classified into three general categories indicating the nature or origin of the event: Call Completed, User, and Network. One commonly occurring "User" cause is "unallocated (unassigned) number" (cause value 1), which indicates that the caller has dialed a properly formatted telephone number, but that number itself is not assigned to an end user. If the call attempt is not answered, a "User" category cause value such as "user busy" (cause value 17) or "no user responding" (cause value 18) is returned.

[121] Hardy, William C., *QoS: Measurement and Evaluation of Telecommunications Quality of Service*, John Wiley & Sons Ltd, 2001 ("[W]hen ASRs are used as a means of identifying possible changes in performance of a service, the decision supported is one of where to look for possible problems, and the indications from analysis of ASRs provide information that might otherwise be unavailable or submerged in masses of maintenance data. The only penalty for a wrong decision in this case is the effort expended in pursuing what turns out to have been a false alarm, and this penalty will be adequately off-set by the benefits of pursuing indications from analyses of ASRs, as long as a sufficient proportion of those indications do surface latent problems.") http://onlinelibrary.wiley.com/doi/10.1002/0470845910.app3/pdf (last accessed Oct. 25, 2013). The Answer Seizure Ratio is the traditional call answer rate measure for TDM-based telephone networks.

[122] Requiring covered providers to record calls to unassigned numbers separately will help address commenter concerns that autodialer traffic distorts call answer rates in rural areas due to a higher percentage of unassigned numbers there. *See, e.g.*, CenturyLink Comments at 16; Frontier Comments at 6; Verizon Comments at 13; Windstream Comments at 4; XO Comments at 11.

that never reach the intended destination.[123] We recognize that these data are imperfect—we understand, for example, that user busy signaling may in reality reflect network problems[124]—but they will improve our ability as well as that of providers to monitor performance and narrow in on specific problems. As such, in addition to the eight data points proposed in the *Notice*, we require covered providers to record an indication whether the call attempt was completed to the incumbent local exchange carrier but signaled as busy, ring no answer, or unassigned number. For most providers, this indication is likely to take the form of an SS7 signaling cause code or SIP signaling message code associated with each call attempt.[125]

44. In contrast, we disagree with commenters that encourage the Commission to require covered providers to record and retain post-dial delay.[126] Because the retention and reporting of average post-dial delay information is of limited utility, and the accumulation and reporting of useful post-dial delay data by rural OCN is complex, we decline to add this category of call detail information to the recording and retention requirements.[127]

45. *Interstate and Intrastate Call Data.* We require covered providers to record data for all domestic long-distance calls, regardless of whether the calls are interstate or intrastate, and to report data on interstate and intrastate calls separately.[128] To identify the source of problems and take appropriate action, we need complete data. Indeed, several state entities support the Commission's collection of interstate and intrastate call data as a positive step for monitoring rural call completion problems.[129]

46. While we considered providing greater flexibility to providers to choose whether to record and report data for interstate and intrastate call attempts separately or together, we decide that having consistent data sets across providers is necessary to a clear analysis of rural call completion

[123] These cause codes will allow the Commission and providers to generate the network effectiveness ratio, also known as the network efficiency ratio.

[124] *See ITU-T Recommendation E.425* at 8 (noting that "this classification is [theoretical] and that in practice, some [cause values] categorized as a user failure can be in reality a network problem").

[125] Although Level 3 suggests that such data may be unreliable, *see* Level 3 Reply at 2 ("Upstream providers cannot always be assured that the signaling information provided to them from downstream entities is accurate."), incorrect signaling information may itself cause systematic problems with rural call completion, a problem we cannot possibly confront without data about the signals that are in fact being handed off. Notably, the ring signaling integrity rule we adopt today may alleviate this concern.

[126] *See, e.g.*, NARUC Comments at 13; INS Reply at 18. Post-dial delay, also known as post-selection delay, means the time "between dialing the last digit and an audible tone being heard at the originating end. The audible tone is typically ring-back or the engaged tone." ETSI TS 102 024-5: *Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 4; End-to-end Quality of Service in TIPHON Systems; Part 5: Quality of Service (QoS) measurement methodologies (2003-09)* at 5.2, *available at* http://www.etsi.org/deliver/etsi_ts/102000_102099/10202405/04.01.01_60/ts_10202405v040101p.pdf (last accessed Oct. 25, 2013).

[127] Post-dial delay analysis would require providers to accumulate distributions of values. For example, the ITU-T has suggested target values for toll calls of no more than 5 seconds on average and no more than 8 seconds for 95%. International Telecommunication Union, "Network grade of service parameters and target values for circuit-switched services in the evolving isdn," Recommendation E.721, Telecommunication Standardization Sector of ITU, Geneva, Switzerland, May 1999.

[128] Reporting requirements are discussed in section III.A.4. As noted above, for purposes of this Order, the term "long-distance voice service provider" means any person that is engaged in the provision of interstate interLATA, intrastate interLATA, interstate interexchange, intrastate interexchange, intraLATA toll, inter-MTA interstate and/or inter-MTA intrastate voice services. *See supra* note 61.

[129] NARUC Comments at 3 (asserting that call completion problems are a serious issue "for the FCC"); INS Comments at 4-5; Public Service Commission of Wisconsin Comments at 3 (citing widespread moves to deregulate at the state level as reason for Commission to include intrastate).

problems. For example, if we were to compare the performances of various providers in completing calls to a particular rural destination, it would be important to know that the performances we were comparing included the same types of calls (e.g., interstate, intrastate, or both). In addition, inconsistent data could potentially mask problems that consumers are actually experiencing, if the call volume for one category is substantially higher than the other. We will also be better able to advise our state partners of relevant problems within their states. While the record suggests that distinguishing between interstate and intrastate calls may require some providers to make adjustments to their systems,[130] we believe these adjustments are warranted so that we can quickly and efficiently identify and pursue any problems.

47. One commenter suggests that the Commission should limit the requirements to interstate calls so that intrastate long-distance providers will not be burdened by duplicative or conflicting state requirements.[131] While some states are acting to address rural call completion problems, we are not aware of any overlap or conflict with the rules we adopt today. Indeed, we believe that these rules will help states monitor and address rural call completion problems too, and also enable them to address rural call completion problems with us jointly.[132] Thus, we disagree that collecting intrastate call information will be duplicative of state requirements. To the extent that covered providers identify areas where the requirements we adopt today duplicate or conflict with state commission regulation, we will consider those specific circumstances when they are brought to our attention.[133]

b. Categories of Call Attempts to Be Recorded

48. The *Notice* proposed to categorize long-distance call attempts by type of originating and terminating provider.[134] The *Notice* proposed that the data collection requirements cover, at a minimum, the following categories of long-distance call traffic: originating provider to rural telephone company (including rural CLEC[135]), originating provider to nonrural LEC (including nonrural CLEC), first facilities-based provider to rural telephone company (including rural CLEC), and first facilities-based provider to nonrural LEC (including nonrural CLEC).[136] The *Notice* sought comment on whether all these proposed categories are necessary and whether other categories of calls should also be included.[137]

49. We conclude that the only call attempts that need to be retained are those to incumbent LECs that are rural telephone companies, as identified by OCN.[138] Evidence indicates that the rural call

[130] *See* Level 3 Comments at 7 (stating that IXCs frequently do not track jurisdiction on a call-by-call basis and suggesting that the Commission focus on the completion of calls to rural areas irrespective of jurisdiction).

[131] CenturyLink Comments at 9.

[132] We address confidentiality and sharing of data with states below in section III.A.9.

[133] *See* 47 U.S.C. § 220(h). Although CenturyLink asserts that, if the Commission does collect this intrastate call information, it should preempt states from also imposing such requirements, we do not find preemption necessary at this time. CenturyLink Comments at 9. As noted above, several states support these rules, we intend to work with the states to resolve call completion problems, and we may except covered providers if there is overlap with state regulation.

[134] *See Notice*, 28 FCC Rcd at 1577, para. 25.

[135] *See* 47 C.F.R. § 61.26(a)(6) (defining "rural CLEC").

[136] *See Notice*, 28 FCC Rcd at 1577, para. 25; 47 U.S.C. § 153(44) (defining "rural telephone company").

[137] *Id.* at 1577-78, paras. 25-26.

[138] *See infra* para. 73 (describing the lists of rural and nonrural OCNs that covered providers must use to comply with the requirements in this Order). For ease of reference, throughout this Order and the Further Notice, we refer to incumbent LECs that are rural telephone companies as "rural incumbent LECs" or "rural ILECs." We note that while covered providers need not retain data for calls to nonrural OCNs, they must nonetheless *record* such data to the extent that it is necessary to comply with the reporting obligations set forth in this Order. *See infra* section III.A.4.

completion problems are largely confined to such carriers; one reason may be that rate-of-return carriers have terminating access rates tend to be higher than those of other carriers. In addition, we note that originating providers process substantially more calls to nonrural areas than to rural areas each day—according to Verizon, 89.5 percent of long-distance calls may be to nonrural destinations.[139] Thus requiring covered providers to retain records only for calls to rural incumbent LECs may substantially reduce the burden of compliance. Finally, we are unaware of any complaints that the list of proposed rural OCNs on which the Commission sought comment did not include rural competitive LECs.[140] Indeed, NTCA agrees that so long as we retain the data for calls to rural incumbents, there is no need to maintain that same data for calls to nonrural carriers.[141]

50. We disagree with the commenter that argues we should include calls that terminate to CMRS subscribers.[142] Evidence indicates that calls to CMRS customers are unlikely to suffer from the completion problems affecting long-distance calls to rural wireline telephone subscribers because calls to CMRS subscribers normally do not incur high termination access charges in rural areas.[143] Moreover, calls that terminate to CMRS customers have not been the subject of the same or similar volume of complaints as have calls to rural LECs.[144] Therefore, we decline to include calls that terminate to CMRS subscribers in the categories of call attempts to be recorded and retained.[145]

51. *Calls delivered on-network.* One commenter asserts that intraLATA toll traffic and interLATA traffic carried on its own network and handed off directly by the originating provider to the terminating LEC should be excluded because this traffic would not likely cause call completion issues.[146] Even if this traffic would incur fewer call completion issues, we decline to exclude this traffic because it provides an important benchmark for issue-free performance. This is especially true in instances where a provider may be using both on-net and off-net routes to deliver calls to the same terminating provider.

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[139] *See* Letter from Maggie McCready, Vice President, Federal Regulatory Affairs, Verizon, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 13-39, at 1 (filed Oct. 23, 2013).

[140] *See List of OCNs Public Notice*, 28 FCC Rcd 5190. We note that one commenter contends that the source-termination categories should exclude calls terminating to rural competitive LECs for a number of reasons, including arguments that rural CLEC calling areas generally overlap with nonrural ILEC calling areas, calling patterns to rural CLECs differ from those to rural ILECs, and rural CLECs generally employ different network architectures. Level 3 Comments at 2, 13-14. We agree, and accordingly do not include calls to rural CLECs in the definition of "call attempts" for purposes of these rules.

[141] *See* Letter from Michael R. Romano, Senior Vice President – Policy, NTCA – The Rural Broadband Association, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 13-39, at 2 (filed Oct. 22, 2013).

[142] *See* NASUCA Comments at 11, 20.

[143] Because CMRS providers are subject to mandatory detariffing, termination access charges on calls to CMRS subscribers, to the extent there are any charges at all, should be significantly lower and therefore diminish or eliminate any incentive to bypass access charges through the use of low-quality least cost routers. *See USF/ICC Transformation Order*, 26 FCC Rcd at 17909-10, 17937, paras. 748, 806 (noting that CMRS providers generally incur but do not collect termination access charges).

[144] *See* Sprint Comments at 19; *Notice*, 28 FCC Rcd at 1577-78, para. 25.

[145] Several commenters agree with this conclusion. *See, e.g.*, Sprint Comments at 19; Level 3 Comments at 2. We reiterate here that, while call attempts to CMRS subscribers are excluded from the recording, retention, and reporting requirements, CMRS *providers* that make the initial long-distance call path choice for more than 100,000 domestic retail subscriber lines are "covered providers" as defined in this Order and must therefore comply with the recording, retention, and reporting requirements with regard to their originating long-distance traffic that terminates to the PSTN. We also note that we do not require any reporting regarding calls that terminate to VoIP service providers, as our record does not reflect call completion problems with regard to such long-distance calls.

[146] *See* Letter from James C. Falvey and Justin L. Faulb, Counsel for RCN Telecom Services, LLC, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 13-39 at 9 (filed Sept. 25, 2013)

52. *Autodialer Traffic.* The *Notice* acknowledged that some providers may handle substantial amounts of autodialer traffic on behalf of business customers who may have call completion expectations and capacity requirements that differ from those of residential and business callers.[147] The Commission noted, for example, that an autodialer may be programmed to hang up before a call attempt can be answered by voicemail or an answering machine.[148] We thus sought comment on whether such traffic can be reliably identified and, to the extent that it can be identified, whether it should be excluded from the recording and retention requirements.

53. Some commenters indicate that they can reliably identify retail autodialer traffic because it is delivered on a dedicated connection.[149] Another commenter, however, argues that such traffic cannot be reliably identified.[150] To the extent that it can be identified, several commenters suggest that autodialer traffic should be excluded because it has the potential to skew call completion results.[151] One commenter suggests that the Commission should only allow covered providers to exclude autodialer traffic to the extent that they can identify and segregate emergency autodialer call attempts,[152] while another commenter argues that all autodialer traffic should be included in the recording and retention requirements, particularly given concerns about completion of important autodialed emergency alert calls.[153]

54. While we agree that there are characteristics unique to autodialer traffic that may make it likely to skew call completion performance results, the record in this proceeding is unclear on the degree to which providers can reliably identify and segregate this traffic when recording their long-distance call attempts. We are confident that the impact of autodialer traffic can be accounted for and will not

[147] *See Notice*, 28 FCC Rcd at 1578, para. 26. An autodialer is "equipment which has the capacity to store or produce telephone numbers to be called using a random or sequential number generator and to dial such numbers." 47 U.S.C. § 227(a)(1); 47 C.F.R. § 64.1200(f)(2).

[148] *Notice*, 28 FCC Rcd at 1578, para. 26 n.50.

[149] *See* CenturyLink Comments at 15 (explaining that it is possible to identify and exclude autodialer traffic from its retail customers coming over a dedicated trunk group, but that it is not feasible to distinguish autodialer traffic coming from its wholesale customers, as autodialer and non-autodialer traffic is intermingled); XO Reply at 12 (explaining that it is possible to exclude certain autodialer traffic from its retail customers that have dedicated connections but cannot distinguish autodialer traffic from its reseller customers or autodialer traffic originated on another carrier's network).

[150] *See* ATIS Comments at 6.

[151] *See, e.g.*, Comcast Comments at 8 ("[M]any autodialers are programmed in a manner that may result in a high number of failed call attempts for reasons other than interexchange carrier performance (*e.g.*, autodialers programmed to hang up before a call attempt can be answered)"); Level 3 Comments at 2 ("[T]hese calls are treated differently by consumers than other types of calls, are likely to have a higher level of no-answer calls, and can easily and timely be repeated."); Verizon Comments at 4 ("[A]n auto-dialer or telemarketer may make repeated attempts to a particular number if the initial call is not answered. Moreover, an auto-dialer or telemarketer may dial sequential numbers in a rate center, even though in rural areas, there is a greater chance that the numbers are unassigned due to the smaller and less dense populations of rural areas."); Windstream Comments at 3 ("[R]etail business customers generating auto-dialer traffic often have call completion expectations and capacity requirements that are different from those of residential and business customers. In addition, for various reasons, the call answer rates of auto-dialer traffic are likely to be lower than for standard traffic.").

[152] *See* NASUCA Comments at 20-21 ("[T]he exclusion of autodialers that are programmed for quick hang-ups would not appear to cause a problem, but exclusion of emergency autodialers should not be countenanced.").

[153] *See* Blooston Comments at 6-7 (noting that autodialer systems are increasingly being used to make emergency alert notifications and emergency closing and other announcements for schools and other institutions in rural areas and that there is anecdotal evidence of call completion problems with attempts generated by such systems).

undermine the reliability of the data for our purposes.[154] For these reasons, we require covered providers to include autodialer traffic in their recording, retention and reporting. Covered providers may, however, submit separate calculations in their reports to the Commission that segregate autodialer traffic from other traffic, accompanied by an explanation of the method the provider used to identify the autodialer traffic. This approach should help the Commission examine the effects of autodialer traffic on call completion rates and the degree to which those effects are magnified in more sparsely populated rural numbering blocks, as well as to identify more effective means of segregating this traffic.[155]

c. Inclusion or Exclusion of Certain Call Attempt Types

55. The *Notice* sought comment on the feasibility and appropriateness of including or excluding certain types of call attempts from the recording and retention requirements.[156] For the reasons set forth below, we include call attempts of very short duration and exclude call attempts handed back to an upstream provider and call attempts to toll-free numbers.[157]

56. *Calls of Short Duration*. The *Notice* sought comment on whether calls of very short duration, such as those lasting for less than two seconds, should be excluded from the recording and retention requirements.[158] Some commenters encourage the Commission to include these calls[159] while others contend that we should exclude these calls "because they are often wrong numbers, are made by

[154] We note that the Commission's rules governing telemarketing calls, 47 C.F.R. § 64.1200(a)(6)-(8), limit the ability of telemarketers to call consumers and hang up either before they answer or without providing any response when the called party receives the call. As a result, these rules limit the number of situations in which consumers may be confused by these types of telemarketing calls and wrongly attribute them to service issues. Autodialer traffic generally has a lower call answer rate, which can skew comparisons between providers (because some originating providers have more autodialer traffic than others) and between rural and nonrural areas (because some autodialers walk through numbers sequentially, and rural numbering is less dense and may therefore have more unassigned numbers than nonrural areas). In the context of telemarketing calls, a call is deemed "abandoned" if it is not connected to a live sales representative within two seconds of the called person's completed greeting. When a call is abandoned, the called person will typically hear only dead air after answering, even though the call has been completed, because no sales representative is available. In an effort to limit the number of abandoned calls generated by telemarketers, the Commission's rules prohibit abandoning more than 3% of all telemarketing calls that are answered live by a person, measured over a 30-day period. *See* 47 C.F.R. § 64.1200(a)(7). Many such telemarketing calls are made using autodialers. While abandoned calls are generally completed and therefore present an issue that is distinct from call completion issues, we note them because such calls may be misinterpreted by the called party as a dropped call when answered.

[155] As explained above, we require providers to retain the cause code indicating that a call was destined for an unassigned number. *See supra* para. 43 & note 120. To the extent autodialers send more calls to unassigned numbers, any effect on the call answer rate should be addressable by examining how many call attempts overall were made to unassigned numbers.

[156] *See Notice*, 28 FCC Rcd at 1578-79, paras. 27-30.

[157] The *Notice* also asked about the appropriate treatment of call attempts that generate user category release codes and call attempts to unassigned numbers. *Notice*, 28 FCC Rcd at 1578-79, para. 29. These subjects are addressed above in paragraph 43.

[158] *See Notice*, 28 FCC Rcd at 1579, para. 30.

[159] *See* Independent LECs Comments at 11; INS Comments at 19; PSCW Comments at 4. Both the Independent LECs and INS argue for the inclusion of these call attempts by contending that to exclude them would be to open a loophole in our call blocking ban. *See, e.g.*, *USF/ICC Transformation Order*, 26 FCC Rcd at 17903, 18028-29, paras. 734, 973-974; *2007 Declaratory Ruling*, 22 FCC Rcd 11629. Neither the Independent LECs nor INS, however, provides any support for this contention beyond conclusory statements. We nevertheless find that it is appropriate to include calls of very short duration for the reasons stated above.

mass dialers, and/or do not provide the called party ample time to answer."[160] We find that it is appropriate to include calls of short duration. While there are myriad reasons why a call may be very brief, a short call could reflect an inability to complete a call to the intended called party, a dropped call, poor call quality, or that the calling party hung up just as the called party answered, all of which are relevant to the issues the Commission is attempting to address. We thus conclude that calls of very short duration should be included in the recording and retention requirements. Covered providers may submit an explanation for any apparent anomalies when they submit their reports.

57. *Calls Handed Back*. The *Notice* proposed to exclude call attempts that are handed back to the upstream provider in order to avoid double-counting of the same phone call, and sought comment on the feasibility and appropriateness of doing so.[161] The record strongly supports the proposal and several commenters contend that it is "easily achievable,"[162] while CTIA claims that excluding these attempts will require the development of new systems to identify these calls.[163]

58. We find that excluding call attempts handed back to the upstream provider is both appropriate and practicable. To obtain a fair measure of total call attempts, we find it appropriate to exclude call attempts handed back to the upstream provider from the recording and retention requirements if the upstream provider makes further attempts to complete the call, whether on its own network or through a different intermediate provider. Covered providers should confirm that they have excluded such hand backs when reporting their results. Inteliquent observes that some providers, especially CMRS providers, are "unable to take back a call that an intermediate provider is unable to complete."[164] Our understanding is that calls are not handed back to originating providers in such cases, and these rules would not apply as there are no calls that are handed back and no new systems for detecting calls handed back would be required. Under those circumstances, there is no risk of double counting a single call attempt, so there is no need for CMRS providers to develop new systems to properly account for such calls.

59. *Toll-Free Numbers*. The *Notice* sought comment on whether calls to toll-free numbers can be reliably identified and excluded.[165] Some commenters argue that calls to toll-free numbers should be excluded, noting that in many instances it is the toll-free service provider, and not the originating

[160] Level 3 Comments at 11; *see also* Windstream Comments at 4 (arguing that calls of very short duration should be excluded).

[161] *See Notice*, 28 FCC Rcd at 1578, para. 28. In a typical arrangement, an intermediate provider must hand a call back to the upstream provider if it cannot expeditiously hand off the call attempt downstream, *e.g.*, to the terminating provider. *Id*.

[162] Level 3 Comments at 10; *see also* CenturyLink Comments at 15 (noting that it can identify and exclude these call attempts only in its capacity as an originating provider and not as a wholesale provider); Comcast Comments at 2, 7; Level 3 Comments at 8, 10 and Reply at 3; XO Comments at 6-7 and Reply at 11; Windstream Comments at 4 (stating that, while it does not currently have the ability to identify and exclude these call attempts, it is developing that capability and supports the proposal); NCTA Reply at 7 (supporting the exclusion of handbacks if the Commission continues to use CAR rather than NER); Rural Associations Reply at 18 (arguing that all providers are capable of identifying and excluding these call attempts).

[163] *See* CTIA Comments at 10; *see also* Inteliquent Reply at 10 ("[I]n Inteliquent's experience, some originating providers, especially CMRS providers, are technically unable to accept certain SS7 cause codes and take back a call that the intermediate provider is unable to complete.").

[164] Inteliquent Reply at 10.

[165] *See Notice*, 28 FCC Rcd at 1579, para. 30; *see also* 47 C.F.R. § 52.101(f) (defining a toll-free number as "[a] telephone number for which the toll charges for completed calls are paid by the toll free subscriber").

service provider, that controls the routing of those call attempts.[166] However, other commenters contend that calls to toll-free numbers should not be excluded from the recording and retention requirements.[167]

60. We conclude that calls to toll-free numbers should be excluded. In many instances, the originating provider has no control over the routing or the quality of call attempts to toll-free numbers,[168] and to include these call attempts in the recording and retention requirements would require covered providers to include data on call attempts for which they can take no remedial steps in the event of completion problems. We thus exclude call attempts to toll-free numbers from the recording and retention requirements.

d. Retention Period

61. The *Notice* proposed that covered providers retain call detail records in a readily retrievable form for at least six calendar months.[169] We find that the six-month retention period best balances the Commission's need for access to these data in support of its efforts to eliminate rural call completion problems, including enforcement actions, with the burden on providers associated with compliance. Some commenters support the six-month retention period, emphasizing the utility of the recording and retention requirements in the Commission's efforts to identify patterns of rural call completion problems and take enforcement action where appropriate.[170] Others urge us to adopt a longer[171] or shorter retention period.[172]

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[166] *See* Comcast Comments at 2, 8 ("As a practical matter, the originating service provider of a toll free call simply has no way to implement remedial measures if problems are detected."); Level 3 Comments at 11 (arguing that, because the terminating provider often directly pays the toll-free provider, the terminating provider controls completion and quality levels rather than the originating provider, and call attempts to toll-free numbers should thus be excluded).

[167] *See* PSCW Comments at 3-4 (asserting that many toll-free calls are routed in exactly the same way as other long-distance calls and pointing to call completion problems with toll-free calls in Wisconsin); NASUCA Comments at 21 and Reply at 19. PSCW states that "the provider queries the 800 database to determine that functional number to which the call will be routed. After that, the call is routed in the same manner as any other toll call." PSCW Comments at 3-4. While we agree that this is true for many toll-free calls, it is not true for many other—perhaps most—toll-free calls, for which the routing instructions returned from the provider's query can be much more complex and limiting. *See, e.g.*, North American Numbering Council (NANC), *Toll Free Resources Allocation,* May 14, 2010, at 2.3 Multiple Carrier Routing and Routing Facility, http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-308245A2.doc (describing routing instruction features that enable toll-free calls to be allocated among multiple carriers, routed differently depending on the time of day, state of origination, etc.).

[168] *See, e.g.*, North American Numbering Council (NANC), *Toll Free Resources Allocation,* May 14, 2010, at 2.3 Multiple Carrier Routing and Routing Facility, http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-308245A2.doc.

[169] *Notice*, 28 FCC Rcd at 1577, para. 22.

[170] *See, e.g.*, ITA Reply at 10 (stating that "[t]hese steps will improve the Commission's ability to monitor provider performance and will aid in meaningful enforcement against originating carriers and intermediate providers who elect to engage in unreasonable and unlawful conduct"); *see also* Level 3 Comments at 7 (stating that it "does not object to the requirement to capture and retain much of this information for a limited period of time, such as six months").

[171] *See* NASUCA Comments at 18 (suggesting that the Commission extend the retention period to one year to ensure that call data is available for examination in the event that there are indications of a pattern of poor performance in a carrier's completion of calls to rural areas); *see also* NJ Rate Counsel Reply at 7-8 (stating support for NASUCA's recommendation).

[172] *See, e.g.*, Frontier Comments at 9 (asserting that a three-month retention period would be more in line with current industry practices and would still allow the Commission to evaluate a significant set of data); Sprint Comments at 19 ("If there is a problem with call completion, the end user or the LEC will, in the vast majority of

(continued . . .)

62. A six-month retention period is consistent with our decision to require quarterly reporting to the Commission. If we were to adopt a shorter retention period, such as the three months suggested by some commenters,[173] the records underlying the first month reflected in the report might have been purged before the Commission had a reasonable opportunity to review the quarterly report. Alternatively, if the Commission adopted a shorter retention period, it likely would need to require more frequent reporting to provide time to review reports before covered providers purged call records summarized in the report. This increased reporting frequency, in turn, would increase the burden on covered providers. Thus we conclude that a six-month retention period (and quarterly reporting requirements) strikes the appropriate balance between the benefit of better ensuring satisfactory levels of call completion to rural areas and any associated burdens on covered providers.

63. Some commenters argue that the proposed six-month retention period is too burdensome, both in terms of up-front software and hardware costs required to develop the capability to retain this volume of data in a readily retrievable form, and in terms of ongoing personnel and systems costs associated with administering a data retention program.[174] These commenters characterize these up-front and ongoing costs as exceeding any benefits associated with a six-month retention period.[175] As other commenters point out, however, covered providers already collect, in the ordinary course of business, much if not all of the call data to be retained.[176]

64. We disagree with those commenters who contend that the development, storage, and personnel costs associated with the six-month retention period are too burdensome relative to any benefits resulting from the data retained. A number of potentially covered providers appear to already have in place the capability of complying with these rules.[177] We also note that Sprint's unsubstantiated contention that the proposed rules will cost billions of dollars industry-wide is based on several erroneous assumptions. For example, Sprint's assertion that the rules will apply to "hundreds or thousands of other originating carriers"[178] does not reflect the fact that our rules will apply only to providers that make the

(Continued from previous page)
cases, contact the originating carrier very soon after the problem occurs, not 6 months later."); Verizon Comments at 9 (arguing that the retention period should be reduced to three months in order to reduce the burden on carriers); XO Reply at 12-13 (stating support for Verizon's proposal that the retention period be reduced to three months).

[173] *See* Frontier Comments at 9; Verizon Comments at 9; Sprint Comments at 19; XO Reply at 12-13.

[174] *See, e.g.*, CenturyLink Reply at 7 ("To expand these to hold six months of data would require significant cost and effort, as well as additional IT development to manage and enable single call retrieval capabilities."); HyperCube Comments at 14 (arguing that many providers would have to purchase, deploy, and maintain new data storage and retrieval systems to comply with the rules).

[175] *See* Sprint Comments at 18 (estimating monthly operational costs of $550,000 and annual personnel costs of $200,000, and extrapolating those figures to assert that the proposed rules will impose industry-wide annual costs in the billions of dollars); *see also* CTIA Comments at 4; COMPTEL Comments at 8; Verizon Reply at 5; Frontier Comments at 7 (all generally characterizing the proposed rules as overly burdensome).

[176] *See*, *e.g.*, Rural Associations Reply at 3; Comcast Comments at 3; CenturyLink Comments at 12 ("The sources currently used by CenturyLink for data associated with its legacy Qwest long-distance network capture the information proposed by the FCC.").

[177] *See, e.g.*, Comcast Comments at 3 ("Comcast already collects the call detail information proposed in the *Notice* for every originating Comcast interexchange call as part of the company's internal service quality program."); Vonage Reply at 3 ("Vonage believes that the Commission's proposal concerning reporting and data retention requirements are reasonable and strike the correct balance between the Commission's twin goals of effectively addressing rural call completion issues in a timely manner and not placing an excessive economic burden on service providers."); Level 3 Comments at 6 ("Level 3 does not object to the requirement to capture and retain much of this information for a limited period of time, such as six months.").

[178] Sprint Comments at 18.

initial long-distance call path choice for more than 100,000 domestic retail subscriber lines.[179] In addition, the retention obligation applies only to call attempts to incumbent LECs that are rural telephone companies, which reduces the burden on covered providers.[180] We therefore find that imposing a six-month retention period is not unduly burdensome, relative to the significant harm of call completion problems and the expected benefits of retaining the data and having access to the data underlying the periodic reports.

4. Reporting Requirements

65. We require covered providers to submit a certified report to the Commission once per calendar quarter that includes for each full month in that quarter: (1) for each rural OCN, the OCN, the state, the total number of attempted interstate calls, the number of attempted interstate calls that were answered, and the number of attempted interstate calls that were not answered, reported separately for call attempts signaled as busy, ring no answer, or unassigned number; (2) the same information described in (1), but for intrastate calls; (3) the same information regarding attempted interstate calls described in (1), but for nonrural OCNs in the aggregate; and (4) the same information regarding attempted intrastate calls described in (2), but for nonrural OCNs in the aggregate. Using these data, we will calculate the percentage of calls answered (the call answer rate) and the percentage of calls completed to the terminating provider regardless of whether answered or unanswered by the user (the network effectiveness ratio). We will also calculate the totals and values for the rural OCNs in the aggregate. The categories of call attempts and what constitutes a call attempt are addressed above in section III.A.3. As proposed in the *Notice*, the reports will be submitted in electronic form using a template specified by the Commission.[181]

66. In Appendix C, we provide a template of the mandatory report in the form of an electronic spreadsheet that will be filed with the Commission each quarter.[182] As noted above, covered providers must include autodialer traffic in their reports, but they may submit separate calculations that segregate autodialer traffic from other traffic, accompanied by an explanation of the method the provider used to identify the autodialer traffic.[183] Before any reports are due, the Wireline Competition Bureau will release a public notice that explains the filing mechanism in detail. Bureau staff will work with providers to ensure that the providers have the tools they need to complete and file the form in the least burdensome manner possible. Because the reporting requirements are an information collection, no reports will be required until the collection has been approved by OMB under the Paperwork Reduction Act.[184] The effective date of the information collections in these rules will be announced in the Federal Register, and covered providers must begin recording the data included in the reports they file with the Commission on the first day of the calendar month that is at least 20 days after the effective date.[185]

67. Originating long-distance voice service providers that do not make the initial long-distance call path decision for more than 100,000 domestic retail subscriber lines are not required to

[179] Sprint's estimates also do not distinguish between potential one-time costs and recurring costs; it appears to assume that all costs are recurring. Sprint also does not account for the fact that some covered providers already collect and retain these records, and thus will have minimal, if any, incremental compliance costs.

[180] *See supra* para. 50.

[181] *Notice*, 28 FCC Rcd at 1576, para. 20.

[182] The template represents a worksheet for a single month. Other worksheets in the spreadsheet are for the second and third month in the quarter being reported and for optional exclusion of autodialer numbers. The electronic spreadsheet will be provided by the Commission.

[183] *See supra* para. 55.

[184] Paperwork Reduction Act, 44 U.S.C. §§ 3501-3521.

[185] *See supra* para. 41.

comply with these recording and reporting requirements. Rather, the entity or entities that make the initial long-distance call path decision for calls from those providers' end-user customers must record and report data for those calls. To address rural call completion problems, it is important to ensure that call attempts from all originating long-distance providers that have more than 100,000 domestic retail subscriber lines but do not make the initial long-distance call path choice are accounted for in the reports we receive. Accordingly, we require all originating long-distance voice service providers that have more than 100,000 domestic retail subscriber lines but that, for reasons set forth in this paragraph, are not required to file quarterly reports to file a one-time letter in WC Docket No. 13-39 explaining that they do not make the initial long-distance call path choice for more than 100,000 long-distance voice service subscriber lines and identifying the long-distance provider or providers to which they hand off their end-user customers' calls. This letter must be submitted to the Commission by the date on which recording and retention is required to begin, and a copy must be submitted simultaneously to each provider identified in the letter as having reporting responsibility.

5. Call Answer Rate and Related Information

68. The *Notice* proposed to require that providers report the call answer rate for each rural OCN, for all rural OCNs in the aggregate, and for nonrural OCNs in the aggregate, and report the call answer rates separately for interstate and intrastate calls. After reviewing the record, we require covered providers to report data that will allow the Commission to calculate the call answer rate, rather than requiring them to report the call answer rate itself. We also require covered providers to report data regarding unanswered calls. Specifically, we require covered providers to report, for each rural OCN and for nonrural OCNs in the aggregate but separated by interstate and intrastate call attempts: (a) the total number of call attempts; (b) the number of answered calls; (c) the number of call attempts that result in "busy" code; (d) the number of call attempts that result in a "ring no answer" code; and (e) the number of call attempts for which the called number was reported to be unassigned. Collecting these data points individually will enable the Commission to calculate—for each rural OCN, for all rural OCNs in the aggregate, and for nonrural OCNs in the aggregate—both the call answer rate and the network effectiveness ratio (NER), and will provide the Commission with better insight into the reasons why calls are not answered or not reaching their destinations.[186] We emphasize that because the report includes data for both rural and nonrural call attempts, covered providers must file reports even if they deliver no calls to rural OCNs.

69. The call answer rate that the *Notice* described, which divides the number of calls answered by the total number of call attempts, is similar to the answer/seizure ratio (ASR), the analogous TDM voice network metric, which is often "used as a means of identifying possible changes in performance of a service."[187] Using these data, we can calculate call answer rates, and thus the data are a

[186] *See ITU-T Recommendation E.425* at 3 (explaining that NER is designed to express the ability of networks to deliver calls to the far-end terminal, that NER expresses the relationship between the number of seizures and the sum of the number of seizures resulting in either an answer message, or a user busy, or a ring no answer, or in the case of ISDN a terminal rejection/unavailability, and that, unlike ASR, NER excludes the effects of customer behavior and terminal behavior); *see also id.* at 4 (explaining that a call attempt to a network vacant code caused by customer dialing error that is detected by screening shall not result in a seizure being counted). Therefore, we subtract calls to unassigned numbers from the number of attempted calls when calculating the call answer rate and the network effectiveness ratio. For purposes of this Order, an unassigned number is one for which a call cannot be completed because it is not assigned to an end user.

[187] Hardy, William C., *QoS: Measurement and Evaluation of Telecommunications Quality of Service*, John Wiley & Sons Ltd, 2001 ("[W]hen ASRs are used as a means of identifying possible changes in performance of a service, the decision supported is one of where to look for possible problems, and the indications from analysis of ASRs provide information that might otherwise be unavailable or submerged in masses of maintenance data. The only penalty for a wrong decision in this case is the effort expended in pursuing what turns out to have been a false alarm, and this penalty will be adequately off-set by the benefits of pursuing indications from analyses of ASRs, as long as a

(continued . . .)

valuable metric in assisting the Commission in comparing performance across providers to uncover the source of rural call completion problems. Indeed, the call answer rate is a reasonably reliable measure because, for many users, the answer signaling message generates a billing record.

70. Several commenters urge the Commission to require covered providers to report the NER in addition to the call answer rate.[188] One commenter notes that call answer rates may differ based on local adoption rates of voice-mail service, answering machines, and fax machines and observes that because "ring no-answer" and "end user busy" calls are treated the same as answered calls in calculating the NER, it may be superior to the call answer rate.[189] Some commenters go further to propose that we require providers to report only the NER, instead of the call answer rate.[190] Other commenters disagree and assert that the Commission should not require covered providers to report the additional call data that has been suggested because it would be too burdensome and potentially inaccurate.[191]

71. After reviewing the record, we agree with commenters that we should require providers to report information beyond the call answer rate. As noted above, we require providers to retain certain cause code information from which providers and the Commission can calculate the NER as well as certain specific percentages regarding unanswered calls, such as the percent of call attempts that resulted in a busy signal.[192] While we agree that additional data will be useful in identifying the causes of rural call completion problems, we do not agree with commenters who suggest that we should require reporting of the NER in lieu of the call answer rate. First, the call answer rate is the data point least susceptible to variations in data reporting or to differences in the quality or accuracy of signaling: the called party either answered the call or did not answer the call. The NER, by contrast, standing alone and viewed only from the originating provider's perspective, does not similarly validate whether the call ultimately reached its destination. For example, the NER calculation is dependent on reliable signaling—because it treats "user" cause code signals the same as a completed call, any incorrect or falsified signals could mask problems such as looping or intentional blocking within the network while maintaining a high NER.[193] For instance, busy signals are sometimes injected by intermediate providers, rather than handing back the

(Continued from previous page)
sufficient proportion of those indications do surface latent problems.")
http://onlinelibrary.wiley.com/doi/10.1002/0470845910.app3/pdf (last accessed Oct. 25, 2013).

[188] *See, e.g.*, Rural Associations Reply at 17.

[189] Rural Associations Comments at 15-16.

[190] Comcast Comments at 8-9; TWC Comments at 9-10. Some commenters advocated reporting the NER simply as a percentage, while others encouraged the Commission to include the underlying cause codes used to calculate the NER. *Compare, e.g.*, Comcast Comments at 9-10 ("As a result, NER may be a more useful call completion metric, since it measures the percentage of call failures that can be ascribed to *network* problems"), *with* NECA Comments at ii ("The Rural Associations support collection of data necessary to permit development of a Call Answer Rate (CAR), but recommend the Commission also collect data to permit calculation of a Network Effectiveness Ratio (NER) as well.")

[191] *See* XO Reply at 14 ("While XO understands the value in reviewing these metrics and itself monitors such metrics for its intermediate carriers on a targeted basis, XO is not able to easily compile this data for submission to the Commission without a considerable amount of time and development."); Level 3 Reply at 2 ("Upstream providers cannot always be assured that the signaling information provided to them from downstream entities is accurate . . . .").

[192] *See supra* paras. 42-43.

[193] *See* CenturyLink Comments at 16 (describing CenturyLink's process for contacting intermediate and terminating providers to resolve signaling discrepancies its monitoring uncovers). "Looping" occurs when a call cycles back and forth between networks without ever reaching its destination. Alliance for Telecommunications Industry Solutions, *Intercarrier Call Completion/Call Termination Handbook* at 4.1.3 (2012) (*ATIS Handbook*), *available at* https://www.atis.org/docstore/product.aspx?id=26780 (last accessed Oct. 25, 2013); *see also* Figure 1. Basic Example of Long Distance Call Loop, *ATIS Handbook* at 4.3.6.

call when they cannot find a route.[194] Accordingly, we require covered providers to report data that will allow us to calculate the NER in addition to the call answer rate. In Appendix C, we provide a specific template that covered providers will use in reporting their data, which will capture the information described above while accommodating differences in the specific cause codes or other data that providers may have, to give them flexibility to report such data based on their own network configurations.[195]

72. *"Answered call."* The *Notice* defined the term "answered call" to mean "a call that is answered by the called party, including by voicemail service, facsimile machine or answering machine."[196] One commenter recommends that we expand the definition of "answered call" to mean "a call that was answered by or on behalf of the called party (including calls completed to devices, services or parties that answer the call such as an interactive voice response, answering service, voicemail or call-forwarding system or any such system that cause the network to register that the terminating party has gone off hook)."[197] We adopt this recommendation, with some modification, because we conclude it is more comprehensive. Thus the term "answered call" means a call that was answered by or on behalf of the called party (including calls completed to devices, services or parties that answer the call such as an interactive voice response, answering service, voicemail or call-forwarding system), causing the network to register that the terminating party is prepared to receive information from the calling user.

a. Reporting by Operating Company Number

73. We require each covered provider to report monthly information for each rural OCN to which the provider attempted to deliver calls.[198] As the *Notice* explained, it is necessary to measure performance at the individual rural incumbent LEC level, as identified by OCN, to ensure that poor performance to any individual rural incumbent LEC is not masked, as it otherwise would be by averaging together calls to all rural incumbent LECs, or averaging call data for rural and nonrural areas.[199] Some commenters support reporting the data for each rural operating company as proposed,[200] and several covered providers state that they can readily satisfy a requirement of reporting for each rural operating company.[201] As noted above, the Commission proposed a list of rural OCNs, to be maintained by NECA, for which call completion performance must be recorded, retained, and reported, and it sought comment on the completeness of the list and its suitability for use upon adoption of the rules proposed in the *Notice*.[202] We received no comment opposing the use of this list or arguing that it was overinclusive or

[194] *See ITU-T Recommendation E.425* at 8.

[195] Providers using IP technology may receive cause codes via SIP that have different values than the cause codes generated by SS7 technology, but reflect essentially the same outcomes. The SIP cause code for a busy signal, for example, is "486," while the SS7 cause code for a busy signal is "cause value 17." We intend for our data requirements to be sufficiently flexible to accommodate differences in signaling technology.

[196] *Notice*, 28 FCC Rcd at 1578, 1586, para. 27, Appx. A.

[197] Level 3 Comments at 11-12.

[198] As noted above, covered providers are not required to include calls to terminating CLECs. *See supra* para. 49.

[199] *Notice*, 28 FCC Rcd at 1575-76, para.20.

[200] *See, e.g.*, NJ Rate Counsel Comments at 7 ("Rate Counsel supports the specific reporting requirements outlined in the NPRM."); California PUC Comments at 5 ("[T]he CPUC supports the Commission's proposal to collect data on call answer rates."); Vonage Reply at 3 ("[T]he Commission's proposal[s] concerning reporting and data retention requirements are reasonable.").

[201] Comcast Comments at 3 ("Comcast already collects the call detail information proposed in the *Notice* for every originating Comcast interexchange call."); Vonage Comments at 6-7 ("Vonage does not object to this proposed quarterly reporting system."); *see also* Verizon Comments at 9 (noting that Verizon has measured call completion rates for individual rural OCNs).

[202] *See supra* para. 9; *see also List of Rural OCNs Public Notice*, 28 FCC Rcd 5190.

underinclusive in any way, and we believe that the proposed list will provide the Commission with the data we need to achieve the objectives identified in this Order. Therefore, we conclude that covered providers must use the rural OCN list as proposed in the *List of Rural OCNs Public Notice*. To further improve administration of the recording and reporting process, the Wireline Competition Bureau will release a public notice shortly after release of this Order providing a list, also compiled and maintained by NECA, of OCNs associated with incumbent LECs that are *not* rural telephone companies; covered providers must use this list to compile the data for nonrural call attempts that must be recorded and reported to the Commission under these rules. Once the information collections in the Order become effective, we direct NECA to update the lists of rural and nonrural OCNs annually and provide them to the Wireline Competition Bureau in time for the Bureau to publish the lists no later than November 15. For purposes of complying with the recording and reporting rules adopted herein, those lists will define the rural OCNs and nonrural OCNs at issue for the following calendar year.

74. Other commenters support the proposed reporting while suggesting that additional data should also be reported.[203] We find that the data that will be reported under this Order should be sufficient to enable the Commission to analyze and address rural call completion problems, and thus we do not expect the benefits of reporting the proposed additional data to outweigh the burdens of doing so.

75. Some commenters indicate that they do not categorize calls by terminating OCN and that to do so would be burdensome.[204] We are not convinced that the requirement is unreasonable or overly burdensome. To make the routing selection for a call, a provider typically begins with the same level of identification of the called number. As we have noted, several originating providers already categorize calls by OCN in order to analyze their performance to rural areas.[205] Indeed, these data seem essential to providers for distinguishing rural and nonrural calls and performance, the very problem we seek to address through this proceeding. We understand that there are several commercial reference databases available for identifying the OCNs for all domestic telephone numbers.[206] We thus find that any burden to these covered providers is outweighed by the importance of this information to meeting our statutory obligations.[207]

b. Reporting for OCNs with 100 Attempts or More

76. The *Notice* proposed that covered long-distance providers be required to report the call answer rate for those rural OCNs to which 100 or more calls were attempted during the month, and also the call attempt and answer data on which the calculation is based.[208] Some commenters have proposed that we increase the threshold to as many as 1,000 attempts per month to limit the number of OCNs being

[203] *See, e.g.*, NARUC Comments at 8 ("While NARUC supports data collection as one of the steps the FCC could take, the FCC should also emphasize the need to understand why calls fail and move promptly to resolve the underlying issues."); *accord* Joint State Commissions Comments at 2-3.

[204] Frontier Comments at 8 ("[I]nformation on whether the called party was assigned to a rural telephone company—would prove difficult to implement".); HyperCube Comments at 14 ("The proposed rules will therefore require the development of costly new processes by affected providers to categorize each long distance call by rural and nonrural OCN.").

[205] *See supra* note 201.

[206] *See, e.g.*, Neustar, Numbering Portal Port PS, http://portps-legacy.neustar.biz/ (last accessed Oct. 25, 2013); CCMI rate center databases, http://www.ccmi.com/Products/QTEL/RateCenter (last accessed Oct. 25, 2013).

[207] *See* 47 U.S.C. §§ 151, 201(b), 202(a).

[208] *Notice*, 28 FCC Rcd at 1575-76, para. 20.

reported,[209] and others proposed substantially reducing the threshold, including removing the threshold completely.[210]

77. We agree with the commenters who recommend that we eliminate the minimum calls per month threshold for reporting by rural OCN. As some commenters observe, all attempts have to be counted by OCN before a provider can then exclude those below a threshold from the submitted report and it is less burdensome to simply report complete results for all OCN results than it is to take the additional step of applying a threshold before doing so.[211] In addition to being less burdensome on covered providers, this adjustment will permit the Commission to more reliably study data aggregated across all providers for an individual OCN. The Commission will weigh the statistical significance of the data on OCNs with small numbers of call attempts per month that it will likely receive from covered providers in their individual reports.

c. Reporting for Peak Periods Only

78. The *Notice* asked whether reports should cover all call attempts or just those attempted in some peak period, such as between noon and 6:00 p.m. Eastern time.[212] Commenters generally opposed limiting call attempts to those made during a peak period.[213] The Rural Associations observe that "[l]imiting reporting to peak hours suggests call failures are attributable solely to network congestion."[214]

79. We conclude that we will obtain the most informative data by collecting data on all call attempts, rather than attempts during a peak period. While we recognize that a disproportionate percentage of call failures may be attributable to intermediate providers whose facilities are poorly engineered or inadequately sized for loads occurring during peak hours,[215] there is little support in the record for limiting reporting to peak periods and strong support for requiring reporting that covers all call attempts. To the extent that a covered provider requires data on peak periods data to analyze call completion problems, the provider can extract that information from the data it collects on all calls.

d. Reporting Monthly Measurements

80. The *Notice* proposed that the call answer rates for rural OCNs be calculated over a month-long period, asked if a different measurement period would be more appropriate, and asked whether the nature of chronic call routing failures might be such that measurement data analyzed monthly masks problems that, for example, a weekly measurement period would better capture.[216]

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[209] Frontier Comments at 7; Comcast Reply at 5.

[210] State Associations Comments at 6-7; Independent LECs Comments at 11-12; Blooston Comments at 4; ATIS Comments at 5; Letter from Geoffrey A. Feiss, General Manager, Montana Telecommunications Association, to Marlene Dortch, Secretary, FCC, WC Docket No. 13-39 at 3 (filed Apr. 30, 2013) (*April 2013 MTA Letter*).

[211] Rural Associations Reply at 16; CTIA Comments at 10; INS Reply at 16.

[212] *Notice*, 28 FCC Rcd at 1576, para.21.

[213] *See, e.g.*, CenturyLink Comments at 13; COMPTEL Comments at 8; INS Comments at 12; Missouri PSC at 4; NASUCA Comments at 17; NJRC Comments at 8.

[214] Rural Associations Comments at 11.

[215] HyperCube's busy-hour testing of intermediate providers according to the price they charge for terminating a call to a particular rural LEC appears to bear this out. *See* Letter from Helen E. Disenhaus, Counsel for HyperCube Telecom LLC, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 13-39 (filed July 22, 2013) ("Case Study #4 South Carolina RLEC . . . Low-Cost Vendor [Call Completion Rate] at Busy Hour: 18% NER; Mid-Cost Vendor CCR at Busy Hour: 20% NER; High-Cost Vendor CCR at Busy Hour: 99% NER; CCR at Quiet Hour: 95% NER for all vendors").

[216] *Notice*, 28 FCC Rcd at 1575-76, paras. 20-21.

81. Comments vary widely on the approach to take. One carrier states that it can gain significant insight from a one-day snapshot[217] while another recommends that the measurement period should be the whole quarter.[218] Other commenters propose collecting data over a three-day period each month[219] or a peak-period measurement during one sample week each month.[220] One commenter asserts that a weekly measurement period would be more likely to capture intermittent problems.[221] Other commenters accept the month-long measurement period and some oppose reducing the reporting interval to less than a calendar month.[222] Two commenters state that they are comfortable with using a monthly measurement period initially, while noting that the Commission could reduce the period in the future if one month proves inadequate.[223]

82. We adopt the proposed monthly measurement interval. As we develop experience, we may reconsider this decision. At present, the record indicates that monthly measurements are reasonably calculated to provide a reasonable snapshot of performance. We again note that for problem identification and analysis purposes, providers can extract data for smaller time spans, such as weekly figures, from the complete set of data they collect.

e. Timing and Frequency of Reports

83. We proposed in the *Notice* that reports be filed quarterly with the Commission and asked on what dates they should be filed.[224] Several commenters support reporting no more frequently than quarterly if reporting rules are adopted.[225] Other commenters recommend that call attempt data be reported monthly in the interest of timely reporting of problems.[226] Another commenter concerned about

[217] Verizon Comments at 9 ("[I]t may be possible for some carriers to derive sufficient insight into call completion performance from a series of as little as one-day snapshots of data. Verizon found that for one randomly selected day in August 2012, over 96% of the rural OCNs had more than the 100 call attempt threshold proposed in the Notice.").

[218] Level 3 Comments at 16 ("Call reporting should be quarterly and should cover the whole quarter, rather than dividing into months or weeks as monitoring periods.").

[219] Sprint Comments at 19 ("[T]he Commission should allow the originating carrier to instead do a statistically significant sample study—for example, to collect data for a 3-day period each month rather than a full month's data, or to conduct a week-long special study once per quarter.").

[220] Windstream Comments at 2 ("[C]arriers should be required to report only on OCNs with 1,000 or more call attempts during a peak period in a sample week for a calendar month.").

[221] Rural Associations Comments at 11 ("The Commission should require originating providers to measure and record rural call completion data on a weekly basis. This approach is more granular than the monthly standard proposed in the NPRM, but is much more likely to capture the kinds of intermittent problems that plague consumers today . . . .").

[222] CenturyLink Comments at 10; ATIS Comments at 5; Comcast Comments at 4; State Associations Comments at 5-6.

[223] COMPTEL Comments at 9 ("If the Commission determines at some point in the future that the monthly measurement and quarterly reporting requirements together with the input it receives from rural carriers and customers are inadequate to identify and correct chronic call routing failures, it can then solicit comment on whether weekly measurement requirements should be adopted."); NASUCA Comments at 17 ("[M]onthly reporting should be adequate. Weekly reporting should not be necessary, although such a short interval would be appropriate for a carrier 'under suspicion.'").

[224] *Notice*, 28 FCC Rcd at 1576, paras. 20-21.

[225] Comcast Comments at 4; Level 3 Comments at 16; XO Reply at 12; *see also* COMPTEL Comments at 8.

[226] *See* INS Comments at 13 ("The data in a quarterly submission could already be stale and of little use by the time it is filed with the Commission."); NARUC Comments at 7 ("Initially, the FCC should require monthly report for nine months or three quarters.").

the timeliness of reporting recommends that covered providers submit three "rolling" months of data once a month.[227]

84. Some parties raise concern that reporting more frequently than quarterly would be unduly burdensome.[228] To minimize the burden while providing the Commission with sufficient information, we adopt a quarterly reporting interval. Concerning when the reports should be filed, we agree with commenters that assert that once reporting systems and procedures are deployed, they should be able to produce the quarterly electronic spreadsheet submission before the end of the following calendar month.[229] Therefore, we conclude that quarterly reports will be due on February 1 (reflecting monthly data from October through December), May 1 (reflecting monthly data from January through March), August 1 (reflecting monthly data from April through June), and November 1 (reflecting monthly data from July through September) of each year.

6. Safe Harbors

85. The *Notice* proposed two safe harbors by which providers could reduce their obligations under the data reporting and retention obligations. The first safe harbor was described as the "Managing Intermediate Provider Safe Harbor."[230] Under this safe harbor, as proposed, a provider could have no more than two intermediate providers in a given call path before the call reaches the terminating provider. The second safe harbor, described as the "Monitoring Performance Safe Harbor," would provide some relief from the proposed rules to providers meeting certain performance standards.[231] We adopt the Managing Intermediate Provider Safe Harbor in part, and to create incentives for providers to improve their rural call completion performance immediately, we provide a means for providers that have taken significant steps and adopted measures to ensure calls to rural areas are being completed, such as adoption of industry best practices, to seek a waiver of these data-related obligations. We do not adopt the Monitoring Performance Safe Harbor.

86. *Managing Intermediate Provider Safe Harbor*. We adopt the Managing Intermediate Provider Safe Harbor in part, to reduce a qualifying provider's reporting obligations and reduce the data retention obligations from six months to three months. Qualifying covered providers must comply with the reporting requirements for one year and must retain the call detail records described above in a readily retrievable form for only three calendar months, but must have three full months of data available at all times. To qualify, a provider must certify on an annual basis either that it uses no intermediate providers, or that all of its contracts with directly connected intermediate providers allow those intermediate providers to pass a call to no more than one additional intermediate provider (that is, a total of no more than two intermediate providers in the call path) before the call reaches the terminating provider or terminating tandem. The provider must further certify that any nondisclosure agreement with an intermediate provider permits the covered provider to reveal the identity of the directly connected intermediate provider and any additional intermediate provider to the Commission and to the rural carrier(s) whose incoming long-distance calls are affected by intermediate provider performance. Finally,

[227] NJ Rate Counsel Comments at 7 ("[T]he FCC should require carriers to submit three-months of data on a monthly basis through electronic submission. For example, the first three-month report could encompass data for January, February, and March; the second three-month report would include data for February, March and April."); *see also* NJ Rate Counsel Reply at 6-7; Level 3 Comments at 16-17 ("A month period between the end of the quarter and the reporting date would allow sufficient time to assemble the data and transmit it to the Commission.").

[228] *See* Level 3 Comments at 16-17; XO Reply at 12-13.

[229] NJ Rate Counsel Reply at 6-7 ("[W]ith today's sophisticated software [industry] should be able to submit data each month, within 30 days after the end of the month, for the previous three months' performance without much additional burden."); Level 3 Comments at 17; Comcast Comments at 4.

[230] *Notice*, 28 FCC Rcd at 1580, para. 33.

[231] *Notice*, 28 FCC Rcd at 1580, para. 35.

the provider must certify that if it uses intermediate providers, it has a process in place to monitor the performance of its intermediate providers.[232] Providers may utilize the safe harbor by filing a certification on any of the four quarterly filing dates throughout the year (and filings are due annually thereafter). Thus, a provider does not need to wait until the next annual certification to take advantage of the safe harbor. At the same time, a provider must comply with our full data retention and reporting obligations for any quarter in which it no longer qualifies for the safe harbor (i.e., its business practices cease to comply with the terms of its certification).

87. Several commenters oppose this safe harbor, expressing skepticism about its efficacy in preventing rural call completion problems.[233] NARUC and the rural associations describe the safe harbor as premature until it can be validated by a history of reporting.[234] We disagree. Our experience in investigating and resolving rural call completion complaints suggests that problems with routing calls to rural areas typically arise where more than two intermediate providers are involved in transmitting a call. An originating provider that limits the intermediate providers in the call path to two is better able to manage performance to rural destinations than an originating provider that sends calls through numerous intermediate providers, the identities of which the originating provider may not even know.[235] We agree that "[l]imiting the number of intermediate providers that may handle a call limits the potential for lengthy call setup delays and looping."[236]

88. Moreover, our examination of carrier practices during enforcement proceedings and when responding to complaints has revealed that the proliferation of rural call completion problems in recent years has coincided with the proliferation of intermediate providers, the use of which appears to contribute to call completion problems and often results in nearly untraceable call routes. This situation has arisen after decades of uncontroversial, well-functioning use of intermediate providers for least-cost routing. This suggests that a provider that has a manageable network with few intermediate providers in a call path will provide better performance.

89. We do, however, modify the proposed safe harbor by requiring the same reporting for a period of one year as for providers not invoking the safe harbor and requiring the same recording

[232] We expect this process to include monitoring intermediate providers' performance in completing calls to rural areas.

[233] *See, e.g.*, Blooston Comments at 6 ("There is no evidence at this time that the use of only one or two intermediate providers is any less problematic than the use of more than two intermediate providers."); NASUCA Reply at 21 ("[A] carrier's limiting the number of intermediate providers, disclosing the identify of that intermediate provider to the Commission and to affected rural carriers and, most importantly, having a process in place to monitor the intermediate provider's performance, provides no assurance for customers that the monitoring will actually result in action against a provider's sub-par performance."); ANPI Comments at 10 ("Such a certification provides no assurance that the contract is enforceable, or that there is any incentive to enforce the contract."); *see also* INS Comments at 17; Independent LECs Comments at 12; NJ Rate Counsel Reply at 22.

[234] NARUC Comments at 11; Rural Associations Reply at 19.

[235] *See, e.g.,* Bandwidth Comments at 6-7 ("A single call may go through three or more intermediate providers, some of whom may not consider themselves to be 'telecommunications carriers' at all, before being handed off to the terminating local exchange carrier ('LEC'). In such situations, it is not clear how the originating provider can track and report the call completion data required under the proposed rules without substantial cooperation from the numerous intermediate carriers involved in the call path, providers who may not be required by their contracts to provide such information. In fact, in many instances, the originating provider may not have privity of contract with one or more of the intermediate providers").

[236] COMPTEL Comments at 5; *see also* ATIS Comments at 6; AT&T Comments at 3; *ATIS Handbook*, *available at* https://www.atis.org/docstore/product.aspx?id=26780 (last accessed Oct. 25, 2013) ("As the number of providers handling a call increases, there is the potential for lengthier call setup delay and other impairments. Troubleshooting may also prove more difficult. Some carriers have found it useful to limit underlying carriers to including no more than one additional provider, not including the terminating carrier, in the call.").

requirements, but limit the retention period to three full calendar months rather than six.[237] One year of reporting will provide the Commission with data on completion rates from safe-harbor qualifiers to ensure that such providers are achieving satisfactory rural call completion performance. Furthermore, the recording requirements ensure that the providers have the data available should there be a need to initiate investigation. And, we believe that, absent any retention requirements, providers may have an incentive to purge data quickly to avoid having relevant information for any possible investigation.

90. Even so, we reduce the burden by limiting reporting to one year and retention to three months of data for several reasons. First, we want to encourage providers to take advantage of the safe harbor and expect fewer rural call completion issues, if any, to arise regarding providers that qualify for the safe harbor. Several providers encouraged the Commission to adopt a three-month retention period to reduce the burden.[238] Second, the Enforcement Bureau is already able to require providers to retain these records for a longer period of time and may revoke a provider's use of this safe harbor if that provider fails to comply with the safe harbor requirements.[239] Third, because we expect rural call completion to be less of a problem for safe-harbor qualifiers, our concern that six months of record retention is necessary to ensure that the first month of data reflected in any report has not been purged before the Commission has had a reasonable opportunity to review the quarterly report is mitigated here.[240]

91. Some commenters seek clarification on whether, if a provider other than the terminating rural ILEC operates the terminating tandem switch, that provider counts as an intermediate provider for purposes of eligibility for this safe harbor.[241] We clarify that it does not. Our experience in investigating rural call completion complaints indicates that when a call does reach the terminating tandem, regardless of ownership, it is completed by the rural ILEC with a very high degree of reliability. Accordingly, if a provider merely operates a terminating tandem that delivers traffic to a rural ILEC, delivering traffic to the terminating tandem operated by that provider does not count as using an additional intermediate provider for purposes of this safe harbor.[242]

92. One commenter seeks clarification concerning the categorization of an intermediate provider that operates a comprehensive network of organizationally separate affiliates.[243] We agree that

[237] The reporting period for providers invoking the safe harbor will begin at the time they invoke the safe harbor and continue for one year.

[238] *See, e.g.*, Frontier Comments at 9 (asserting that a three-month retention period would be more in line with current industry practices and would still allow the Commission to evaluate a significant set of data); Sprint Comments at 19 ("If there is a problem with call completion, the end user or the LEC will, in the vast majority of cases, contact the originating carrier very soon after the problem occurs, not 6 months later."); Verizon Comments at 9 (arguing that the retention period should be reduced to three months in order to reduce the burden on carriers); XO Reply at 12-13 (stating support for Verizon's proposal that the retention period be reduced to three months).

[239] *See infra* para. 94.

[240] *See supra* para. 62.

[241] CTIA Comments at 8 ("Many rural ILECs can only be reached through tandems owned by other carriers, such as a larger regional ILEC or a state access network. Neither originating long distance carriers nor their intermediate carriers have any involvement in the selection of these tandem providers, and also have no control over their performance. As a result, such carriers should not 'count' towards the total number of carriers attributed to the reporting carrier for purposes of the safe harbor."); *see also* Wisconsin PSC Comments at 4-5; Inteliquent Reply at 10.

[242] If, however, an intermediate provider delivers traffic to the tandem operator somewhere other than the terminating tandem—so, for example, the tandem operator also provides transport on the network side of the tandem—then that provider *does* count as an intermediate provider for purposes of this safe harbor.

[243] IntelePeer Comments at 5-6 ("For example, Verizon has over 200 affiliates registered as Form 499A Filers on the Commission's website. If an intermediary provider hands a call to a Verizon carrier entity, the call should not be limited to the network allocated to only that one entity . . . . [T]he Commission should clarify that 'one additional (continued . . .)

an intermediate provider at either the first or second level includes all of the intermediate provider's affiliates.

93. Finally, the *Notice* proposed that originating providers maintain a self-certified monitoring process to qualify for this safe harbor. Many commenters indicate that they monitor the performance of their first-level intermediate providers using a variety of key performance measures including but not limited to overall answer-seizure ratio (ASR), network effectiveness ratio (NER), and post-dial delay.[244] One interexchange carrier requested additional guidance.[245] Because we want to encourage providers covered by the safe harbor to analyze their own performance and that of any intermediate providers, we do not require qualifying providers to use any particular process. Instead, we require that they describe the process they use to monitor their intermediate providers in their annual filings certifying compliance with the safe harbor.

94. We note that this safe harbor decreases reporting and data retention obligations for a covered provider, but is not a safe harbor from the Commission's normal investigatory processes. For example, the Commission will continue to serve rural call completion complaints from consumers and rural carriers on service providers that invoke the safe harbor.[246] Furthermore, we delegate authority to the Enforcement Bureau to revoke a provider's use of the safe harbor if the Bureau finds that the provider is not in compliance with the safe harbor requirements. At any time, the Bureau may request copies of the provider's contracts or agreements with intermediate providers as well as other evidence regarding the covered provider's processes for monitoring the performance of its intermediate providers. If the Bureau determines that evidence warrants revocation of the provider's safe harbor protection, the Bureau shall notify the service provider of such revocation by letter. The provider's safe harbor protection shall terminate 30 days after the revocation letter is mailed. Accordingly, any provider taking advantage of the safe harbor should be prepared to begin complying with the additional data retention requirements and the reporting requirements within 30 days. A service provider that loses safe harbor protection in this manner may seek reconsideration or review of the Bureau's decision in accordance with the Commission's rules.[247] While we anticipate that the need to revoke a provider's use of the safe harbor will not occur often, we must remain prepared to assess and address rural call completion issues involving providers that use the safe harbor.

95. *Waivers of Data Collection and Retention Requirements.* Although the safe harbor encourages providers to take steps to reduce the rural call completion problem, we note that the industry through the *ATIS Handbook* and other means has identified other significant steps providers can take to ensure calls to rural areas are completed. We seek comment in the Further Notice about imposing additional requirements to take advantage of the safe harbor in the future. While the Further Notice is pending, we adopt a waiver process to enable providers that have taken steps in addition to satisfying the

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intermediate provider in the call path' includes all of the affiliates of the intermediate providers to ensure efficient routing of the call."); *see also* Inteliquent Reply at 10.

[244] *See, e.g.,* Comcast Comments at 4 ("Comcast collects and actively monitors performance metrics for every intermediate interexchange provider with whom it contracts and regularly meets with each carrier to review their results, both in total and for rural routes in particular."); Sprint Comments at 10 ("Sprint recently invested $1.5 million in a new platform to enhance its monitoring capabilities—and monitors the service performance of each of its intermediate carriers on a daily basis "); XO Reply at 14 ("XO understands the value in reviewing these metrics and itself monitors such metrics for its intermediate carriers on a targeted basis . . . .").

[245] AT&T Comments at 3-4 ("The first safe harbor would require the provider to certify, among other things, 'that it has a process in place to monitor the performance of its intermediate providers in completing calls to individual rural telephone companies as identified by Operating Carrier Number.' The Commission should clarify what type of 'process' is required.")

[246] *See supra* paras. 10-11.

[247] *See generally* 47 C.F.R. §§ 1.101-1.117.

requirements for the Managing Intermediate Provider Safe Harbor to ensure calls to rural areas are being completed to receive a waiver of the data retention obligations.

96. To encourage providers to take immediate and decisive action to redress rural call completion problems, we will consider requests for waiver of the specific reporting and data retention rules as described herein.[248] We delegate to the Wireline Competition Bureau, in consultation with the Enforcement Bureau, the authority to act on such waiver requests. In evaluating a provider's waiver request, the Bureau should consider not only whether a provider has demonstrated that it qualifies for the Managing Intermediate Provider Safe Harbor, but also whether it persuasively demonstrates that it has processes in place to ensure that call attempts to rural incumbent LECs successfully reach their destinations, such as by adopting industry best practices.[249] The Bureau should also consider whether the provider has demonstrated that it has capabilities and processes to monitor its own performance by the OCN of the called party's ILEC (rather than just at an aggregate level). The Bureau shall require, as a condition of a waiver, that a provider report information about rural call completion for a one-year period, and such a report may be based on a statistically valid sample of calls. In addition, the Bureau may require, as a condition of a waiver, that a provider collect and retain some data, such as data reflecting a statistically valid sample of calls to rural and non-rural areas.

97. By adopting this waiver process, we hope to encourage providers to adopt practices and processes to prevent rural call completion problems from occurring in the first place, thus benefitting rural consumers and avoiding the need for enforcement. Providers are free to file such waiver requests before the Commission receives OMB approval for the data retention and reporting obligations. We also encourage the Bureau to act upon such requests on an expedited basis.[250]

98. *Monitoring Performance Safe Harbor*. The *Notice* proposed a second safe harbor that would subject a provider to a reduced call completion data retention obligation and relieve the provider of all reporting obligations if the provider certified that it had met the following performance standards. The average call answer rate for all rural carriers (*i.e.*, not weighted by call volume) to which the provider attempted more than 100 calls in a month could be no more than 2 percent less than the average call answer rate for all calls it placed to nonrural carriers in the same month. Additionally, the call answer rates for 95 percent of those rural carriers to which the provider attempted more than 100 calls could be no more than 3 percent below the average rural call answer rate.

99. Some commenters objected to the suggestion implicit in this safe harbor that a small differential between rural and nonrural average call answer rates is acceptable.[251] Other commenters suggested that the proposed differential (no more than 2 percent) may be too small to be of practical or

[248] As with any Commission requirement, providers may seek a waiver of the limited data retention requirements under section 1.3 of the Commission's rules. *See* 47 C.F.R. § 1.3; *see also Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) (stating that in granting a waiver, an agency must explain why deviation from the general rule better serves the public interest than would strict adherence to the rule); *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969).

[249] *See* Letter from Glenn Reynolds, Vice President, Policy, USTelecom, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 13-39 (filed Oct. 24, 2013) (suggesting that the possibility of further relief may motivate providers to adopt industry best practices similar to those in the *ATIS Handbook*); Letter from Colin Sandy, NECA, WC Docket No. 13-39 (filed Oct. 22, 2013) (identifying industry best practices); *see also ATIS Handbook*, *available at* https://www.atis.org/docstore/product.aspx?id=26780 (last accessed Oct. 25, 2013).

[250] We recognize that to maximize the benefit of the waiver, providers may need resolution of their waiver requests before the data retention and reporting rules receive OMB approval and go into effect. Therefore, we encourage providers to file detailed information to enable the Wireline Competition Bureau to act expeditiously on any waiver requests.

[251] Blooston Comments at 5; Independent LECs Comments at 11; INS Comments at 12; MoSTG Reply at 3-4; NARUC Comments at 8; NASUCA Comments at 24; NJ Rate Counsel Reply at 15.

statistical significance.[252] One large carrier notes that the requirement that 95 percent of all rural sites be no more than 3 percent below the average rural call answer rate presupposes an abnormally narrow distribution and suggests the Commission needs to do analysis to establish permissible variance.[253]

100. After reviewing the record, we decline to adopt the Monitoring Performance Safe Harbor at this time. We agree with commenters that we should not adopt a performance-based safe harbor before we receive any call completion data from providers.[254]

7. Duration of Rules

101. In the *Notice*, the Commission sought comment on whether any recording and reporting requirements adopted in this proceeding should expire at the end of the intercarrier compensation transition to bill-and-keep or some other point.[255] As discussed more fully above,[256] the *USF/ICC Transformation Order* adopted rules that should address the root causes of many rural call completion problems.[257] In particular, the Commission adopted a bill-and-keep methodology for all intercarrier traffic, and adopted a transition plan to gradually reduce most termination charges, which, at the end of the transition, should eliminate the financial incentive that appears to be contributing significantly to rural call completion problems.[258]

102. Many carriers comment that the rules should expire before the transition to bill-and-keep is complete. They argue that "systemic problems with rural call completion resulting from the current access regime should disappear as the incentives to avoid high, rural terminating rates decrease," thus the Commission should sunset the rules in this order prior to the completion of a transition to bill-and-keep.[259] Commenters propose that targeted enforcement,[260] scheduled reviews of the continuing need for these rules,[261] or hard expiration deadlines[262] will provide "more than sufficient time to determine whether a call completion issue exists in particular rural destinations or with particular intermediate carriers."[263]

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[252] CTIA Comments at 9; CenturyLink Comments at 18.

[253] Verizon Comments at 14.

[254] *See*, *e.g.*, Rural Associations Reply at 24-25 ("[The Commission] needs to collect comprehensive call completion data for at least a year before it will have the information necessary to design reasonable 'safe harbors' capable of distinguishing law-abiding long distance providers and exempting them from certain reporting or recordkeeping requirements.").

[255] *Notice* at 1581, para 38.

[256] *See supra* para. 4.

[257] *See, e.g.*, *USF/ICC Transformation Order*, 26 FCC Rcd at 17904-15, paras. 736-759; *supra* para. 4.

[258] The transition to a bill-and-keep methodology for most terminating charges is nine years for rate-of-return carriers. *See USF/ICC Transformation Order*, 26 FCC Rcd at 17394, para. 801 & Figure 9; 47 C.F.R. §§ 51.907, 51.909. We note that the ICC transition does not include transport for rate-of-return carriers, so it will not eliminate the incentive entirely until the Commission acts on the FNPRM. *See* 47 C.F.R. § 51.909(d)(2).

[259] AT&T Comments at 1-2.

[260] AT&T Comments at 2 ("Targeted and vigorous enforcement of existing legal duties may be a more effective means than broad rules during this limited transition period.").

[261] CenturyLink Comments at 19 ("[A]t the beginning of each phase of the planned intercarrier compensation reform transition, when terminating access rates are scheduled to be reduced, a review of the continuing need for these proposed requirements should be conducted").

[262] Verizon Comments at 9-10 ("With a reporting obligation that lasts for a full year, providers would submit three additional reports so that the Commission could be satisfied that the provider has a program in place to address call completion issues that do occur."); Vonage Comments at 7-8 (suggesting that after two years the incentives disappear and "after two full years of reporting rural call completion rates to the Commission, responsible

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103. Other commenters urge the Commission to refrain from setting an expiration date until these rules are clearly unnecessary. Many commenters suggest that terminating access charges and reciprocal compensation are not the only incentives for certain originating and intermediate carriers to avoid completing calls to rural customers.[264] For example, there may be unique incentives for carriers to not complete calls in rural versus nonrural areas, because many of the calls to rural LEC exchanges "must be carried over lengthy transport and transit routes operated by third parties, to whom compensation must be paid by toll service providers," and that "[i]n the highly competitive, low-margin long-distance toll service market, LCR providers will still be tempted to reduce their transit/transport costs by taking networking shortcuts or blocking calls to such RLEC service areas even after [many intercarrier compensation] charges go to bill-and-keep."[265] Further, as one commenter suggests, "[w]ith the sunset of the rules, any short term solutions could unravel the progress made, because the factors not directly linked to the ICC reform transition could trigger a relapse in the performance by the industry in completing calls to rural customers."[266] Other commenters note that while terminating access rates have declined, the number of call completion problems to rural areas have actually increased.[267] Some comments suggest that any rules should not expire because the impact of VoIP providers on rural call completion is unclear, stating that "because VoIP providers are applying less rigorous call completion standards than the rest of the PSTN, then there will continue to be a need for the rules adopted in this proceeding regardless of the level of terminating rates."[268]

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originating long-distance voice providers will have been forced to resolve any rural call completion issues that are uncovered by the reporting process").

[263] Verizon Comments at 10.

[264] *See*, *e.g.*, Independent LECs Comments at 12 ("As uncompleted calls have increased with decreases in terminating access charges, it would be unreasonable to assume that the motivation to engage in illegal call blocking is tied to the price level for terminating access service. Even when terminating access charges are zero, calls to rural areas will still require more telephone plant than urban calls."); Rural Associations Reply at 10 ("The move to 'bill-and-keep' for LEC to CMRS intraMTA traffic has been in place for over a year, yet call completion problems for CMRS customers attempting to call RLEC customers within the same MTA have not diminished. Reductions in intrastate access rates (in Michigan, Maine, Kansas, and New Mexico, for example) have similarly failed to ameliorate rural call completion problems."); IntelePeer Comments at 2-3 ("The adoption of such a sunset for the proposed rules presumes that the sole source for rural call completion problems is the cost of the RLECs' terminating access charges."); NASUCA Comments at 25 ("NASUCA submits—as strongly as possible—that these rules should expire only if the call completion failure problem is solved and can be assured not to recur."); NJ Rate Counsel Reply at 23 ("The industry provides no coherent argument for a definitive sunset date. . . . Instead the FCC should monitor traffic patterns and assess whether problems have actually been eliminated. During the upcoming years, any amelioration of the rural call traffic problem could be attributed both to the transition (which is gradually narrowing the gap in termination charges) and also to the rules that the FCC establishes in this proceeding.").

[265] Rural Associations Comments at 22; *see also* INS Comments at 20 ("Because of the many more miles of telephone plant needed to provide service in rural areas, it will always be more expensive to complete a call to a rural resident than to a called party in an urban metropolitan area. Consequently, even when terminating access charges are zero, IXCs and intermediary service providers will still have a profit incentive to block calls to rural areas and avoid incurring the associated costs of transporting and completing such rural calls.").

[266] IntelePeer Comments at 3.

[267] *See, e.g.*, INS Reply at 21 ("For example, the implementation of bill-and-keep for CMRS-to-LEC calls and the reduction of intrastate termination rates in several states have not resulted in a reduction in the number of uncompleted calls); *see also* Independent LECs Comments at 12 ("As uncompleted calls have increased with decreases in terminating access charges, it would be unreasonable to assume that the motivation to engage in illegal call blocking is tied to the price level for terminating access service.").

[268] INS Comments at 20.

104. Based on the record before us, we decline at this time to adopt a sunset date for the rules we adopt today. We believe that these rules will provide relief to rural consumers who are receiving inferior telephone service. The Commission must also ensure that it has the data necessary to adopt a long-term solution regarding the disparity in call completion rates between rural and nonrural areas. While the bill-and-keep transition should, to a large extent, eliminate the financial incentive structure that contributes to rural call completion problems, we agree with commenters that rural call completion problems may not be solely attributable to terminating charges.

105. Although we decline to adopt a specific sunset date, we anticipate that our need for these rules will decrease, particularly as the transition to a bill-and-keep regime continues. To assist with that examination, we direct the Wireline Competition Bureau to analyze the eight sets of reports submitted during the first two years of the data collection's effectiveness (as well as any other information the Commission receives during that period regarding the causes of and solution to rural call completion) and to publish for public comment a report on the effectiveness of the rules, whether data collection and reporting should be reduced or eliminated for certain providers or classes of providers (including those that meet a performance-based standard over four consecutive quarters), whether the Commission should extend data collection and reporting requirements to certain intermediate providers, and how the Commission can incorporate industry best practices, such as those developed through ATIS, into its work. The Bureau shall publish that report no more than 90 days after the last reports are due for that two-year period.

106. Furthermore, to ensure that the data collection and reporting rules we adopt today do not last without review in perpetuity, the Commission shall complete a proceeding in which we reevaluate whether to keep, eliminate, or amend the data collection and reporting rules three years after they become effective. That time should be sufficient for the Commission and the public to review the data collected herein, as well as the report of the Wireline Competition Bureau, and determine whether the rules adopted today remain in the public interest going forward.

8. Voluntary Reporting by Rural Incumbent Local Exchange Carriers

107. One commenter proposes that terminating rural incumbent LECs file quarterly reports documenting the number of incoming long-distance call attempts received and the number answered on their network.[269] We agree that a terminating rural ILEC's call answer rate for incoming calls would be an important benchmark that could be responsive to speculation about local rural user behavior and local rural service distinctions, both among individual rural ILECs and between rural and nonrural terminating ILECs generally.[270] It would also be an important benchmark against which to evaluate the number of call attempts that covered providers report as having reached a rural ILEC's terminating switch or tandem, and the number that covered providers report as having been answered.

[269] Comcast Comments at 12 ("[T]he Commission should require terminating service providers in rural areas to file quarterly reports that document the number of long distance calls delivered to the reporting provider on a monthly basis and the number of calls completed to the called locations on their networks. . . . Filing such reports should impose little, if any, burden on a provider that actively monitors its network. The information provided, however, would help to identify rural exchanges that have experienced network service problems that may have prevented the termination of interexchange calls.").

[270] *See, e.g.*, Verizon Comments at 3 ("[T]here may be intrinsic differences between rural and non-rural call areas that might lead to differences in call answer rates. For example, the ratio of business to residential customers may vary in non-rural and rural areas. More businesses may reside in non-rural locations, and those entities will almost always have a voicemail or other answering service to answer every call not answered by a person, thus impacting call answer rates."); *see also* Level 3 Comments at 15 ("[C]all completion rates and issues can be affected by regional events, such as (among others) storms or elections, by tandem congestion, by RLEC end office switch capacity, or by the capacity of trunks between a Rural ILEC end office and the tandem it subtends.")

108. We think that it is in the terminating rural ILECs' own interest to report this information on a voluntary basis. We therefore encourage, but do not require, rural ILECs to report quarterly on the number of incoming long-distance call attempts received, the number answered on its network, and the call answer rate calculation for each of the previous three months, by the reporting dates for covered providers. In the Further Notice we seek comment on whether we should mandate reporting by rural ILECs.

9. Disclosure of Reported Data

109. The *Notice* sought comment on whether the information that will be provided pursuant to the reporting requirements should be treated as confidential or be open to public inspection.[271] After reviewing the record, we conclude that covered providers filing these reports may request confidential treatment of all or portions of the data they submit without filing the detailed confidentiality justification required by section 0.459 of our rules.[272] If the Commission receives a request for, or proposes disclosure of, the information contained in the report, the provider will be notified and required to make the full showing under section 0.459 as to why confidentiality is warranted.[273] Taking into consideration that covered providers must submit these reports quarterly, as well as the unique and relatively homogenous nature of this data collection, these streamlined procedures for requesting nondisclosure should greatly improve the ability of providers to request confidential treatment of their data in a timely manner while minimizing the burden of doing so. The Commission will release information to states upon request, if those states are able to maintain the confidentiality of this information.[274] The Commission imposes similar confidentiality requirements on state commissions seeking to gain access to broadband subscription data filed pursuant to our Form 477.[275] The Commission also expects to make aggregated data available to states and the public.[276]

110. We recognize that there may be benefits to providing public access to the information in these reports. Some commenters argue that the public and/or other entities should have access to this information because this would provide an incentive to correct call completion problems, would be effective in deterring and resolving call blocking, and would provide valuable data for rural LECs to identify the cause of uncompleted calls.[277] We further recognize that information submitted may be

[271] *See Notice*, 28 FCC Rcd at 1576, para. 21.

[272] 47 C.F.R. § 0.459(a)(4). The Wireline Competition Bureau will release a public notice describing the filing mechanism for the required reports and explaining the process for requesting confidential treatment of the reports. *See supra* para. 66.

[273] 47 C.F.R. § 0.459(a)(4).

[274] Several commenters support the sharing of this information with states. *See, e.g.*, California PUC Comments at 6-7; GPC Reply at 3, 9-10; Missouri PSC Comments at 5; NJ Rate Counsel Reply at 20; NARUC Comments at 14. If a request for this information is filed and the Commission determines that the information is not confidential, the states would not need to treat that information as confidential.

[275] *See* 47 C.F.R. § 1.7001(d)(1).

[276] Although some commenters argued that the information in these reports should not be made public, some of those commenters approved making aggregated data public as long as it does not allow for the identification of individual service provider data. *See, e.g.*, CenturyLink Comments at 10.

[277] *See, e.g.*, INS Comments at 13-14; NASUCA Comments at 17-18 and Reply at 18; Rural Associations Comments at 20-21 and Reply at 28-29; *see also* NJ Rate Counsel Comments at 9 and Reply at 19 (asserting that industry should bear the burden to demonstrate with compelling reasons why any particular category of data should be afforded confidential treatment and should be required to provide specific evidence to support any assertions of confidentiality); Rural Associations Comments at 20-21 (arguing that, at most, such information should be subject only to limited protection under a protective order that enables any and all interested parties and stakeholders to view such information subject to agreeing to make proper use of it); GPC Reply at 3 (arguing that the information

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confidential. Some commenters assert that the reports should not be publicly disclosed because they could result in public misperception of the nature of the call completion problem, could result in the misuse of information taken out of context, and may prove difficult to compare fairly across providers due to potentially differing abilities of providers, for example, to identify autodialer traffic or account for call attempts that are handed back to be retried using a different intermediate provider.[278] For now, we find that the approach we adopt today appropriately balances the filers' disclosure concerns with the public need for access to this information.

B. Rules to Address Ring Signaling

111. *False Audible Ringing.* One of the rural call completion problems that parties have identified is "false audible ringing." False audible ringing occurs when an originating or intermediate provider prematurely triggers audible ring tones to the caller before the call setup request has actually reached the terminating rural provider. That is, the calling party believes the phone is ringing at the called party's premises when it is not. An originating or intermediate provider may do this to mask the silence that the caller would otherwise hear during excessive call setup time.[279] As a result, the caller may often hang up, thinking nobody is available to receive the call.[280] False audible ringing can also make it appear to the caller that the terminating rural provider is responsible for the call failure, instead of the originating or intermediate provider. Once an intermediate provider provides a ringing indication to an originating provider while still processing the call, the call cannot be handed back to the preceding provider for an alternate route.[281]

112. In the *Notice*, the Commission proposed to mandate that audible ringing be provided to callers only after the terminating provider affirmatively signals that the called line is free and the called party is being alerted.[282] The record overwhelming supports the adoption of the proposed rule.[283] False

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should be made available to state commissions and the affected rural LECs); Missouri PSC Comments at 1, 5 (asserting that the information should be available to state commissions and "other companies handling the traffic").

[278] *See, e.g.*, Comcast Comments at 5 (arguing that the information is entitled to blanket confidentiality protection because company-specific, detailed traffic data are clearly commercially sensitive and not otherwise available to the public or competitive rivals); Vonage Comments at 8 (asserting that these reports are exempt from disclosure under FOIA); CenturyLink Comments at 10; COMPTEL Comments at 10; NCTA Reply at 8; Verizon Reply at 10; Windstream Comments at 3; XO Reply at 13 (generally arguing that these reports should be kept confidential). Some commenters expressed concern that granular calling data could include customer proprietary network information (CPNI), including called and calling party numbers, that should not be released to the public. *See* NASUCA Comments at 18; XO Reply at 13. The information we will require to be reported does not include CPNI data.

[279] Extensive call setup can occur, for example, because the originating provider or an intermediate provider is sequentially searching through the routing alternatives offered by intermediate providers. *See ATIS Handbook* at 5.1 ("As the number of providers handling a call increases, there is the potential for lengthier call setup delay and other impairments. Troubleshooting may also prove more difficult. Some carriers have found it useful to limit underlying carriers to including no more than one additional provider, not including the terminating carrier, in the call.").

[280] *See* Letter from Sharon Gillett, Chief, Wireline Competition Bureau, FCC, to Thomas Goode, General Counsel, ATIS, 26 FCC Rcd 16454 (2011).

[281] *See*, *e.g.*, Letter from Steven Thomas, Counsel for Transcom Enhanced Services, Inc., to William Dever, Chief, Competition Policy Division, Wireline Competition Bureau, FCC at 4 (filed Oct. 17, 2011) ("In an effort to try to keep calling parties on the line while the extended attempt to secure a through connection proceeds, a provider might choose to insert a self-generated RBT [Ring Back Tone] before actual receipt of the required signaling messages (ISDN Alerting message or SS7 ACM) from the terminating office. If the call ends up not successfully completing (and actual RBT does not come) the provider would then be forced to stop RBT and abandon the call attempt.").

[282] *Notice*, 28 FCC Rcd at 1582, para. 41.

audible ringing departs from longstanding and well-established telephony signaling practices.[284] Indeed, many commenters urge the Commission to simply codify the industry standard prohibiting false audible ringing, stating that "numerous industry signaling standards and definitions . . . unambiguously establish that an audible ringing indication should be provided to the caller only after the terminating provider signals that the called line is free and the called party is being alerted."[285] Some commenters support prohibiting false audible ringing broadly across the industry, stating that our prohibition "should be applied across all providers that allow end users to make voice calls regardless of license, function, or authority,"[286] because such a practice "is not likely to harm just consumers in rural areas; the harm could just as well fall on customers in nonrural areas, in the absence of an industry-wide rule."[287] Because the proposed rule simply codifies long-standing industry practice, the majority of commenters do not believe such a rule is unduly burdensome.[288]

113. Only two commenters opposed a rule prohibiting false ring signaling.[289] The VON Coalition argues that the adoption of such a rule that could potentially thwart enhanced functionalities that VoIP providers may develop and possibly make these providers "limit their end user services in order to conform to 'traditional' call flows would be contrary to the Commission's settled deregulatory approach to VoIP."[290] Vonage, on the other hand, argues the real underlying issue "is not 'false' ringing per se. Rather, the root issue is excessive post-dial delay in connecting a call to the terminating switch (*i.e.*, post-dial delay that is sometimes filled by 'false' ringing) . . . which may simply be used by providers to ensure that the calling party does not hang up before the call is answered because the calling party hears a relatively prolonged silence."[291] They further argue that "[p]rohibiting false ringing could have unintended consequences such as extended silence after the call is placed. This could lead to confusion and increased hang-ups by the calling party, which would increase (rather than reduce) the incidence of call completion problems."[292] By contrast, another commenter responds that Vonage's argument "is

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[283] *See*, *e.g.*, NJ Rate Counsel Comments at 12 and Reply at 25; RCN Reply at 3-4; Blooston Comments at 7; Hypercube Comments at 5; CenturyLink Comments at 20; Comcast Comments at 14-15; COMPTEL Comments at 10-11; NASUCA Comments at 26 and Reply at 23; Western Telecom Associations Comments at 2, 10.

[284] *See ATIS Handbook* at 4.1.51 ("Callers expect to hear, during call processing, that their call is progressing, and that when it has been set up, end to end, they will hear tone (ring back), indicating that the call set up has progressed to the point that it is ringing at the called end. . . . When ring back is presented to the caller, in the absence of receipt of the proper SS7 or SIP message [from the terminating switch], the caller may infer that the phone they are calling is ringing when in fact it is not."); *see also ATIS Telecom Glossary* (defining the ringback signal as a signal provided to a caller to indicate that the called-party instrument is receiving a ringing signal); Internet Engineering Task Force, *RFC 3960 Early Media and Ringing Tone Generation in the Session Initiation Protocol Initiation (SIP)*, at 3.2 (Dec. 2004), *available at* https://tools.ietf.org/html/rfc3960#section-3.2 (last accessed Oct. 25, 2013) ("In the PSTN, telephone switches typically play ringing tones for the caller, indicating that the callee is being alerted. When, where, and how these ringing tones are generated has been standardized (i.e., the local exchange of the callee generates a standardized ringing tone while the callee is being alerted).").

[285] Comcast Comments at 15; *see also* COMPTEL Comments at 10-11; HyperCube Comments at 5; NJ Rate Counsel Reply at 25; RCN Reply at 3-4.

[286] Hypercube Comments at 5.

[287] NASUCA Comments at 26.

[288] *See*, *e.g.*, NJ Rate Counsel Reply at 25; RCN Comments at 3-4; Blooston Comments at 7; Comcast Comments at 15; NASUCA Comments at 26; HyperCube Comments at 5.

[289] *See* VON Coalition Comments at 5-6; Vonage Comments at 8-11.

[290] VON Coalition Comments at 5-6.

[291] Vonage Comments at 8-9.

[292] *Id*.

tantamount to an argument that phone users are properly deceived into thinking that the called party's phone is ringing when in fact it is not. Deception is not sound public policy."[293]

114. We find many benefits to adopting the proposed rule prohibiting false ring signaling, as set forth in the *Notice.* We find that this rule will benefit both consumers and industry and avoid unnecessary confusion that may occur today about whether the call was actually delivered to the called party. Consumer expectation is simple: if a calling party hears audible ringing, the calling party believes the called party's phone is ringing or otherwise being alerted in the same timeframe. As a result of this rule, consumers will no longer prematurely hang up when the call has not even rung on the caller's side, nor will consumers mistakenly believe that the terminating rural provider is responsible for the call failure. Industry will benefit from this rule because intermediate providers will now hand back calls that have excessive set-up time to the preceding provider to find an alternate route, so that the call can ultimately be completed.[294] Originating providers will be able to better identify (and compare) intermediate providers with patterns of service failures and, if they choose, elect other intermediate providers. Because this rule codifies a long-standing industry standard, it should not be unduly burdensome.[295] We expect that this rule will improve the call completion rates to rural areas, therefore benefiting consumers and industry alike.[296]

115. Accordingly, we adopt a rule prohibiting false audible ringing.[297] More specifically, all originating and intermediate providers are prohibited from causing audible ringing to be sent to the caller before the terminating provider has signaled that the called party is being alerted.[298] We clarify that alerting the called party includes alerting devices, services or parties that can answer the call such as an interactive voice response, answering service, voicemail or call-forwarding system or any such system that can cause the network to register that the terminating party has gone off hook. As we proposed in the *Notice*, originating and intermediate providers must also convey audio tones and announcements sent by the terminating provider to the calling party.[299] We apply this rule prohibiting false audible ringing to all

[293] NASUCA Reply at 23.

[294] As discussed, once an intermediate provider sends a ringing indication to the originating provider while still processing a call, that call cannot be handed back to the preceding provider for an alternate route. We believe prohibiting false audible ringing affects an intermediate provider's incentive to continue processing calls struggling with excessive setup times, allowing them to hand back such calls to the preceding provider.

[295] *See*, *e.g.*, RCN Comments at 3-4; Blooston Comments at 7; Comcast Comments at 15; NASUCA Comments at 26; HyperCube Comments at 5.

[296] We note that while both the VON Coalition and Vonage respond to our proposal to adopt a rule prohibiting false audible ringing by arguing "unintended consequences," neither propose adequate alternatives to adopting such a rule. Vonage's "per se" argument does not reject false audible ringing as part of the problem regarding rural call completion, but simply states that it is a subset of a bigger "post-dial delay" problem. Neither the VON Coalition nor Vonage provides a counterargument to the fact that the rule we proposed in the *Notice* simply codifies a long-standing industry practice applicable to terminating traffic on the PSTN.

[297] Our proposal is similar, in many respects, to the proposal on Calling Party Number signaling that the Commission adopted in the *USF/ICC Transformation Order* with support from many stakeholders. *USF/ICC Transformation Order*, 26 FCC Rcd at 17893-97, paras. 710-718; 47 C.F.R. § 64.1601(a).

[298] *See Notice*, 28 FCC Rcd at 1582, para. 41

[299] Like the rules the Commission adopted in the *USF/ICC Transformation Order*, *see supra* para. 6, interconnecting providers must not strip or alter call signaling information. For example, when a called party's phone is in service and not busy, which only the terminating provider can confirm, that provider will signal back to the original or intermediate provider when the called party is being alerted. Similarly if the phone is out of service, the terminating provider may send back an announcement (intercept message) stating, for example, that "this number is temporarily out of service" or "no longer in service" and the other providers must respect the integrity of that info, too, in the same manner. The rules we adopt here today require interconnecting providers to respect the integrity of that

(continued . . .)

originating providers and intermediate providers,[300] including local exchange carriers, interexchange carriers, commercial mobile radio service (CMRS) providers, interconnected VoIP, and one-way VoIP providers. These rules apply to both interstate and intrastate calls, as well as to both originating and terminating international calls while they traverse U.S. networks.

116. *Legal Authority*. Our authority for prohibiting false audible ringing to all originating and intermediate providers lies in section 201(b) of the Act.[301] It is an unreasonable practice to send misleading ring sounds to customers making long-distance calls, as it may cause them to believe that the called party is not answering when in fact the call has not yet been connected, or has been connected for a shorter time than the ring sounds would lead the calling party to believe.[302] The majority of the comments assert that false audible ringing contributes to the disparity between rural and nonrural call completion rates.[303] Adopting a rule that prohibits false audible ringing therefore aids in the Commission's efforts to ensure that provider practices are not unjust or unreasonable.[304]

117. We also apply this rule to interconnected and one-way VoIP providers that send calls to terminate on the PSTN, as well as intermediate providers that are not common carriers, as "reasonably ancillary to the effective performance of [our] statutorily mandated responsibilities" under section 201(b).[305] The purpose of the rule is to address the problem of calls failing to complete to rural PSTN customers.[306] Given the substantial role that VoIP service connected to the PSTN plays in the retail long-distance telephone market, [307] and the potential for intermediate providers to be non-carriers, excluding such providers from the prohibition against false audible ringing would undermine the effectiveness of the rule, as well as the Commission's ability to ensure that carrier practices are both just and reasonable.[308] Specifically, if VoIP customers or callers being indirectly served by non-carrier intermediate providers receive misleading ring sounds, leading them to mistakenly believe that the called party is not answering when in fact the called party has not been alerted, the terminating carrier may be erroneously subject to complaints regarding its perceived failure to terminate calls to its customers. Indeed, it is not "just and reasonable" for customers of rural terminating carriers not to be alerted to incoming calls or to be alerted

(Continued from previous page)
signaling; they must convey audio tones and announcements sent by the terminating provider to the calling party unchanged.

[300] Intermediate providers include "any entity that carries or processes traffic that traverses or will traverse the PSTN at any point insofar as that entity neither originates nor terminates that traffic." 47 C.F.R. § 64.1600(f).

[301] 47 U.S.C. § 201(b).

[302] *Id*. The Act charges the Commission with responsibility for ensuring that common carrier practices and charges are both just and reasonable (also stating that "the Commission may prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of this chapter").

[303] *See*, *e.g.*, New Jersey Rate Counsel Reply at 25; Comcast Comments at 15; COMPTEL Comments at 10-11.

[304] As discussed, *supra* paras. 111 and 113, false audible ringing can unfairly make it appear to the caller that the terminating rural provider is responsible for the call failure, instead of the originating provider. Moreover, once an intermediate provider provides a ringing indication to an originating provider while still processing the call, the call cannot be handed back to the preceding provider for an alternate route.

[305] *American Library Ass'n v. FCC*, 406 F.3d 689, 692 (D.C. Cir. 2005); *see also Southwestern Cable*, 392 U.S. at 178. As explained above, to the extent these providers are not subject to our direct authority, the Commission has ancillary authority over them, and they are subject to our general jurisdictional grant under Title I. *See supra* paras. 35-38.

[306] *See supra* note 303.

[307] VoIP service connected to the PSTN constitutes a significant and growing portion of the long-distance telephone market, and consumers increasingly regard these services as substitutes for traditional voice telephone service. *See supra* paras. 22-23.

[308] 47 U.S.C. §§ 151, 152(a), 201(b), 202(a).

for less time than the calling parties believes. The Commission has previously applied ring signaling rules to interconnected VoIP service providers, including intermediate providers in a call path.[309] For the same reasons that the Commission has authority to prohibit intermediate providers from altering the calling number, the Commission has authority to apply the false audible ringing rule to intermediate providers.[310] The problem would not be adequately addressed without addressing the practices of VoIP service and intermediate providers.

118. Adopting a prohibition against false ring signaling will help the Commission isolate problems that are the responsibility of carriers subject to section 201(b), and help us uncover and better understand call completion issues which could otherwise be obfuscated. If we did not do so, callers would continue to think that calls were being completed that in fact had never made it to the rural LEC or its customer. Likewise, if false ring signaling were not prohibited, originating providers and some intermediate providers would treat calls passed to a downstream intermediate provider as having been answered when in fact they were not being completed. The prevention of such problems by prohibiting all originating and intermediate carriers, interconnected VoIP providers, and one-way VoIP providers from transmitting false audible signaling is therefore reasonably ancillary to the effective performance of our duties in enforcing section 201(b).

119. Finally, we apply this false audible ringing rule to all traffic, including intrastate traffic. The *USF/ICC Transformation Order* expanded the scope of our call signaling rules to encompass jurisdictionally intrastate traffic.[311] Where providers previously were required to include the Calling Party Number (CPN) on interstate calls, the Commission required such information to be included on intrastate calls as well.[312] The Commission noted that CPN-based services are jurisdictionally mixed services and it would be impractical and uneconomic to require the development and implementation of systems that would permit separate federal and state call signaling rules to operate.[313] We conclude here, as we did in the *USF/ICC Transformation Order*, that it would be infeasible to have separate federal and state rules regarding false audible ringing because, *inter alia*, there would be significant confusion among consumers and long-distance providers if the presence or absence of a ring signal had a different meaning on interstate versus intrastate calls, thus exacerbating the problems that we have seen to date.[314] We conclude, therefore, that we have authority to extend the false audible ringing rule to intrastate traffic.

[309] In the *USF/ICC Transformation Order*, the Commission also applied signaling rules to interconnected VoIP traffic, stating that "[f]ailure to include interconnected VoIP traffic in our signaling rules would create a large and growing loophole as the number of interconnected VoIP lines in service continues to grow." *USF/ICC Transformation Order*, 26 FCC Rcd at 17896, para. 717. In that order, the Commission required VoIP service providers to transmit the telephone number of the calling party for all traffic destined for the PSTN that they originate, including if they are intermediate providers in a call path. *Id*.

[310] *Id.* at 17895, para. 714.

[311] *USF/ICC Transformation Order*, 26 FCC Rcd at 17893, para. 710.

[312] *See id*. at 17894, para. 711.

[313] *Id*. at 17893, para. 710.

[314] *Id*. The Commission has reached similar conclusions with regard to call signaling requirements for caller ID purposes—that it would be impractical to require separate federal and state signaling systems. *Id.* at para. 710 & n.1206; *see also Louisiana PSC v. FCC*, 476 U.S. 355, 375 n.4 (citing cases where FCC preemption of state regulation was upheld where it was not possible to separate the interstate and the intrastate components of the asserted FCC regulation); *North Carolina Utilities Comm'n v. FCC*, 537 F.2d 787 (4th Cir. 1976); *North Carolina Utilities Comm'n v. FCC*, 552 F.2d 1036 (4th Cir. 1977) (Where FCC acted within its authority to permit subscribers to provide their own telephones, preemption of inconsistent state regulation prohibiting subscribers from connecting their own phones unless used exclusively in interstate service upheld since state regulation would negate the federal tariff).

IV. FURTHER NOTICE OF PROPOSED RULEMAKING

A. Autodialer Traffic

120. We seek additional comment on the ability of a covered provider to identify and segregate autodialer calls.[315] It is unclear from the existing record whether autodialer, or mass-dialer, traffic can be reliably distinguished from regular traffic by covered providers. Two providers indicate that they can reasonably identify retail autodialer traffic because it is delivered on dedicated connections,[316] whereas other commenters state that it is not possible to distinguish autodialer traffic.[317] We seek comment on whether providers are able to isolate autodialer calls because of the way such traffic is delivered or otherwise. We also seek comment on the burdens of and benefits of distinguishing autodialer traffic.

121. We note that to the extent that terminating rural incumbent LECs report their own call answer rates, as we have encouraged them to do, those call answer rates will include autodialer traffic.[318] In order for a terminating rural incumbent LEC's call answer rate to be a meaningful benchmark, the call data reported by covered providers must also include autodialer traffic.[319] At the same time, as we have discussed, we recognize that autodialer traffic may skew call completion performance results, and that reports that segregate autodialer traffic may therefore be useful if such traffic can be reliably excluded. In the Order we permit covered providers to file a separate report that segregates autodialer traffic from other traffic, accompanied by an explanation of the method the provider used to identify the autodialer traffic. We seek comment on the proposal that all covered providers be required to file a separate report that segregates autodialer traffic from other traffic, accompanied by an explanation of the method the provider used to identify the autodialer traffic, and on the relative benefits and burdens of doing so.

B. Intermediate Providers

122. In the Order, we decline at this time to impose the rules on intermediate providers. We seek comment on whether we should extend these rules to intermediate providers, or a subset thereof, and on the Commission's authority to do so. If we extended these rules to intermediate providers, could we reduce or eliminate the burden on originating providers?

123. We seek comment on whether we should impose certifications or other obligations on intermediate providers. For example, one commenter proposes intra-industry compliance certification as a supplement to the data collection, retention and reporting adopted in the Order.[320] Should the Commission require each intermediate provider offering to deliver traffic for termination for another provider, or offering to deliver traffic for termination that is originated by an entity other than the end users it serves, to certify that it is terminating such traffic in compliance with all applicable intercarrier compensation orders, tariffs and agreements? Should each intermediate provider be required to obtain and file similar certifications from companies to which it is directing traffic for the purpose of terminating to the PSTN and to rural incumbent LECs in particular? Should we require intermediate providers to include in their rate decks a statement of the maximum number of intermediate providers they will use to deliver a call to a particular area? We seek comment on the proposal that it would be unlawful for any

[315] *See supra* paras. 52-54; *see also* CenturyLink Comments at 15; Level 3 Comments at 9; Comcast Comments at 8; Verizon Comments at 4; Windstream Comments at 3.

[316] *See* CenturyLink Comments at 15; XO Reply at 12; *see also* CenturyLink Comments at 15; XO Reply at 12.

[317] *See* ATIS Comments at 6.

[318] *See supra* paras. 106-107.

[319] *See supra* paras. 52-54.

[320] ANPI Comments at 9 and Reply at 12.

intermediate provider that refused to provide such a certification to carry traffic for termination on the PSTN, and it would be unlawful for any provider to direct such traffic to such a non-complying company.

C. Modifications to the Safe Harbor

124. In the Order, we adopt a safe harbor for qualifying providers, as noted above, whose contracts with directly connected intermediate providers allow those intermediate providers to pass a call to no more than one additional intermediate provider before the call reaches the terminating provider. We seek comment on whether we should revise these requirements in the future.

125. For example, ATIS supports the safe harbor, but recommends that the Commission also consider whether there may be other measures carriers can take that should constitute safe harbors.[321] Are there particular industry practices to manage call termination that should make providers eligible for a safe harbor from reporting and/or retention of records? Should the existing safe harbor be modified to include additional requirements in contracting with intermediate providers or other measures? If so, what should these triggers be and why? What should the obligations be? And, if the Commission revises or adopts different safe harbors, should the Commission relieve any of the data retention obligations?

126. We also seek comment on adopting a separate safe harbor related to a provider's call completion performance in specific OCNs. Specifically, we seek comment on whether a covered provider's record of matching or exceeding a rural incumbent LEC's reported terminating call answer rate in specific OCNs, or another threshold tied to the rural incumbent LEC's terminating call answer rate, could establish the foundation for a separate safe harbor for those OCNs? What would be an appropriate record of matching or exceeding a rural incumbent LEC's terminating call answer rate, and what would be an appropriate threshold in relation to that call answer rate?

127. In the Order that we adopt today, we decline to adopt a performance-based safe harbor (i.e., a safe harbor based on successful performance in completing rural calls as demonstrated by a provider's data).[322] As we note above, some commenters have suggested that the Commission should review data reported by the providers and then adopt some type of a performance-based safe harbor.[323] What should the Commission take into consideration if it were to adopt standards for rural call performance? What other uses of the reported data would be useful and appropriate to eliminate the rural call completion problem?

D. Rural Incumbent Local Exchange Carriers

128. In the Order we encourage, but do not require, each rural ILEC to report quarterly on the number of incoming long-distance call attempts received, the number answered on its network, and the resultant call answer rate calculation. We noted that this information would be an important benchmark against which to evaluate the number of call attempts that originating providers report as having reached a rural ILEC's terminating switch or tandem, and the number that originating providers report as having been answered.[324] Here we seek comment on whether the Commission should adopt or encourage a reporting methodology beyond what is described in the Order.

129. Should rural ILECs above a certain size be required to report their terminating call answer rate data, while those below the size threshold could continue to report on a voluntary basis? If reporting this information by rural ILECs were mandated, what would be the appropriate threshold, in terms of subscriber lines, revenues, or other measures? Would it be more efficient for a single report on rural ILEC call answer rates to be assembled by a third party organization (e.g., industry association), and

[321] ATIS Comments at 6-7.

[322] *See supra* paras. 98-100.

[323] *See supra* para. 100.

[324] See *supra* paras. 107-108.

how would that process function? For example, how would we select the organization, how would they obtain the data, and how we ensure the reliability of the report? Should we retain the same reporting timing and frequency as set for voluntary reporting in the Order? If not, what should the reporting timing and frequency be? We also seek comment on the burdens and benefits associated with the type of rural ILEC reporting described above.

E. Additional Rule Changes

130. The Commission and the Wireline Competition Bureau have stated that no carriers, including interexchange carriers, or VoIP service providers may block, choke, reduce, or restrict traffic, including VoIP-PSTN traffic. The Order accompanying this Further Notice and the Wireline Competition Bureau's *2012 Declaratory Ruling* make clear that carriers' and VoIP service providers' call routing practices that lead to call termination and call quality problems may violate this prohibition. Practices resulting in rural call completion problems adversely affect the ubiquity and reliability of the nation's telecommunications network and threaten the ability of consumers, businesses, and public health and safety officials to access and use a reliable network. For these reasons, we seek comment on whether we should adopt rules formally codifying existing prohibitions on blocking, choking, reducing, or restricting traffic. We also seek comment on whether there are any additional requirements that should apply to some or all of these providers or to any other entity, whether with respect to that entity's acts or omission that directly block, choke, reduce, or restrict traffic, governing its acts or omissions with respect to its intermediate providers, or that otherwise lead to rural call completion problems. To the extent that commenters advocate for additional requirements, commenters should explain why any such new requirements are needed; identify the specific categories of conduct that would be prohibited under the new requirements; and identify the specific sources of legal authority that would permit the Commission to adopt the new requirements. We also seek comment on whether we should provide additional guidance as to how existing or any new requirements should apply to specific scenarios.

V. PROCEDURAL MATTERS

A. Paperwork Reduction Act Analysis

131. This document contains new information collections subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. They will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA, 44 U.S.C. § 3507. Prior to submission to OMB, the Commission will publish a notice in the Federal Register seeking public comment on the information collections. In addition, that notice will also seek comment on how the Commission might "further reduce the information collection burden for small business concerns with fewer than 25 employees" pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. § 3506(c)(4). The information collections contained in this Report and Order will not go into effect until OMB approves the collections and the Commission has published a notice in the Federal Register announcing the effective date of the information collections.

132. This document also contains proposed new information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4), we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

B. Regulatory Flexibility Analyses

1. Final Regulatory Flexibility Analysis

133. As required by the Regulatory Flexibility Act of 1980, *see* 5 U.S.C. § 604, the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) of the possible significant economic impact on small entities of the policies and rules, as proposed, addressed in this Report and

Order. The FRFA is set forth in Appendix D. The Commission will send a copy of this Report and Order, including the FRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).

2. Initial Regulatory Flexibility Analysis

134. As required by the Regulatory Flexibility Act of 1980 (RFA),[325] the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) for this Further Notice of Proposed Rulemaking, of the possible significant economic impact on small entities of the policies and rules addressed in this document. The IRFA is set forth in Appendix E. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Further Notice indicated on the first page of this document. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this Further Notice of Proposed Rulemaking, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).[326]

C. Congressional Review Act

135. The Commission will send a copy of this Report and Order and Further Notice of Proposed Rulemaking to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. 801(a)(1)(A).

D. Comment Filing Procedures

136. Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing 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 12th Street, SW, Washington DC 20554.

[325] *See* 5 U.S.C. § 603.

[326] *See* 5 U.S.C. § 603(a).

137. 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).

E. Ex Parte Rules

138. The proceeding this Further Notice initiates shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.[327] Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (*e.g.*, .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

F. Contact Person

139. For further information about this rulemaking proceeding, please contact Gregory Kwan, Competition Policy Division, Wireline Competition Bureau, at (202) 418-1191.

VI. ORDERING CLAUSES

140. Accordingly, IT IS ORDERED that, pursuant to sections 1, 4(i), 201(b), 202(a), 218, 220(a), 251(a), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 201(b), 202(a), 218, 220(a), 251(a), and 403, this Report and Order and Further Notice of Proposed Rulemaking IS ADOPTED.

141. IT IS FURTHER ORDERED that Part 64 of the Commission's rules IS AMENDED as set forth in Appendix A.

142. IT IS FURTHER ORDERED that, pursuant to sections 1.4(b)(1) and 1.103(a) of the Commission's rules, 47 C.F.R. §§ 1.4(b)(1), 1.103(a), this Report and Order SHALL BE EFFECTIVE 30 days after publication of a summary in the Federal Register, except for the addition of section 64.2201 of the Commission's rules, which will become effective 45 days after publication of a summary in the Federal Register, and for the additions of sections 64.2103, 64.2105, and 64.2107 of the Commission's rules and the information collection in paragraph 67 of this Report and Order, which will become effective upon announcement in the Federal Register of Office of Management and Budget (OMB) approval and an effective date of the rules.

143. IT IS FURTHER ORDERED that the Commission SHALL SEND a copy of this Report and Order to Congress and to the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. § 801(a)(1)(A).

[327] 47 C.F.R. §§ 1.1200 *et seq.*

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

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

Final Rules

PART 64—MISCELLANEOUS RULES RELATING TO COMMON CARRIERS

*****

Subpart V—Recording, Retention and Reporting of Data on Long-distance Telephone Calls to Rural Areas and Reporting of Data on Long-distance Telephone Calls to Nonrural Areas

§ 64.2101 Definitions

For purposes of this subpart, the following definitions will apply:

(a) *Affiliate.* The term "affiliate" has the same meaning as in 47 U.S.C. § 153(2).

(b) *Call attempt.* The term "call attempt" means a call that results in transmission by the covered provider toward an incumbent local exchange carrier (LEC) of the initial call setup message, regardless of the voice call signaling and transmission technology used.

(c) *Covered provider.* The term "covered provider" means a provider of long-distance voice service that makes the initial long-distance call path choice for more than 100,000 domestic retail subscriber lines, counting the total of all business and residential fixed subscriber lines and mobile phones and aggregated over all of the providers' affiliates. A covered provider may be a local exchange carrier as defined in section 64.4001(e), an interexchange carrier as defined in section 64.4001(d), a provider of commercial mobile radio service as defined in section 20.3, a provider of interconnected voice over Internet Protocol (VoIP) service as defined in 47 U.S.C. § 153(25), or a provider of non-interconnected VoIP service as defined in 47 U.S.C. § 153(36) to the extent such a provider offers the capability to place calls to the public switched telephone network.

(d) *Initial long-distance call path choice.* The term "initial long-distance call path choice" means the static or dynamic selection of the path for a long-distance call based on the called number of the individual call.

(e) *Intermediate provider*. The term "intermediate provider" has the same meaning as in section 64.1600(f) of this chapter.

(f) *Long-distance voice service*. The term "long-distance voice service" includes interstate interLATA, intrastate interLATA, interstate interexchange, intrastate interexchange, inter-MTA interstate and inter-MTA intrastate voice services.

(g) *Operating company number (OCN).* The term "operating company number" means a four-place alphanumeric code that uniquely identifies a local exchange carrier.

(h) *Rural OCN*. The term "rural OCN" means an operating company number that uniquely identifies an incumbent LEC (as defined in section 51.5) that is a rural telephone company (as defined in section 51.5). The term "nonrural OCN" means an operating company number that uniquely identifies an incumbent LEC (as defined in section 51.5) that is not a rural telephone company (as defined in section 51.5). We direct NECA to update the lists of rural and nonrural OCNs annually and provide them to the Wireline Competition Bureau in time for the Bureau to publish the lists no later than November 15. These lists will be the definitive lists of rural OCNs and nonrural OCNs for purposes of this subpart for the following calendar year.

§ 64.2103 Retention of Call Attempt Records

(a) Except as described in rule 64.2107, each covered provider shall record and retain information about each call attempt to a rural OCN from subscriber lines for which the covered provider makes the initial long-distance call path choice in a readily retrievable form for a period that includes the six most recent complete calendar months.

(b) Affiliated covered providers may record and retain the information required by this rule individually or in the aggregate.

(c) A call attempt that is returned by an intermediate provider to the covered provider and reassigned shall count as a single call attempt.

(d) Call attempts to toll-free numbers, as defined in section 52.101(f) of this chapter, are excluded from these requirements.

(e) The information contained in each record shall include:

(1) the calling party number;

(2) the called party number;

(3) the date;

(4) the time;

(5) an indication whether the call attempt was handed off to an intermediate provider or not and, if so, which intermediate provider;

(6) the rural OCN associated with the called party number;

(7) an indication whether the call attempt was interstate or intrastate;

(8) an indication whether the call attempt was answered, which may take the form of an SS7 signaling cause code or SIP signaling message code associated with each call attempt; and

(9) an indication whether the call attempt was completed to the incumbent local exchange carrier but signaled as busy, ring no answer, or unassigned number. This indication may take the form of an SS7 signaling cause code or SIP signaling message code associated with each call attempt.

§ 64.2105 Reporting Requirements

(a) Except as described in rule 64.2107, each covered provider shall submit a certified report to the Commission in electronic form on the following quarterly schedule: February 1 (reflecting monthly data from October through December), May 1 (reflecting monthly data from January through March), August 1 (reflecting monthly data from April through June), and November 1 (reflecting monthly data from July through September). An officer or director of each covered provider must certify to the accuracy of each report.

(b) The information contained in the certified report shall include the following information about subscriber lines for which the covered provider makes the initial long-distance call path choice, reported separately for each month in that quarter:

(1) For each rural OCN:

(i) the OCN;

(ii) the state;

(iii) the number of interstate call attempts;

(iv) the number of interstate call attempts that were answered;

(v) the number of interstate call attempts that were not answered, reported separately for call attempts signaled as busy, ring no answer, or unassigned number;

(vi) the number of intrastate call attempts;

(vii) the number of intrastate call attempts that were answered; and

(viii) the number of intrastate call attempts that were not answered, reported separately for call attempts signaled as busy, ring no answer, or unassigned number.

(2) For nonrural OCNs in the aggregate:

(i) the number of interstate call attempts;

(ii) the number of interstate call attempts that were answered;

(iii) the number of interstate call attempts that were not answered, reported separately for call attempts signaled as busy, ring no answer, or unassigned number;

(iv) the number of intrastate call attempts;

(v) the number of intrastate call attempts that were answered; and

(vi) the number of intrastate call attempts that were not answered, reported separately for call attempts signaled as busy, ring no answer, or unassigned number.

(c) In reporting the information described in subsection (b), a covered provider may disaggregate calls originated by automatic telephone dialing systems (as defined in section 64.1200(f)) if it includes an explanation of the method used to identify those calls.

(d) Affiliated covered providers may report this information individually or in the aggregate.

§ 64.2107 Reduced Retention and Reporting Requirements for Qualifying Providers Under the Safe Harbor

(a)(1) A covered provider may reduce its retention and reporting obligations under this subpart if it files one of the following certifications, signed by an officer or director of the covered provider regarding the accuracy and completeness of the information provided, in WC Docket No. 13-39 on any of the four quarterly filing dates established in section 64.2105 and annually thereafter.

I _____ (name), _____ (title), an officer of _____ (entity), certify that _____ (entity) uses no intermediate providers;

or

I _____ (name), _____ (title), an officer of _____ (entity), certify that _____ (entity) restricts by contract any intermediate provider to which a call is directed by _____ (entity) from permitting more than one additional intermediate provider in the call path before the call reaches the terminating provider or terminating tandem. I certify that any nondisclosure agreement with an intermediate provider permits _____ (entity) to reveal the identity of the intermediate provider and any additional intermediate provider to the Commission and to the rural incumbent local exchange carrier(s) whose incoming long-distance calls are affected by the intermediate provider's performance. I certify that _____ (entity) has a process in place to monitor the performance of its intermediate providers.

(2) Covered providers that file the second certification must describe the process they have in place to monitor the performance of their intermediate providers.

(b) A covered provider that meets the requirements described in subsection (a) must comply with the data retention requirements in section 64.2103 for a period that includes only the three most recent complete calendar months, so long as it continues to meet the requirements of subsection (a). A covered provider that ceases to meet the requirements described in subsection (a) must immediately begin retaining data for six months, as required by section 64.2103.

(c) A covered provider that meets the requirements described in subsection (a) must comply with the reporting requirements in section 64.2105 for a period of one year commencing when it first filed the certification described in subsection (a), so long as it continues to meet those subsection (a) requirements. A covered provider that ceases to meet the requirements described in subsection (a) must begin filing the reports required by section 64.2105 on the next filing deadline.

(d) Affiliated covered providers may meet the requirements of subsection (a) individually or in the aggregate.

§ 64.2109 Disclosure of Data

(a) Providers subject to the reporting requirements in section 64.2105 of this chapter may make requests for Commission nondisclosure of the data submitted under section 0.459 of this chapter by so indicating on the report at the time that the data are submitted.

(b) The Chief of the Wireline Competition Bureau will release information to states upon request, if the states are able to maintain the confidentiality of this information.

Subpart W—Ring Signaling Integrity

§ 64.2201 Ringing Indication Requirements

(a) A long-distance voice service provider shall not convey a ringing indication to the calling party until the terminating provider has signaled that the called party is being alerted to an incoming call, such as by ringing.

(1) If the terminating provider signals that the called party is being alerted and provides an audio tone or announcement, originating providers must cease any locally generated audible tone or announcement and convey the terminating provider's tone or announcement to the calling party.

(2) The requirements in this subsection apply to all voice call signaling and transmission technologies and to all long-distance voice service providers, including local exchange carriers as defined in section 64.4001(e), interexchange carriers as defined in section 64.4001(d), providers of commercial mobile radio service as defined in section 20.3, providers of interconnected voice over Internet Protocol (VoIP) service as defined in 47 U.S.C. § 153(25), and providers of non-interconnected VoIP service as defined in 47 U.S.C. § 153(36) to the extent such providers offer the capability to place calls to or receive calls from the public switched telephone network.

(b) Intermediate providers must return unaltered to providers in the call path any signaling information that indicates that the terminating provider is alerting the called party, such as by ringing.

(1) An intermediate provider may not generate signaling information that indicates the terminating provider is alerting the called party. An intermediate provider must pass the signaling information indicating that the called party is being alerted unaltered to subsequent providers in the call path.

(2) Intermediate providers must also return unaltered any audio tone or announcement provided by the terminating provider.

(3) In this subsection, the term "intermediate provider" has the same meaning as in section 64.1600(f) of this chapter.

(4) The requirements in this subsection apply to all voice call signaling and transmission technologies.

(c) The requirements in subsections (a) and (b) apply to both interstate and intrastate calls, as well as to both originating and terminating international calls while they are within the United States.

APPENDIX B

List of Commenters

Comments

Commenter	Abbreviation
AT&T Inc.	AT&T
Alliance for Telecommunications Industry Solutions	ATIS
American Cable Association	ACA
Associated Network Partners, Inc. and Zone Telecom, Inc.	ANPI
Bandwidth.com, Inc.	Bandwidth.com
Bart Fitzgerald	Fitzgerald
Bay Springs Telephone Company, Inc., Breda Telephone Corp., BTC, Inc., Cooperative Telephone Company, Crockett Telephone Company, Dumont Telephone Company, East Buchanan Telephone Cooperative, Hickory Telephone Company, Modern Cooperative Telephone Company, Moultrie Independent Telephone Company, Mutual Telephone Company of Morning Sun, National Telephone of Alabama, Inc., Ogden Telephone Company, Olin Telephone Company, Inc., Palmer Mutual Telephone Company, Peoples Telephone Company, Prairie Telephone Company, Inc., Roanoke Telephone Company, Royal Telephone Company, Sharon Telephone Company, Springville Cooperative Telephone Co., Terril Telephone Company, The Farmers Mutual Telephone Company of Stanton, Iowa, Villisca Farmers Telephone Company, Wellman Cooperative Telephone Association, West Liberty Telephone Company, West Tennessee Telephone Company, Inc., Westside Independent Telephone Company, WTC Communications Inc.	Independent LECs
Blooston Rural Carriers	Blooston Rural Carriers
COMPTEL	COMPTEL
CTIA—The Wireless Association®	CTIA
California Public Utilities Commission	California PUC
California Public Utilities Commission, Idaho Public Utilities Commission, Indiana Utility Regulatory Commission, Iowa Utilities Board, Michigan Public Service Commission, Minnesota Department of Commerce, Minnesota Public Utilities Commission, Montana Public Service Commission, Nebraska Public Service Commission, New York Public Service Commission, Public Utilities Commission of Ohio, Pennsylvania Public Utility Commission, South Dakota Public Utilities Commission, Vermont Public Service Board, West Virginia Public Service Commission	Joint State Commissions
Cbeyond Communications, LLC, EarthLink, Inc., Integra Telecom, Inc., and tw telecom inc.	Cbeyond et al.
CenturyLink	CenturyLink
Colorado Telecommunications Association, Idaho Telecom Alliance, Montana Telecommunications Association, Oklahoma Telephone Association, Oregon Telecommunications Association, Washington Independent Telecommunications Association	Western Telecom Associations
Comcast Corporation	Comcast
Frontier Communications Corporation	Frontier
HyperCube Telecom, LLC	HyperCube
IntelePeer, Inc.	IntelePeer
Iowa Network Services, Inc.	INS

Commenter	Abbreviation
Level 3 Communications, LLC	Level 3
Midcontinent Communications	Midcontinent
Mississippi Public Service Commission	Mississippi PSC
Missouri Public Service Commission	MoPSC
National Association of Regulatory Utility Commissioners	NARUC
National Association of State Utility Consumer Advocates	NASUCA
National Exchange Carrier Association, Inc., NTCA – The Rural Broadband Association, Western Telecommunications Alliance, and the Eastern Rural Telecom Association	Rural Associations
Neeke Hurley	Hurley
Neutral Tandem, Inc. (d/b/a Inteliquent)	Inteliquent
New Jersey Division of Rate Counsel	NJ Rate Counsel
Public Service Commission of Wisconsin	PSCW
Sprint Nextel Corporation	Sprint
Time Warner Cable Inc.	TWC
United States Telecom Association	USTelecom
Verizon and Verizon Wireless	Verizon
Voice on the Net Coalition	VON Coalition
Vonage Holdings Corp.	Vonage
Windstream Corporation	Windstream
ZipDX LLC	ZipDX

Reply Comments

Reply Commenter	Abbreviation
AT&T Inc.	AT&T
American Cable Association	ACA
Associated Network Partners, Inc. and Zone Telecom, Inc.	ANPI
COMPTEL	COMPTEL
CenturyLink	CenturyLink
Charter Communications, Inc.	Charter
Comcast Corporation	Comcast
Free Conferencing Corporation	Free Conferencing
Great Plains Communication, Inc.	GPC
Hypercube Telecom, LLC	HyperCube
Iowa Network Services, Inc.	INS
Iowa Telecommunications Association	ITA
Level 3 Communications, LLC	Level 3
Massachusetts Department of Telecommunications and Cable	MDTC
Midcontinent Communications	Midcontinent
Mississippi Public Service Commission	Mississippi PSC
Missouri Small Telephone Company Group	MoSTCG
New Jersey Division of Rate Counsel	NJ Rate Counsel
NTCA–The Rural Broadband Association, the National Exchange Carrier Association, Inc., the Western Telecommunications Alliance, and the Eastern Rural Telecom Association	Rural Associations
National Association of State Utility Consumer Advocates	NASUCA
National Cable & Telecommunications Association	NCTA

Reply Commenter	Abbreviation
Nebraska Public Service Commission	Nebraska PSC
Neutral Tandem, Inc. (d/b/a Inteliquent)	Inteliquent
RCN Telecom Services, LLC	RCN
Sprint Nextel Corporation	Sprint
Verizon and Verizon Wireless	Verizon
Voice on the Net Coalition	VON Coalition
Vonage Holdings Corp.	Vonage
XO Communications	XO

APPENDIX C

Reporting Template

Covered Provider X		Month 1																					
		Interstate							Intrastate							Total							
State	Rural OCN	Calls Attempted	Answered	Busy	Ring No Answer	Unassgnd Number	% Calls Answered	% Calls Cmpleted	Calls Attempted	Answered	Busy	Ring No Answer	Unassgnd Number	% Calls Answered	% Calls Cmpleted	Calls Attempted	Answered	Busy	Ring No Answer	Unassgnd Number	% Calls Answered	% Calls Cmpleted
AA	OCNA	A,AAA	B,BBB	C,CCC	D,DDD	E,EEE	YY.Y%	ZZ.Z%	A,AAA	B,BBB	C,CCC	D,DDD	E,EEE	YY.Y%	ZZ.Z%	AA,AAA	BB,BBB	CC,CCC	DD,DDD	EE,EEE	YY.Y%	ZZ.Z%
AA	OCNB	A,AAA	B,BBB	C,CCC	D,DDD	E,EEE	YY.Y%	ZZ.Z%	A,AAA	B,BBB	C,CCC	D,DDD	E,EEE	YY.Y%	ZZ.Z%	AA,AAA	BB,BBB	CC,CCC	DD,DDD	EE,EEE	YY.Y%	ZZ.Z%
AA	OCNC	A,AAA	B,BBB	C,CCC	D,DDD	E,EEE	YY.Y%	ZZ.Z%	A,AAA	B,BBB	C,CCC	D,DDD	E,EEE	YY.Y%	ZZ.Z%	AA,AAA	BB,BBB	CC,CCC	DD,DDD	EE,EEE	YY.Y%	ZZ.Z%
AA	OCND	A,AAA	B,BBB	C,CCC	D,DDD	E,EEE	YY.Y%	ZZ.Z%	A,AAA	B,BBB	C,CCC	D,DDD	E,EEE	YY.Y%	ZZ.Z%	AA,AAA	BB,BBB	CC,CCC	DD,DDD	EE,EEE	YY.Y%	ZZ.Z%
AA	OCNE	A,AAA	B,BBB	C,CCC	D,DDD	E,EEE	YY.Y%	ZZ.Z%	A,AAA	B,BBB	C,CCC	D,DDD	E,EEE	YY.Y%	ZZ.Z%	AA,AAA	BB,BBB	CC,CCC	DD,DDD	EE,EEE	YY.Y%	ZZ.Z%
BB	OCNF	A,AAA	B,BBB	C,CCC	D,DDD	E,EEE	YY.Y%	ZZ.Z%	A,AAA	B,BBB	C,CCC	D,DDD	E,EEE	YY.Y%	ZZ.Z%	AA,AAA	BB,BBB	CC,CCC	DD,DDD	EE,EEE	YY.Y%	ZZ.Z%
BB	OCNG	A,AAA	B,BBB	C,CCC	D,DDD	E,EEE	YY.Y%	ZZ.Z%	A,AAA	B,BBB	C,CCC	D,DDD	E,EEE	YY.Y%	ZZ.Z%	AA,AAA	BB,BBB	CC,CCC	DD,DDD	EE,EEE	YY.Y%	ZZ.Z%
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ZZ	OCNZ	A,AAA	B,BBB	C,CCC	D,DDD	E,EEE	YY.Y%	ZZ.Z%	A,AAA	B,BBB	C,CCC	D,DDD	E,EEE	YY.Y%	ZZ.Z%	AA,AAA	BB,BBB	CC,CCC	DD,DDD	EE,EEE	YY.Y%	ZZ.Z%
Rural [Total]		AAA,AAA	BBB,BBB	CC,CCC	DD,DDD	EE,EEE	YY.Y%	ZZ.Z%	AAA,AAA	BBB,BBB	CC,CCC	DD,DDD	EE,EEE	YY.Y%	ZZ.Z%	AAA,AAA	BBB,BBB	CCC,CCC	DDD,DDD	EEE,EEE	YY.Y%	ZZ.Z%
Nonrural [Total]		A,AAA,AAA	B,BBB,BBB	CCC,CCC	DDD,DDD	EEE,EEE	YY.Y%	ZZ.Z%	A,AAA,AAA	B,BBB,BBB	CCC,CCC	DDD,DDD	EEE,EEE	YY.Y%	ZZ.Z%	A,AAA,AAA	B,BBB,BBB	C,CCC,CCC	DDD,DDD	E,EEE,EEE	YY.Y%	ZZ.Z%

Shaded areas are provided on, or calculated by, the template.
% Calls Answered is calculated as **BBBB/(AAAA-EEEE)**
% Calls Completed is calculated as **(BBBB+CCCC+DDDD)/(AAAA-EEEE)**
Call attempts are generally categorized as follows based on ISUP Cause values and corresponding SIP Response messages
Answered = calls signaled back with ISUP 16 & 31 and SIP BYE & CANCEL
Busy = call attempts signaled back with ISUP 17 and SIP 486
Ring No Answer = call attempts signaled back as ISUP 18 & 19 and SIP 408 & 480
Unassigned Number = call attempts signaled back as ISUP 1 and SIP 404

APPENDIX D

Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act (RFA),[1] an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the Notice of Proposed Rulemaking (Notice) in WC Docket No. 13-39.[2] The Commission sought written public comment on the proposals in the Notice, including comment on the IRFA.[3] This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

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

2. This Report and Order (Order) continues the Commission's efforts to identify the causes of—and potential remedies for—the ongoing and widespread problems with the completion of long-distance telephone calls to rural areas. In the Order, the Commission adopts rules to address significant concerns about completion of long distance calls to rural areas. Doing so will help ensure that long distance calls to all Americans, including rural Americans, are completed. Completion rates for long-distance calls to rural telephone company service areas are frequently poor—whether the call is significantly delayed, the called party's phone never rings, the caller hears false busy signals, or there are other problems. These failures have significant and immediate public interest ramifications, causing rural businesses to lose customers, cutting families off from their relatives in rural areas, and creating potential for dangerous delays in public safety communications in rural areas. The rules adopted in the Order are a critical step to eliminating this significant problem by improving the Commission's ability to monitor the delivery of long-distance calls to rural areas, aiding enforcement action in connection with providers' call completion practices as necessary, as well as by aiding consumers and industry by adopting a rule prohibiting false ring signaling.

3. Adopting recording, retention, and reporting requirements will substantially increase our ability to monitor and redress problems associated with completing calls to rural areas. These rules will also enhance our ability to enforce restrictions against blocking, choking, reducing, or restricting calls. The recording, retention, and reporting rules should apply to providers of long-distance voice service that make the initial long-distance call path choice for more than 100,000 domestic retail subscriber lines, counting the total of all business and residential fixed subscriber lines and mobile phones and aggregated over all of the providers' affiliates (referred to herein as "covered providers"). In most cases, this is the calling party's long-distance provider. As discussed below, covered providers include LECs, interexchange carriers (IXCs), commercial mobile radio service (CMRS) providers, and VoIP service providers. Finally, we do not apply these rules to intermediate providers.

4. The Order requires covered providers to record and retain the following information for each long-distance call to a local exchange carrier that is a rural telephone company: calling party number; called party number; date; time of day; whether the call is handed off to an intermediate provider and, if so, which intermediate provider; whether the call is going to a rural carrier and, if so, which rural carrier, as identified by its operating company number (OCN); whether the call is interstate; whether the call attempt was answered; and whether the call attempt was completed to the incumbent local exchange carrier but signaled as busy, ring no answer, or unassigned number. For most providers, this indication is likely to take the form of an SS7 signaling cause code or SIP signaling message code associated with each call attempt. While covered providers need not retain data for calls to nonrural OCNs, they must

[1] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 *et seq*., has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

[2] *Notice*, 28 FCC Rcd at 1575-83, paras. 20-43.

[3] *Id*. at 17882, para. 26.

nonetheless record such data to the extent that it is necessary to comply with the reporting obligations described below. The Order also concludes that the most useful comparison of call completion rates is between rural and nonrural incumbent LECs, and thus excludes calls terminating to CLECs, CMRS providers, or VoIP services providers from the recording, retention, and reporting requirements. The Order also requires filers to include autodialer traffic in their recording, retention and reporting but allows them file a separate report that segregates autodialer traffic from other traffic, accompanied by an explanation of the method the used to identify the autodialer traffic. In addition, recording, retention, and reporting requirements set forth in the Order apply to call attempts of very short duration, while excluding call attempts handed back to an upstream provider and call attempts to toll-free numbers. The Order requires covered providers to retain the call detail records described above for calls to rural OCNs in a readily retrievable form for at least six calendar months, except as described in the discussion of the safe harbor, below.

5. The reporting obligations adopted in the Order require covered providers to submit a certified report to the Commission once per calendar quarter that includes, for each full month in that quarter: (1) for each rural OCN, the OCN, the state, the total number of attempted interstate calls, the number of attempted interstate calls that were answered, and the number of attempted interstate calls that were not answered, reported separately for call attempts signaled as busy, ring no answer, or unassigned number; (2) the same information described in (1), but for intrastate calls; (3) the same information regarding attempted interstate calls described in (1), but for nonrural OCNs in the aggregate; and (4) the same information regarding attempted intrastate calls described in (2), but for nonrural OCNs in the aggregate. These data permit calculation of the percentage of calls answered (the call answer rate) and the percentage of calls completed to the terminating provider regardless of whether answered or unanswered by the user (the network effectiveness ratio). Collecting these data points will provide the Commission with better insight into the reasons why calls are not answered or not reaching their destinations. The Order defines the term "answered call" to mean "a call that was answered by or on behalf of the called party (including calls completed to devices, services or parties that answer the call such as an interactive voice response, answering service, voicemail or call-forwarding system or any such system that cause the network to register that the terminating party has gone off hook)."[4] The Order requires each covered provider to report monthly information for each rural OCN to which the provider attempted to deliver calls and decline to adopt a minimum calls per month threshold for reporting by rural OCN. The Order also concludes that the Commission will obtain the most informative data by collecting data on all call attempts, rather than attempts during a peak period, and adopts a monthly measurement interval and quarterly reporting interval for covered providers. The Order also encourages rural ILECs to voluntarily report their own call answer rates by terminating rural OCN, which we believe would be an important benchmark that could be responsive to speculation about local rural user behavior and local rural service distinctions both among individual rural ILECs and between rural and nonrural terminating ILECs generally.

6. The Order adopts a rule prohibiting all originating and intermediate providers from causing audible ringing to be sent to the caller before the terminating provider has signaled that the called party is being alerted, and clarifies that "alerting the called party" includes alerting devices, services or parties that can answer the call such as an interactive voice response, answering service, voicemail or call-forwarding system or any such system that can cause the network to register that the terminating party has gone off hook. Originating and intermediate providers must also convey audio tones and announcements sent by the terminating provider to the calling party. The rule prohibiting false audible ringing applies to all originating providers and intermediate providers, including LECs, IXCs, CMRS providers, interconnected VoIP, and one-way VoIP providers.

7. The rules adopted in the Order will help the Commission, our state partners, and the reporting providers monitor call completion performance and address problem areas. At the same time,

[4] Order section III.A.4.a.

we are mindful of the potential burdens and take actions to minimize them, particularly on smaller entities. The Order therefore limits the application of the recording, retention, and reporting requirements to providers with more than 100,000 retail customers. We also target our regulations to address the source of the problem. Because the problems appear to increase significantly when a call is handed off among multiple providers, the Order adopts a safe harbor to encourage providers to limit the number of hand offs. Specifically, providers that restrict by contract directly connected intermediate providers to no more than one additional intermediate provider in the call path will be relieved of the reporting obligation after one year and have a reduced record retention period, although such providers may be required to comply with those requirements at the discretion of the Enforcement Bureau. Similarly, covered providers adhering to industry best practices and other measures intended to ensure robust call completion performance may apply for a waiver of these recording, retention, and reporting requirements. Our regulations are carefully targeted to help address the problems with completing calls in rural areas while minimizing the burdens of compliance for all covered providers, including small entities. We also note that the ring signaling integrity requirements adopted in the Order may have an economic impact on small entities, but believe that the benefits to the functioning of the PSTN and to consumers outweigh any burdens.

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

8. There were no comments filed that specifically addressed the rules and policies proposed in the IRFA. To the extent we received comments raising general small business concerns during this proceeding, those comments are discussed throughout the Order.

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

9. 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.[5] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[6] In addition, the term "small business" has the same meaning as the term "small-business concern" under the Small Business Act.[7] 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.[8]

10. **Small Businesses**. Nationwide, there are a total of approximately 27.9 million small businesses, according to the SBA.[9]

11. **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 Census data for 2007 shows that there were 31,996 establishments that operated that

[5] *See* 5 U.S.C. § 603(b)(3).

[6] *See* 5 U.S.C. § 601(6).

[7] *See* 5 U.S.C. § 601(3) (incorporating by reference the definition of "small-business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

[8] *See* 15 U.S.C. § 632.

[9] *See* SBA, Office of Advocacy, "Frequently Asked Questions," *available at* http://www.sba.gov/sites/default/files/FAQ_Sept_2012.pdf (last accessed Jan. 24, 2012).

year. Of those 31,996, 1,818 operated with more than 100 employees, and 30,178 operated with fewer than 100 employees. [10] Thus, under this size standard, the majority of firms can be considered small.

12. **Local Exchange Carriers (LECs)**. Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. 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.[11] According to Commission data, Census data for 2007 shows that there were 31,996 establishments that operated that year. Of those 31,996, 1,818 operated with more than 100 employees, and 30,178 operated with fewer than 100 employees. [12] 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.

13. **Incumbent Local Exchange Carriers (Incumbent LECs)**. Neither the Commission nor the SBA 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.[13] According to Commission data, 1,307 carriers reported that they were incumbent local exchange service providers.[14] Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees.[15] 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.

14. We have included small incumbent LECs in this present RFA analysis. As noted above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation."[16] 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.[17] 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.

15. Competitive Local Exchange Carriers (competitive LECs), Competitive Access Providers (CAPs), Shared-Tenant Service Providers, and Other Local Service Providers. Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[18] According to

[10] *See id.*

[11] *See* 13 C.F.R. § 121.201, NAICS code 517110.

[12] *See id.*

[13] *See* 13 C.F.R. § 121.201, NAICS code 517110.

[14] *See Trends in Telephone Service*, Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division at Table 5.3 (Sept. 2010) (*Trends in Telephone Service*).

[15] *See id*.

[16] 5 U.S.C. § 601(3).

[17] *See* Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (May 27, 1999). The Small Business Act contains a definition of "small business concern," which the RFA incorporates into its own definition of "small business." *See* 15 U.S.C. § 632(a); *see also* 5 U.S.C. § 601(3). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. *See* 13 C.F.R. § 121.102(b).

[18] *See* 13 C.F.R. § 121.201, NAICS code 517110.

Commission data, 1,442 carriers reported that they were engaged in the provision of either competitive local exchange services or competitive access provider services.[19] Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees and 186 have more than 1,500 employees.[20] 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.[21] In addition, 72 carriers have reported that they are Other Local Service Providers.[22] Of the 72, seventy have 1,500 or fewer employees and two have more than 1,500 employees.[23] 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.

16. **Interexchange Carriers (IXCs)**. Neither the Commission nor the SBA has developed a size 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.[24] According to Commission data, 359 companies reported that their primary telecommunications service activity was the provision of interexchange services.[25] Of these 359 companies, an estimated 317 have 1,500 or fewer employees and 42 have more than 1,500 employees.[26] 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.

17. **Prepaid Calling Card Providers**. Neither the Commission nor the SBA has developed a small business size standard specifically for prepaid calling card providers. The appropriate size standard under SBA rules is for the category Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[27] Census data for 2007 show that 1,523 firms provided resale services during that year. Of that number, 1,522 operated with fewer than 1000 employees and one operated with more than 1,000.[28] Thus, under this category and the associated small business size standard, the majority of these prepaid calling card providers can be considered small entities. According to Commission data, 193 carriers have reported that they are engaged in the provision of prepaid calling cards.[29] Of these, an estimated all 193 have 1,500 or fewer employees and none have more than 1,500 employees.[30] Consequently, the Commission estimates that the majority of prepaid calling card providers are small entities that may be affected by rules adopted pursuant to the NPRM.

18. **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

[19] *See Trends in Telephone Service* at Table 5.3.

[20] *See id.*

[21] *See id*.

[22] *See id*.

[23] *See id*.

[24] *See* 13 C.F.R. § 121.201, NAICS code 517110.

[25] *See Trends in Telephone Service* at Table 5.3.

[26] *See id.*

[27] *See* 13 C.F.R. § 121.201, NAICS code 517911.

[28] *See id.*

[29] *See Trends in Telephone Service* at Table 5.3.

[30] *See id*.

fewer employees.[31] Census data for 2007 show that 1,523 firms provided resale services during that year. Of that number, 1,522 operated with fewer than 1000 employees and one operated with more than 1,000.[32] Thus, under this category and the associated small business size standard, the majority of these prepaid calling card providers can be considered small entities. According to Commission data, 213 carriers have reported that they are engaged in the provision of local resale services.[33] Of these, an estimated 211 have 1,500 or fewer employees and two have more than 1,500 employees.[34] Consequently, the Commission estimates that the majority of local resellers are small entities that may be affected by rules adopted pursuant to the NPRM.

19. **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.[35] Census data for 2007 show that 1,523 firms provided resale services during that year. Of that number, 1,522 operated with fewer than 1000 employees and one operated with more than 1,000.[36] Thus, under this category and the associated small business size standard, the majority of these prepaid calling card providers can be considered small entities. According to Commission data, 881 carriers have reported that they are engaged in the provision of toll resale services.[37] Of these, an estimated 857 have 1,500 or fewer employees and 24 have more than 1,500 employees.[38] Consequently, the Commission estimates that the majority of toll resellers are small entities that may be affected by rules adopted pursuant to the NPRM.

20. **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.[39] Census data for 2007 shows that there were 31,996 establishments that operated that year. Of those 31,996, 1,818 operated with more than 100 employees, and 30,178 operated with fewer than 100 employees. [40] Thus, under this category and the associated small business size standard, the majority of Other Toll Carriers can be considered small. According to Commission data, 284 companies reported that their primary telecommunications service activity was the provision of other toll carriage.[41] Of these, an estimated 279 have 1,500 or fewer employees and five have more than 1,500 employees.[42] 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.

[31] *See* 13 C.F.R. § 121.201, NAICS code 517911.

[32] *See id.*

[33] *See Trends in Telephone Service* at Table 5.3.

[34] *See id*.

[35] *See* 13 C.F.R. § 121.201, NAICS code 517911.

[36] *See id.*

[37] *See Trends in Telephone Service* at Table 5.3.

[38] *See id*.

[39] *See* 13 C.F.R. § 121.201, NAICS code 517110.

[40] *See id.*

[41] *See Trends in Telephone Service* at Table 5.3.

[42] *See id*.

21. **Wireless Telecommunications Carriers (except Satellite)**. Since 2007, the SBA has recognized wireless firms within this new, broad, economic census category.[43] Prior to that time, such firms were within the now-superseded categories of Paging and Cellular and Other Wireless Telecommunications.[44] Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.[45] For this category, census data for 2007 show that there were 11,163 establishments that operated for the entire year.[46] Of this total, 10,791 establishments had employment of 999 or fewer employees and 372 had employment of 1000 employees or more.[47] Thus, under this category and the associated small business size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities that may be affected by our proposed action.

22. 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.[48] Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.[49] 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.

23. **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."[50] The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees.[51] Census data for 2007 shows that there were 31,996 establishments that operated that year. Of those 31,996, 1,818 operated with more than 100 employees, and 30,178 operated with fewer than 100 employees. Thus, under this size standard, the majority of firms offering cable and other program distribution services can be considered small and may be affected by rules adopted pursuant to the NPRM.

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[43] *See* 13 C.F.R. § 121.201, NAICS code 517210.

[44] U.S. Census Bureau, 2002 NAICS Definitions, "517211 Paging," *available at* http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517211&search=2002%20NAICS%20Search (last accessed Jan. 31, 2013); U.S. Census Bureau, 2002 NAICS Definitions, "517212 Cellular and Other Wireless Telecommunications," *available at* http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517212&search=2002%20NAICS%20Search (last accessed Jan. 31, 2013).

[45] 13 C.F.R. § 121.201, NAICS code 517210. The now-superseded, pre-2007 C.F.R. citations were 13 C.F.R. § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

[46] U.S. Census Bureau, Subject Series: Information, Table 5, "Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 517210" (issued Nov. 2010).

[47] *Id*. Available census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "100 employees or more."

[48] *See Trends in Telephone Service* at Table 5.3.

[49] *See id*.

[50] U.S. Census Bureau, 2007 NAICS Definitions, "517110 Wired Telecommunications Carriers" (partial definition), *available at* http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517110&search=2007%20NAICS%20Search (last accessed Jan. 31, 2013).

[51] *See* 13 C.F.R § 121.201, NAICS code 517110.

24. **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.[52] Industry data indicate that, of 1,076 cable operators nationwide, all but eleven are small under this size standard.[53] In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.[54] Industry data indicate that, of 6,635 systems nationwide, 5,802 systems have under 10,000 subscribers, and an additional 302 systems have 10,000-19,999 subscribers.[55] Thus, under this second size standard, most cable systems are small and may be affected by rules adopted pursuant to the NPRM.

25. **All Other Telecommunications**. The Census Bureau defines this industry as including "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."[56] 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.[57] According to Census Bureau data for 2007, there were 2,623 firms in this category that operated for the entire year.[58] Of these, 2478 establishments had annual receipts of under $10 million and 145 establishments had annual receipts of $10 million or more.[59] 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

26. The Order requires covered providers to submit a certified report to the Commission once per calendar quarter that includes, for each full month in that quarter: (1) for each rural OCN, the OCN, the state, the total number of attempted interstate calls, the number of attempted interstate calls that were answered, and the number of attempted interstate calls that were not answered, reported separately for call attempts signaled as (a) busy, (b) ring no answer, or (c) unassigned number; (2) the same information described in (1), but for intrastate calls; (3) the same information regarding attempted interstate calls

[52] *See* 47 C.F.R. § 76.901(e). The Commission determined that this size standard equates approximately to a size standard of $100 million or less in annual revenues. *See Implementation of Sections of the 1992 Cable Television Consumer Protection and Competition Act: Rate Regulation*, MM Docket Nos. 92-266, 93-215, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393, 7408 para. 28 (1995).

[53] These data are derived from R.R. BOWKER, BROADCASTING & CABLE YEARBOOK 2006, "Top 25 Cable/Satellite Operators," pages A-8 & C-2 (data current as of June 30, 2005); WARREN COMMUNICATIONS NEWS, TELEVISION & CABLE FACTBOOK 2006, "Ownership of Cable Systems in the United States," pages D-1805 to D-1857.

[54] *See* 47 C.F.R. § 76.901(c).

[55] WARREN COMMUNICATIONS NEWS, TELEVISION & CABLE FACTBOOK 2006, "U.S. Cable Systems by Subscriber Size," page F-2 (data current as of Oct. 2007). The data do not include 851 systems for which classifying data were not available.

[56] U.S. Census Bureau, "2007 NAICS Definitions: 517919 All Other Telecommunications," *available at* http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517919&search=2007%20NAICS%20Search (last accessed Jan. 31, 2013).

[57] *See* 13 C.F.R. § 121.201, NAICS code 517919.

[58] U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 4, "Establishment and Firm Size: Receipts Size of Firms for the United States: 2007 NAICS Code 517919" (issued Nov. 2010).

[59] *See id.*

described in (1), but for nonrural OCNs in the aggregate; and (4) the same information regarding attempted intrastate calls described in (2), but for nonrural OCNs in the aggregate. The Order requires covered providers to record and retain the following information for each long-distance call to a local exchange carrier that is a rural telephone company: calling party number; called party number; date; time of day; whether the call is handed off to an intermediate provider and, if so, which intermediate provider; whether the call is going to a rural carrier and, if so, which rural carrier, as identified by its operating company number (OCN); whether the call is interstate; whether the call attempt was answered; and whether the call attempt was completed to the incumbent local exchange carrier but signaled as busy, ring no answer, or unassigned number. The Commission requires covered providers to retain these records for a period including the six most recent calendar months for call attempts to rural ILECs; for those call attempts to nonrural ILECs, the rules do not require covered providers to retain records for any length of time. Compliance with these recordkeeping and retention obligations may affect small entities, and may include new administrative processes.

27. In the Order, the Commission adopts a rule prohibiting all originating and intermediate providers—including LECs, IXCs, CMRS providers, interconnected VoIP, and one-way VoIP providers— from causing audible ringing to be sent to the caller before the terminating provider has signaled that the called party is being alerted. Compliance with these ring signaling integrity requirements may affect small entities, and may include new administrative processes.

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

28. 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."[60]

29. 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 Order includes a number of measures to minimize or eliminate the costs and burdens generated by compliance with the proposed rules.

30. First, the recording, reporting, and retention rules adopted in the Order apply only to providers of long-distance voice service that make the initial long-distance call path choice for more than 100,000 domestic retail subscriber lines, counting the total of all business and residential fixed subscriber lines and mobile phones and aggregated over all of the providers' affiliates. Accordingly, smaller providers are not required to comply with these rules.

31. Additionally, the rule requiring retention of call detail records applies only to call attempts to rural incumbent LECs, a relatively small percentage of total call attempts; call attempts to nonrural incumbent LECs need not be retained.[61] This approach should reduce the burden of compliance for smaller entities by reducing the costs of data storage that the rule proposed in the *Notice* would have required, according to one estimate by as much as 90 percent. The Order also permits affiliated providers to record and report the information required individually or aggregated to the holding-company level,

[60] 5 U.S.C. § 603(c)(1)–(c)(4).

[61] *See* Order sections III.A.3.b. and III.A.3.d.

which should make it easier for smaller entities to record and report data in ways that are less burdensome to them.[62]

32. The rules adopted in the Order also include a safe harbor provision that could reduce the economic impact on small entities. The safe harbor relieves covered providers of their reporting obligations after one year and reduces their retention obligations if they certify that: they restrict by contract directly connected intermediate providers to no more than one additional intermediate provider in the call path before the call reaches the terminating provider; any nondisclosure agreement with an intermediate provider permits the covered provider to reveal the intermediate provider's identity to the Commission and to any rural carrier whose incoming long-distance traffic is affected by the intermediate provider's performance; and they have a process in place to monitor the performance of their intermediate providers.[63]

33. The Order delegates to the Wireline Competition Bureau, in consultation with the Enforcement Bureau, the authority to consider applications for waiver of the recordkeeping, retention, and reporting requirements adopted in the Order.[64] If approved, these waivers will reduce or eliminate a covered provider's recordkeeping, retention, or reporting obligations. In evaluating a provider's waiver request, the Bureau may consider: whether a provider has demonstrated that it qualifies for the safe harbor; whether it persuasively demonstrates that it has processes in place to ensure that calls to rural incumbent LECs successfully reach their destinations, such as by adopting industry best practices; and whether the provider has demonstrated that it has capabilities and processes to monitor its own performance by the OCN of the called party's LEC. As a condition of a waiver, the Bureau will require a provider to report information about rural call completion for a one-year period, and such a report may be based on a statistically valid sample of calls. In addition, the Bureau may require, as a condition of a waiver, that a provider collect and retain some data, such as data reflecting a statistically valid sample of calls to rural and nonrural areas.

34. The Commission considered 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. In declining to adopt a sunset date for the rules, the Commission considered whether the rules should expire on a particular date to account for the possibility that reforms to the intercarrier compensation rules may alleviate many rural call completion problems. However, the Commission must ensure that it has the data necessary to adopt a long-term solution regarding the disparity in call completion rates between rural and nonrural areas. Moreover, while the bill-and-keep transition should, to a large extent, eliminate the financial incentive structure that contributes to rural call completion problems, we conclude that rural call completion problems may not be solely attributable to terminating charges. Although declining to adopt a sunset provision could have an ongoing economic impact on both small and large entities, the Commission believes that any such impact is outweighed by the benefit of ensuring that the Commission continues to obtain the data necessary to address the rural call completion problem should the intercarrier compensation reforms alleviate only some of the issues plaguing long-distance call attempts to rural areas. Furthermore, to ensure that the data collection and reporting rules do not last without review in perpetuity, the Order states that the Commission shall complete a proceeding in which it reevaluates whether to keep, eliminate, or amend the data collection and reporting rules three years after they become effective. That time should be sufficient for the Commission and the public to review the data collected herein and determine whether the rules adopted today remain in the public interest going forward.

[62] *See* Order section III.A.1.

[63] *See* Order section III.A.5.

[64] *See* Order section V.

35. The proposed ring signaling integrity 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 long distance industry.

F. Report to Congress

36. The Commission will send a copy of the *Order*, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act.[65] In addition, the Commission will send a copy of the *Order*, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the *Order* and FRFA (or summaries thereof) will also be published in the Federal Register.[66]

[65] *See* 5 U.S.C. § 801(a)(1)(A).

[66] *See* 5 U.S.C. § 604(b).

APPENDIX E

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),[1] 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 Further Notice of Proposed Rulemaking (FNPRM). 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 FNPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).[2] In addition, the FNPRM and IRFA (or summaries thereof) will be published in the Federal Register.[3]

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

2. The FNPRM seeks comment on a variety of issues relating to possible remedies for the problem of low call completion rates and poor overall call quality to rural America. As discussed in the FNPRM, the proposed rules will provide the Commission and providers with more data to identify and address problems of long-distance call completion to rural areas. The ubiquity and reliability of the nation's telecommunications network are of paramount importance to the Communications Act of 1934, as amended,[4] and problems adversely affecting that ubiquity and reliability threaten commerce, public safety, and the ability of consumers, businesses, and public health and safety officials in rural America to access and use a reliable network. In order to confront these challenges, the FNPRM asks for comment in a number of specific areas.

1. Autodialer Traffic

3. The FNPRM first seeks comment on the ability of a covered provider to identify and segregate autodialer calls in order to further clarify whether autodialer, or mass-dialer, traffic can be reliably distinguished from regular traffic by covered providers.[5] The FNPRM also seeks comment on whether providers are able to isolate autodialer calls because of the way such traffic is delivered or otherwise, and on the burdens of and benefits of distinguishing autodialer traffic.[6] In addition, the FNPRM seeks comment on the proposal that all covered providers be required to file a separate report that segregates autodialer traffic from other traffic, accompanied by an explanation of the method the provider used to identify the autodialer traffic, and on the relative benefits and burdens of doing so.[7]

2. Intermediate Providers

4. The FNPRM seeks comment on whether the Commission should extend the recording, retention, and reporting requirements adopted in the Order to intermediate providers, or a subset thereof, the Commission's authority to do so, and the benefits and burdens of doing so.[8] The FNPRM also seeks

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

[2] *See* 5 U.S.C. § 603(a).

[3] *Id*.

[4] 47 U.S.C. § 151 *et seq.*

[5] *See* FNPRM section IV.A.

[6] *Id.*

[7] *Id.*

[8] *See* FNPRM section IV.B.

comment on whether the Commission should impose certifications or other obligations on intermediate providers. The FNPRM asks whether each intermediate provider offering to deliver traffic for termination for another provider, or offering to deliver traffic for termination that is originated by an entity other than the end users it serves, should be required to certify that it is terminating such traffic in compliance with all applicable intercarrier compensation orders, tariffs and agreements.[9] The FNPRM further asks whether each intermediate provider should be required to obtain and file similar certifications from companies to which it is directing traffic for the purpose of terminating to the PSTN and to rural telephone companies in particular.[10] The FNPRM also asks whether the Commission should require intermediate providers to include in their rate decks a statement of the maximum number of intermediate providers they will use to deliver a call to a particular area. Finally, the FNPRM seeks comment on the proposals that it would be unlawful for any intermediate provider that refused to provide such a certification to carry traffic for termination on the PSTN, and that it would be unlawful for any provider to direct such traffic to such a non-complying company.[11]

3. Modifications to the Safe Harbor

5. The FNPRM seeks comment on whether the Commission should revise, in the future, the requirements for the safe harbor for qualifying providers whose contracts with directly connected intermediate providers allow those intermediate providers to pass a call to no more than one additional intermediate provider before the call reaches the terminating provider.[12] The FNPRM seeks comment on whether there are particular industry practices to manage call termination that should make providers eligible for a safe harbor from reporting and/or retention of records.[13] The FNPRM also asks whether the existing safe harbor should be modified to include additional requirements in contracting with intermediate providers or other measures and, if so, what these triggers should be and why, and what those obligations should be.[14] In addition, the FNPRM asks whether, if the Commission revises or adopts different safe harbors, providers qualifying for the new or revised safe harbors should be relieved of any data retention obligations.[15]

6. The FNPRM also seeks comment on adopting a separate safe harbor related to a provider's call completion performance in specific OCNs. Specifically, it seeks comment on whether a covered provider's record of matching or exceeding a rural incumbent LEC's reported terminating call answer rate in specific OCNs, or another threshold tied to the rural incumbent LEC's terminating call answer rate, could establish the foundation for a separate safe harbor for those OCNs. The FNPRM also asks what would be an appropriate record of matching or exceeding a rural incumbent LEC's terminating call answer rate and what would be an appropriate threshold in relation to that answer rate.[16]

7. The FNPRM seeks comment on what the Commission should consider should it elect to adopt a performance-based safe harbor (*i.e.*, a safe harbor based on successful performance in completing rural calls as demonstrated by a provider's data). Finally, the FNPRM seeks comment on what the Commission should take into consideration if it were to adopt standards for rural call performance and on

[9] *Id.*

[10] *Id.*

[11] *Id.*

[12] *See* FNPRM section IV.C.

[13] *Id.*

[14] *Id.*

[15] *Id.*

[16] *Id.*

what other uses of the reported data would be useful and appropriate to eliminate the rural call completion problem.[17]

4. Rural Incumbent Local Exchange Carriers

8. The FNPRM seeks comment on whether rural ILECs should be required to report their terminating call answer rate and whether the Commission should adopt or encourage a reporting methodology beyond what is described in the Order.[18] The FNPRM asks whether, if the Commission adopts such a reporting scheme, rural ILECs above a certain size should be required to report their local call answer rate data while those below the size threshold could continue to report on a voluntary basis. The FNPRM seeks comment on what would be the appropriate threshold, in terms of subscriber lines, revenues, or other measures, whether it would be more efficient for a single report on rural ILEC call answer rates to be assembled by a third party organization, and how that process would function.[19] The FNPRM asks how the Commission would select such a third-party organization, how that organization would obtain the data, and how the Commission could ensure the reliability of the reports.[20] The FNPRM also asks whether rural ILECs should report with the same timing and frequency as set out for voluntary reporting in the Order and, if not, what the reporting timing and frequency should be. Finally, the FNPRM seeks comment on the burdens and benefits of rural ILEC reporting.[21]

5. Additional Rule Changes

9. The FNPRM seeks comment on whether the Commission should adopt rules formally codifying existing prohibitions on blocking, choking, reducing, or restricting traffic.[22] The FNPRM also seeks comment on whether there are any additional requirements that should apply to some or all of these providers or to any other entity, whether with respect to that entity's acts or omission that directly block, choke, reduce, or restrict traffic, governing its acts or omissions with respect to its intermediate providers, or that otherwise lead to rural call completion problems.[23] The FNPRM seeks comment on a number of related issues, including: why such new requirements are needed; identify the specific categories of conduct that would be prohibited under the new requirements; and identify the specific sources of legal authority that would permit the Commission to adopt the new requirements.[24] The FNPRM also seeks comment on whether the Commission should provide additional guidance as to how existing or any new requirements should apply to specific scenarios.

B. Legal Basis

10. The legal basis for any action that may be taken pursuant to the FNPRM is contained in sections 1, 4(i), 201(b), 202(a), 218, 220(a), 251(a), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 201(b), 202(a), 218, 220(a), 251(a), and 403.

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[17] *Id.*

[18] *See* FNPRM section IV.D.

[19] *Id.*

[20] *Id.*

[21] *Id.*

[22] *See* FNPRM section IV.E.

[23] *Id.*

[24] *Id.*

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

11. 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.[25] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[26] In addition, the term "small business" has the same meaning as the term "small-business concern" under the Small Business Act.[27] 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.[28]

12. **Small Businesses**. Nationwide, there are a total of approximately 27.9 million small businesses, according to the SBA.[29]

13. **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 Census data for 2007 shows that there were 31,996 establishments that operated that year. Of those 31,996, 1,818 operated with more than 100 employees, and 30,178 operated with fewer than 100 employees. [30] Thus, under this size standard, the majority of firms can be considered small.

14. **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.[31] According to Commission data, Census data for 2007 shows that there were 31,996 establishments that operated that year. Of those 31,996, 1,818 operated with more than 100 employees, and 30,178 operated with fewer than 100 employees. [32] 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.

15. **Incumbent Local Exchange Carriers (incumbent LECs)**. Neither the Commission nor the SBA 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.[33] According to Commission data, 1,307 carriers reported that they were incumbent local

[25] *See* 5 U.S.C. § 603(b)(3).

[26] *See* 5 U.S.C. § 601(6).

[27] *See* 5 U.S.C. § 601(3) (incorporating by reference the definition of "small-business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

[28] *See* 15 U.S.C. § 632.

[29] *See* SBA, Office of Advocacy, "Frequently Asked Questions," *available at* http://www.sba.gov/sites/default/files/FAQ_Sept_2012.pdf (last accessed Jan. 24, 2012).

[30] *See id.*

[31] *See* 13 C.F.R. § 121.201, NAICS code 517110.

[32] *See id.*

[33] *See* 13 C.F.R. § 121.201, NAICS code 517110.

exchange service providers.[34] Of these 1,307 carriers, an estimated 1,006 have 1,500 or fewer employees and 301 have more than 1,500 employees.[35] 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.

16. We have included small incumbent LECs in this present RFA analysis. As noted above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation."[36] 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.[37] 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.

17. **Competitive Local Exchange Carriers (competitive LECs), Competitive Access Providers (CAPs), Shared-Tenant Service Providers, and Other Local Service Providers.** Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[38] 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.[39] Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees and 186 have more than 1,500 employees.[40] 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.[41] In addition, 72 carriers have reported that they are Other Local Service Providers.[42] Of the 72, seventy have 1,500 or fewer employees and two have more than 1,500 employees.[43] 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.

18. **Interexchange Carriers (IXCs)**. Neither the Commission nor the SBA has developed a size 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.[44] According to Commission data,

[34] *See Trends in Telephone Service*, Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division at Table 5.3 (Sept. 2010) (*Trends in Telephone Service*).

[35] *See id*.

[36] 5 U.S.C. § 601(3).

[37] *See* Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (May 27, 1999). The Small Business Act contains a definition of "small business concern," which the RFA incorporates into its own definition of "small business." *See* 15 U.S.C. § 632(a); *see also* 5 U.S.C. § 601(3). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. *See* 13 C.F.R. § 121.102(b).

[38] *See* 13 C.F.R. § 121.201, NAICS code 517110.

[39] *See Trends in Telephone Service* at Table 5.3.

[40] *See id.*

[41] *See id*.

[42] *See id*.

[43] *See id*.

[44] *See* 13 C.F.R. § 121.201, NAICS code 517110.

359 companies reported that their primary telecommunications service activity was the provision of interexchange services.[45] Of these 359 companies, an estimated 317 have 1,500 or fewer employees and 42 have more than 1,500 employees.[46] 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.

19. **Prepaid Calling Card Providers**. Neither the Commission nor the SBA has developed a small business size standard specifically for prepaid calling card providers. The appropriate size standard under SBA rules is for the category Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[47] Census data for 2007 show that 1,523 firms provided resale services during that year. Of that number, 1,522 operated with fewer than 1000 employees and one operated with more than 1,000.[48] Thus, under this category and the associated small business size standard, the majority of these prepaid calling card providers can be considered small entities. According to Commission data, 193 carriers have reported that they are engaged in the provision of prepaid calling cards.[49] Of these, an estimated all 193 have 1,500 or fewer employees and none have more than 1,500 employees.[50] Consequently, the Commission estimates that the majority of prepaid calling card providers are small entities that may be affected by rules adopted pursuant to the NPRM.

20. **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.[51] Census data for 2007 show that 1,523 firms provided resale services during that year. Of that number, 1,522 operated with fewer than 1000 employees and one operated with more than 1,000.[52] Thus, under this category and the associated small business size standard, the majority of these prepaid calling card providers can be considered small entities. According to Commission data, 213 carriers have reported that they are engaged in the provision of local resale services.[53] Of these, an estimated 211 have 1,500 or fewer employees and two have more than 1,500 employees.[54] Consequently, the Commission estimates that the majority of local resellers are small entities that may be affected by rules adopted pursuant to the NPRM.

21. **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.[55] Census data for 2007 show that 1,523 firms provided resale services during that year. Of that number, 1,522 operated with fewer than 1000 employees and one operated with more than 1,000.[56] Thus, under this category and the associated small business size standard, the majority of these prepaid calling card providers can be considered small entities. According to Commission data, 881

[45] *See Trends in Telephone Service* at Table 5.3.

[46] *See id.*

[47] *See* 13 C.F.R. § 121.201, NAICS code 517911.

[48] *See id.*

[49] *See Trends in Telephone Service* at Table 5.3.

[50] *See id*.

[51] *See* 13 C.F.R. § 121.201, NAICS code 517911.

[52] *See id.*

[53] *See Trends in Telephone Service* at Table 5.3.

[54] *See id*.

[55] *See* 13 C.F.R. § 121.201, NAICS code 517911.

[56] *See id.*

carriers have reported that they are engaged in the provision of toll resale services.[57] Of these, an estimated 857 have 1,500 or fewer employees and 24 have more than 1,500 employees.[58] Consequently, the Commission estimates that the majority of toll resellers are small entities that may be affected by rules adopted pursuant to the NPRM.

22. **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.[59] Census data for 2007 shows that there were 31,996 establishments that operated that year. Of those 31,996, 1,818 operated with more than 100 employees, and 30,178 operated with fewer than 100 employees. [60] Thus, under this category and the associated small business size standard, the majority of Other Toll Carriers can be considered small. According to Commission data, 284 companies reported that their primary telecommunications service activity was the provision of other toll carriage.[61] Of these, an estimated 279 have 1,500 or fewer employees and five have more than 1,500 employees.[62] 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.

23. **Wireless Telecommunications Carriers (except Satellite)**. Since 2007, the SBA has recognized wireless firms within this new, broad, economic census category.[63] Prior to that time, such firms were within the now-superseded categories of Paging and Cellular and Other Wireless Telecommunications.[64] Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.[65] For this category, census data for 2007 show that there were 11,163 establishments that operated for the entire year.[66] Of this total, 10,791 establishments had employment of 999 or fewer employees and 372 had employment of 1000 employees or more.[67] Thus, under this category and the associated small business size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities that may be affected by our proposed action.

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[57] *See Trends in Telephone Service* at Table 5.3.

[58] *See id*.

[59] *See* 13 C.F.R. § 121.201, NAICS code 517110.

[60] *See id.*

[61] *See Trends in Telephone Service* at Table 5.3.

[62] *See id*.

[63] *See* 13 C.F.R. § 121.201, NAICS code 517210.

[64] U.S. Census Bureau, 2002 NAICS Definitions, "517211 Paging," *available at* http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517211&search=2002%20NAICS%20Search (last accessed Jan. 31, 2013); U.S. Census Bureau, 2002 NAICS Definitions, "517212 Cellular and Other Wireless Telecommunications," *available at* http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517212&search=2002%20NAICS%20Search (last accessed Jan. 31, 2013).

[65] 13 C.F.R. § 121.201, NAICS code 517210. The now-superseded, pre-2007 C.F.R. citations were 13 C.F.R. § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

[66] U.S. Census Bureau, Subject Series: Information, Table 5, "Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 517210" (issued Nov. 2010).

[67] *Id*. Available census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "100 employees or more."

24. 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.[68] Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.[69] 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.

25. **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."[70] The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees.[71] Census data for 2007 shows that there were 31,996 establishments that operated that year. Of those 31,996, 1,818 operated with more than 100 employees, and 30,178 operated with fewer than 100 employees. Thus, under this size standard, the majority of firms offering cable and other program distribution services can be considered small and may be affected by rules adopted pursuant to the NPRM.

26. **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.[72] Industry data indicate that, of 1,076 cable operators nationwide, all but eleven are small under this size standard.[73] In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.[74] Industry data indicate that, of 6,635 systems nationwide, 5,802 systems have under 10,000 subscribers, and an additional 302 systems have 10,000-19,999 subscribers.[75] Thus, under this second size standard, most cable systems are small and may be affected by rules adopted pursuant to the NPRM.

27. **All Other Telecommunications**. The Census Bureau defines this industry as including "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

[68] *See Trends in Telephone Service* at Table 5.3.

[69] *See id*.

[70] U.S. Census Bureau, 2007 NAICS Definitions, "517110 Wired Telecommunications Carriers" (partial definition), *available at* http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517110&search=2007%20NAICS%20Search (last accessed Jan. 31, 2013).

[71] *See* 13 C.F.R § 121.201, NAICS code 517110.

[72] *See* 47 C.F.R. § 76.901(e). The Commission determined that this size standard equates approximately to a size standard of $100 million or less in annual revenues. *See Implementation of Sections of the 1992 Cable Television Consumer Protection and Competition Act: Rate Regulation*, MM Docket Nos. 92-266, 93-215, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393, 7408 para. 28 (1995).

[73] These data are derived from R.R. BOWKER, BROADCASTING & CABLE YEARBOOK 2006, "Top 25 Cable/Satellite Operators," pages A-8 & C-2 (data current as of June 30, 2005); WARREN COMMUNICATIONS NEWS, TELEVISION & CABLE FACTBOOK 2006, "Ownership of Cable Systems in the United States," pages D-1805 to D-1857.

[74] *See* 47 C.F.R. § 76.901(c).

[75] WARREN COMMUNICATIONS NEWS, TELEVISION & CABLE FACTBOOK 2006, "U.S. Cable Systems by Subscriber Size," page F-2 (data current as of Oct. 2007). The data do not include 851 systems for which classifying data were not available.

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."[76] 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.[77] According to Census Bureau data for 2007, there were 2,623 firms in this category that operated for the entire year.[78] Of these, 2,478 establishments had annual receipts of under $10 million and 145 establishments had annual receipts of $10 million or more.[79] 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

28. In the FNPRM, the Commission proposes to require covered providers to file a separate report that segregates autodialer traffic from other traffic, accompanied by an explanation of the method the provider used to identify the autodialer traffic. Compliance with these reporting obligations may affect small entities, and may include new administrative processes.

29. In the FNPRM, the Commission proposes to extend the recordkeeping, retention, and reporting requirements to intermediate providers, or some subset thereof. Compliance with these reporting obligations may affect small entities, and may include new administrative processes.

30. In the FNRPM, the Commission proposes to require intermediate providers to certify that they terminate long-distance traffic in accordance with all intercarrier compensation orders, tariffs, and agreements, and to prohibit intermediate carriers that fail to submit such certifications from carrying long-distance traffic. In addition, the proposal would prohibit other providers from handing off traffic to an intermediate provider that has failed to submit such certifications. Compliance with these reporting obligations may affect small entities, and may include new administrative processes.

31. In the FNPRM, the Commission also proposes to require rural ILECs to periodically report data for all long-distance calls terminating to their OCNs. Compliance with these reporting obligations may affect small entities, and may include new administrative processes.

32. We note parenthetically that, in the FNPRM, the Commission seeks comment on the benefits and burdens of these proposals.

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

33. 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

[76] U.S. Census Bureau, "2007 NAICS Definitions: 517919 All Other Telecommunications," *available at* http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517919&search=2007%20NAICS%20Search (last accessed Jan. 31, 2013).

[77] *See* 13 C.F.R. § 121.201, NAICS code 517919.

[78] U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 4, "Establishment and Firm Size: Receipts Size of Firms for the United States: 2007 NAICS Code 517919" (issued Nov. 2010).

[79] *See id.*

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."[80]

34. 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 FNPRM proposes a number of measures to minimize or eliminate the costs and burdens generated by compliance with the proposed rules.

35. First, with regard to the proposal that covered providers file a separate report that segregates autodialer traffic from other traffic, accompanied by an explanation of the method the provider used to identify the autodialer traffic,[81] only those covered providers with more than 100,000 retail long-distance subscriber lines (business or residential) would be required to retain the basic information on call attempts and to periodically report the summary analysis of that information to the Commission.

36. Second, the FNPRM seeks comment on the proposal that the recordkeeping, retention, and reporting requirements adopted in the Order be extended to intermediate providers, and on whether doing so would allow the Commission to reduce or eliminate the burden on covered providers.[82]

37. Third, the FNPRM seeks comment on standards the Commission might use to adopt additional safe harbors in the future in order to reduce or eliminate any burdens associated with compliance with the recordkeeping, retention, and reporting obligations. The FNPRM proposes to adopt a safe harbor based on a provider's performance in completing long-distance calls to particular rural OCNs, measured against each rural OCNs local call answer rate.[83]

38. Fourth, the FNPRM proposes to exempt smaller rural ILECs from the requirement that rural ILECs periodically report their local call answer rates to the Commission.[84] Each of these proposals could reduce the economic impact on small entities.

39. The Commission expects to consider the economic impact on small entities, as identified in comments filed in response to the FNPRM, in reaching its final conclusions and taking action in this proceeding. The proposed recordkeeping, retention, and reporting requirements in the FNPRM 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 long distance industry.

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

40. None.

[80] 5 U.S.C. § 603(c)(1)–(c)(4).

[81] *See* FNPRM section IV.A.

[82] *See* FNPRM section IV.B.

[83] *See* FNPRM section IV.C.

[84] *See* FNPRM section IV.D.

STATEMENT OF
ACTING CHAIRWOMAN MIGNON L. CLYBURN

Re: *Rural Call Completion*, WC Docket No. 13-39.

At the core of the FCC's mission is an obligation to ensure all Americans have access to reliable communications services. Yet, in rural America, an alarming number of calls are not being completed. This is unacceptable and today I am proud to say that the FCC is taking meaningful action to end this disparity.

How big of a problem is this? Part of the challenge that today's Order seeks to remedy is that we don't exactly know the answer. But according to one study, nearly a third of rural lines that were tested had completion problems on more than 20% of incoming calls. The same study found that the call-failure rate was more than 13-times higher in rural areas than in non-rural areas. Clearly, a problem exists. And it has real consequences.

We've heard about calls from doctors to nursing homes not going through, that calls to businesses aren't getting completed, and that rural consumers are frustrated when their friends and family are not able to reach them. Even more critically, calls to public safety authorities that are not completed can literally mean the difference between life and death. Consumers expect and deserve to be able to make and receive phone calls.

When any American, rural or urban, is cut off from communications, the FCC must take decisive and meaningful action. I've long been a champion for fast and effective remedies to address rural call completion problems and resolving the issue has been a personal priority. Today's Order represents a welcome step forward in making sure that this serious issue is properly addressed. I am pleased by our efforts to tackle this problem through the formation of a Rural Call Completion Task Force, with the issuance of clarifying orders, and the pursuit of enforcement cases. And today, we take our biggest step yet toward fixing the problem.

This Order will enhance our ability to investigate and crack down on call completion problems by requiring providers to retain information about calls on their networks and report it to the FCC. The data can isolate call completion problems, drive improvements by providers, and arm the FCC with powerful tools for enforcement. The Order will also give our state partners invaluable data on intrastate calls to assist them in their efforts to address call completion issues. Moreover, the Order gives providers incentives to immediately improve rural service quality by offering a safe harbor that eases data collection and reporting requirements for providers that adopt practices that are known to improve call completion rates. And, the Order includes a waiver process for providers that meet the safe harbor that will further reduce the burden for providers that demonstrate superior call completion practices.

I'm also pleased that the Order takes immediate and common-sense steps to help identify the scope of the problem, reduce consumer confusion, and improve the quality of long distance calls for rural Americans. One significant improvement focuses on ring tones. When a caller hears a ring tone in the handset after dialing, he or she assumes the call has gone through. But that's not always the case. The caller may hear ringing, when in fact, the call never rings on the other end of the line. This practice masks the problem of failed calls and mistakenly leads consumers into believing that the call was completed but no one picked up. This Order prohibits this premature "ringing." Silence on the line will make it clear to consumers when there is a call completion issue, and this will help providers more quickly identify problems.

While today's Order will be a significant step forward, we must remain vigilant, which is why we seek comment on further action in the Further Notice of Proposed Rulemaking. The Further Notice will make sure that we continue to have the tools necessary to take additional steps to investigate and eliminate call completion concerns.

I'd like to thank Commissioners Rosenworcel and Pai for their consideration of this item, Wireline Competition Bureau Chief Julie Veach and the rest of the Wireline and Enforcement Bureaus as well as Rebekah Goodheart for their work on this item and their dedication and tireless efforts to address this critical problem in rural America.

STATEMENT OF
COMMISSONER JESSICA ROSENWORCEL

Re: *Rural Call Completion*, WC Docket No. 13-39.

For too long, consumers in rural America—and the carriers that serve them—have complained about dropped calls, missed calls, and connections that fail. This is unacceptable. After all, failure to complete calls to rural subscribers can cut families off from relatives in rural areas, lead rural businesses to lose customers, and create dangerous delays for first responder communications.

This is a hard and unfortunately ubiquitous problem. One survey found that as many as 80 percent of rural carriers have experienced rural call completion failures. Our state counterparts also report that rural call completion difficulties are widespread. More than that, they are a serious threat to public safety and consumer welfare in rural America.

So today we answer the call to take action. We take steps to fix rural call completion. Specifically, in this Order we put in place new recordkeeping, retention, and reporting requirements. This will help ensure that rural consumers receive service on par with that of their urban counterparts. Moreover, this new data will support our enforcement efforts. That means that when calls fail or quality is unacceptably degraded in rural areas, the Commission will have the data necessary to go after bad actors, vigorously enforce its rules, and finally bring an end to this persistent problem.

Thank you to the Wireline Competition Bureau and Enforcement Bureau for your work. The solutions we have here are built on commonsense and transparency. That is why I strongly support this decision and the further rulemaking before us today.

STATEMENT OF
COMMISSIONER AJIT PAI

Re: *Rural Call Completion*, WC Docket No. 13-39.

Most Americans take three things for granted: death, taxes, and a telephone system that works. You dial a phone number, you hear a ring, and your call is completed. But for an increasing number of rural Americans, that's not the case. Calls are dropped. You get a busy signal even when no one is home. You dial a rural number and hear nothing but dead air for five or six seconds before the line disconnects. It almost seems like the most appropriate greeting when you call rural America nowadays should be, "Can you hear me now?"

This is unacceptable. Wherever you live—whether it's Pittsburg, Kansas, or Pittsburgh, Pennsylvania—and whatever technology you use—whether it's a landline, a cellphone, or VoIP—when your number is dialed, your phone should ring shortly thereafter.

Consumers, state commissions, and rural telephone companies have expended a lot of effort bringing rural call completion problems to our attention. So I'm glad that the FCC is finally taking action to address this issue. With today's *Order*, the Commission will start collecting data so we can better understand the difficulties involved. And armed with that information, we will be in a position to take action against those responsible.

I am especially pleased that my colleagues were willing to incorporate many of my suggestions to improve the item. By aligning the safe harbor with established best practices and reducing the burden of compliance, we create stronger incentives for carriers to be good actors.[1] By giving affiliated providers flexibility in recording and reporting their data, we reduce the administrative hassle our rules might otherwise cause.[2] By targeting our recordkeeping on rural calls, we cut the cost of compliance by 90 percent.[3] And by promising to reexamine our rules within three years, we ensure that the data isn't collected only to itself collect digital dust on a Commission hard drive.[4] Instead, the data will be used to ensure that our rules reflect current marketplace realities—a maxim that should apply to every area under the agency's purview.

Of course, today's action alone is unlikely to solve the call completion problems that have plagued rural America. I look forward to collaborating with my colleagues on future efforts. Many others are on the beat, too. The staff of the Wireline Competition Bureau, the Enforcement Bureau, and the Office of General Counsel deserve thanks for getting us this far. The Alliance for Telecommunications Industry Solutions, NTCA—The Rural Broadband Association, the National Exchange Carrier Association, the National Association of Regulatory Utility Commissioners, and many others are working hard to improve the quality of calls to rural America as well. Through our collective efforts and aided by the information we will receive as a result of this order, I hope that we will solve the rural call completion problem as soon as possible.

[1] *See Order* at paras. 85–97; App. A, Rule 64.2107.

[2] *See id.* at para. 24; App. A, Rules 64.2103(b); 64.2105(d); 64.2107(d).

[3] *See id.* at para. 49; App. A, Rule 64.2103(a).

[4] *See id.* at paras. 105–06.