

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

FCC MAIL ROOM

In the Matter of)
)
Numbering Resource Optimization)
)
Petition for Declaratory Ruling and Request)
For Expedited Action on the July 15, 1997)
Order of the Pennsylvania Public Utility)
Commission Regarding Area Codes 412, 610,)
215, and 717)

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CC Docket No. 99-200 ✓

CC Docket No. 96-98 RECEIVED

SECOND REPORT AND ORDER, ORDER ON RECONSIDERATION IN CC DOCKET NO. 96-98 AND CC DOCKET NO. 99-200, AND SECOND FURTHER NOTICE OF PROPOSED RULEMAKING IN CC DOCKET NO. 99-200

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I. INTRODUCTION

1. In this Second Report and Order (*Second Report and Order*), Order on Reconsideration in CC Docket No. 99-200, and Second Further Notice of Proposed Rulemaking (*Second Further Notice*), we continue to develop, adopt and implement a number of strategies to ensure that the numbering resources of the North American Numbering Plan (NANP)¹ are used

¹ The NANP was established in the 1940s, when American Telephone and Telegraph (AT&T) realized that there was a need to ensure that the expansion of long distance calling would be guided by principles consistent with the ultimate incorporation of all public switched telephone networks into an integrated nation-wide network. The (continued....)

efficiently, and that all carriers have the numbering resources they need to compete in the rapidly expanding telecommunications marketplace. Less than nine months ago, we adopted a number of administrative and technical measures designed to allow us to monitor more closely and increase the efficiency with which numbering resources within the NANP are used, and sought further comment on refinements to, and implementation of, those measures.² Primary among the measures we adopted was a roadmap for the assignment of numbers to carriers in blocks of 1,000 rather than 10,000, as has historically been the practice. At that time, we also made clear our intention to continue to examine other optimization measures not specifically addressed then, in furtherance of our national numbering resource optimization goals.

2. In undertaking to develop national numbering resource optimization strategies, we seek to fulfill our statutory mandate under section 251(e) of the Communications Act of 1934, as amended by the Telecommunications Act of 1996 (1996 Act or Act), which grants this Commission plenary jurisdiction over the NANP.³ In the *First Report and Order*, we concentrated our efforts on two of the major factors that contribute to numbering resource exhaust as identified in the Numbering Resource Optimization Notice of Proposed Rulemaking (*Notice*): the absence of regulatory, industry or economic control over requests for numbering resources, which failed to promote accountability or efficiency with which numbering resources were used and may even have led carriers to misuse the allocation system and build large inventories of numbers, and the allocation of numbers in blocks of 10,000, irrespective of the carrier's actual need for new numbers.⁴ We continue to focus on these two factors, and, in

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NANP is the basic numbering scheme for the telecommunications networks located in Anguilla, Antigua, Bahamas, Barbados, British Virgin Islands, Canada, Cayman Islands, Dominica, Dominican Republic, Grenada, Jamaica, Montserrat, St. Kitts & Nevis, St. Lucia, St. Vincent, Turks & Caicos Islands, Trinidad & Tobago, and the United States (including Puerto Rico, the U.S. Virgin Islands, Guam and the Commonwealth of the Northern Mariana Islands). Under the plan, the United States and Canada originally were divided into eighty-three "zones," each of them identified by three digits. Within each zone, a central office was represented by another three-digit code. The zones are now referred to as Numbering Plan Areas (NPAs), and the 3 digits representing those areas are referred to either as Numbering Plan Area codes or area codes. The three digits representing central offices are called central office codes or NXXs. The central office code is used for routing calls and for rating and billing calls. Typically, wireline carriers obtain a central office code for each rate center in which they provide service in a given area code. All public network facilities and private network facilities (such as private branch exchange systems) are designed and programmed to be consistent with the NANP scheme.

² See *Numbering Resource Optimization, Report and Order and Further Notice of Proposed Rulemaking*, 15 FCC Rcd 7574 (rel. Mar. 31, 2000) (*First Report and Order*).

³ Pub. L. No. 104-104, 110 Stat. 56 (1996 Act). The 1996 Act amended the Communications Act of 1934, 47 U.S.C. §§ 151-174. 47 U.S.C. § 251(e)(1) provides:

The Commission shall create or designate one or more impartial entities to administer telecommunications numbering and to make such numbers available on an equitable basis. The Commission shall have exclusive jurisdiction over those portions of the North American Numbering Plan that pertain to the United States. Nothing in this paragraph shall preclude the Commission from delegating to State commissions or other entities all or any portion of such jurisdiction.

⁴ See *Numbering Resource Optimization, Notice of Proposed Rulemaking*, 14 FCC Rcd 10322, 10328-29, para. 15 (rel. June 2, 1999) (*Notice*); *First Report and Order*, 15 FCC Rcd at 7578, para. 4. The other two factors we identified in the *Notice* were: (1) multiple rate centers, and the demand by most carriers to have at least one NXX (continued....)

addition, examine several other measures raised in the *Notice* but not addressed in the *First Report and Order*.

3. In the *Pennsylvania Numbering Order*,⁵ the Commission established guidelines for state commissions to follow in selecting area code relief options and, among other things, encouraged states to seek further delegated authority to implement number conservation plans. In this Order on Reconsideration in CC Docket No. 96-98, we address issues relating to the Commission's delegation of authority to state public utility commissions (state commissions or states) to undertake certain aspects of area code relief and to implement numbering resource optimization measures. We decline to amend the existing rules or implement additional rules for area code relief at this time. Rather, we find that the area code relief measures already in place are in accord with the numbering resource optimization measures under consideration in this proceeding.

II. BACKGROUND AND OVERVIEW

4. In the Communications Act of 1934, as amended by the 1996 Act, Congress gave the Commission plenary jurisdiction over the NANP within the United States.⁶ In discharging our authority over numbering resources, we seek to balance two competing goals. We must ensure that carriers have the numbering resources that they need to compete and bring new and innovative services to the consumer marketplace. At the same time, we must ensure that, to the extent possible, numbering resources are used efficiently. Inefficient use of numbering resources speeds the exhaust of area codes, imposing on carriers and consumers alike the burdens and costs of implementing new area codes. It also shortens the life of the NANP as a whole. In the *First Report and Order*, we described the alarming rate at which existing area codes were entering states of jeopardy and new area codes were being activated throughout North America.⁷ Recent reports by the North American Numbering Plan Administrator (NANPA) indicate that at least 37 additional area codes are scheduled for implementation by the end of 2001.⁸

5. Although it remains difficult to predict NANP exhaust with absolute precision, we

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code per rate center; and (2) the increased demand for numbering resources by new entrants and new technologies. *Notice*, 14 FCC Rcd at 10328-29, para. 15.

⁵ See *Petition for Declaratory Ruling and Request for Expedited Action on the July 15, 1997 Order of the Pennsylvania Public Utility Commission Regarding Area Codes 412, 610, 215, and 717*, Memorandum Opinion and Order on Reconsideration, 13 FCC Rcd 19009, 19025, para. 23 (rel. Sept. 28, 1998) (*Pennsylvania Numbering Order*).

⁶ 47 U.S.C. § 251(e)(1).

⁷ *First Report and Order*, 15 FCC Rcd at 7577-78, para. 2.

⁸ See NANPA, *NPA Relief Activities, Planned NPAs Not Yet in Service*, available at <www.nanpa.com/area_codes/npa_planned.html>. Compared to the activation of only 9 new area codes in the ten-year period between 1984-1994, in 1996 alone, 11 new area codes were activated within the NANP. In 1997, 32 new area codes were activated, and 46 new area codes were activated during 1998-1999. See *North American Numbering Plan Exhaust Study*, submitted to the NANC by the NANPA, Lockheed Martin CIS, April 22, 1999, at 6 (Number Utilization Study). In 2000, 13 area codes have been activated.

know that exhaust could have occurred within ten years unless we took measures to increase the efficiency with which numbering resources are being used. As noted in the *First Report and Order*, the measures first examined were chosen because they could be implemented quickly and would produce immediate and measurable results.⁹ We recognize that it may be too soon to measure comprehensively the effectiveness of the measures we implemented last March in furtherance of numbering resource optimization. Nevertheless, we are confident that those steps, and the ones we implement in this order, will help us to achieve our goal of extending the life of the current NANP.¹⁰

6. *Optimization Measures Already Implemented.* The measures adopted in the *First Report and Order* marked a significant change in NANP administration. Most notably, all carriers in the United States that use NANP numbering resources now must closely monitor, track, and report on their number usage based on uniform definitions established by the Commission. Additionally, carriers must now demonstrate their need for additional numbering resources with more than their subjective forecasts. Carriers that fail to do so will be denied numbering resources. Other measures designed to increase discipline in numbering resource utilization practices include mandatory reclamation of unused numbering resources and a requirement that numbers be assigned by carriers to end-users sequentially to preserve the availability of unused blocks of numbering resources for other carriers.

7. Among the measures adopted that appear to be the most promising is thousands-block number pooling.¹¹ Thousands-block number pooling is a system for allocating numbers in blocks of 1,000 rather than 10,000. It has been estimated that the nationwide implementation of thousands-block number pooling and other numbering optimization measures could potentially extend the life of the NANP by as many as 25 years.¹² Substantial benefit can be realized by thousands-block number pooling because it enables carriers to take fewer than 10,000 numbers at a time, which in turn leaves fewer numbers stranded and thus unavailable to be used by other carriers. By setting forth a framework for implementing thousands-block number pooling, we hope to remedy the inefficient allocation and use of numbering resources at the national level.

8. *State Commission Involvement.* A major component of our overall numbering

⁹ *First Report and Order*, 15 FCC Rcd at 7578, para. 4.

¹⁰ NANP expansion will not only be very costly, but will change the local and long distance dialing patterns by increasing the number of digits that must be dialed to place calls.

¹¹ Thousands-block number pooling allows service providers in a given area to receive numbers in blocks of 1,000 by breaking the association between the NPA-NXX and the service provider to whom the call is routed. All 10,000 numbers available in the NXX code are allocated within one rate center, but can be allocated to multiple service providers in thousand number blocks, instead of only to one particular service provider. For example, if the 202-418 NPA/NXX were pooled, up to ten service providers could serve customers from it. One service provider could be allocated every line number from 202-418-0000 through 202-418-0999. Another service provider could be allocated every line number in the range 202-418-1000 through 202-418-1999.

¹² NANPA Report to the NANC, September 19-20, 2000, at 7. We recognize that this is a conservative estimate, because information on the full impact of thousands-block number pooling and other number optimization measures was not available at the time this report was prepared. Consequently, certain assumptions were made that may not fully reflect the effectiveness of these number optimization measures.

resource optimization strategy involves our commitment to continue developing and maintaining a partnership with the state commissions. We have enlisted states to assist us in numbering resource optimization efforts by delegating significant authority to them to implement certain measures. In addition to the authority to implement area code relief, we have responded to the requests of 25 state commissions by conditionally granting them authority to implement the following measures: thousands-block number pooling trials; rationing for six months following implementation of area code relief; hearing and addressing claims of carriers seeking numbering resources outside of the rationing process; and auditing carriers' use of numbering resources. The grants of authority to the state commissions, however, were not intended to allow the states to engage in number conservation measures to the exclusion of, or as a substitute for, unavoidable and timely area code relief.¹³ Although we did not mandate rate center consolidation in the *First Report and Order*, we also believe that rate center consolidation is an attractive numbering resource optimization measure because it enables carriers to use fewer NXX codes and thousands blocks to provide service throughout a region, thereby reducing the demand for NXX codes and thousands blocks, improving number utilization, and prolonging the life of an area code. We strongly encourage the state commissions to proceed as expeditiously as possible to consolidate rate centers.

9. *Additional Activities.* In the interim period since the release of the *First Report and Order*, we have continued to implement measures in furtherance of our numbering resource optimization goals. On July 15, 2000, the Common Carrier Bureau (Bureau) released a Public Notice in response to several questions the Bureau had received relating to the *First Report and Order*.¹⁴ On July 20, 2000, the Bureau released an order delegating to 15 states the authority to implement number conservation measures.¹⁵ In response to numerous requests from parties, on July 31, 2000, we released an order staying the mandatory utilization and forecast reporting requirements until September 15, 2000, and extending the deadline for compliance with the 45-day reservation limit until December 1, 2000.¹⁶ In addition, on August 30, 2000, the Bureau released a Public Notice seeking comment on the California Public Utilities Commission and the People of the State of California (California Commission) and the Maine Public Utilities Commission (Maine Commission) petitions for waiver of the requirement that state commissions conform their thousands-block number pooling trials to the national pooling rules set forth in the *First Report and Order* by September 1, 2000.¹⁷ We also released an order on August 31, 2000,

¹³ *Pennsylvania Numbering Order*, 13 FCC Rcd at 19027, para. 26; see also *First Report and Order*, 15 FCC Rcd at 7581, para. 7.

¹⁴ *Common Carrier Bureau Responses to Questions in the Numbering Resource Optimization Proceeding*, Public Notice, CC Docket 99-200, DA 00-1549 (rel. July 11, 2000).

¹⁵ *Numbering Resource Optimization*, Order, CC Docket No. 96-98, 99-200, DA 00-1616 (rel. July 20, 2000) (addressing petitions for additional delegated authority to implement numbering resource optimization strategies filed by the following state commissions: Arizona, Colorado, Georgia, Indiana, Iowa, Kentucky, Missouri, Nebraska, North Carolina, Oregon, Pennsylvania, Tennessee, Utah, Virginia, and Washington).

¹⁶ *Numbering Resource Optimization*, Order, CC Docket No. 99-200, FCC 00-280 (rel. July 31, 2000).

¹⁷ *Common Carrier Bureau Seeks Comment on the California Public Utilities Commission and Maine Public Utilities Commission Petitions for Waiver of the Requirement to Conform Their Thousands-Block Number Pooling* (continued....)

staying the compliance of the national pooling rules for California and Maine until we rule on the merits of the petitions or December 31, 2000, whichever date is sooner.¹⁸

10. *Overview.* We sought comment on several matters relating to our findings in the *First Report and Order* in an accompanying Further Notice of Proposed Rulemaking (*Further Notice*). In the *Further Notice*, we sought comment on the level at which the utilization threshold for non-pooling carriers should be established. In this *Second Report and Order*, we establish a utilization threshold of 60% that carriers must meet before receiving additional numbering resources in a given rate center; this threshold will increase by 5% per year to a maximum of 75%. We also reconsider our decision not to apply a utilization threshold to pooling carriers. We conclude that application of a utilization threshold to pooling carriers will further our numbering resource optimization goals, and therefore establish a utilization threshold of 60%, to increase by 5% per year to a maximum of 75% for pooling carriers as well. Those states already using a utilization threshold that exceeds our established utilization threshold may continue to use their higher threshold (up to 75%) only where it is currently in use until it no longer exceeds the mandated threshold, at which time they must conform to the federally mandated threshold.

11. Furthermore, we address our national framework for thousands-block number pooling administration, and conclude that the term of the Pooling Administrator will be five years rather than coterminous with the current NANPA term. We also rule on the merits of petitions for waiver filed by the California Commission and the Maine Commission, and conclude that California and Maine, as well as other state commissions conducting thousands-block number pooling trials, may continue to use their utilization thresholds subject to parameters set forth in this order.

12. In the *Further Notice*, we also sought comment on whether covered CMRS carriers should be required to participate in pooling upon expiration of the local number portability (LNP) forbearance period on November 24, 2002.¹⁹ Based on the record before us, we decline to adopt a transition period between the time that covered CMRS carriers must implement LNP and the time they must participate in any mandatory number pooling.

13. We also address several issues proposed in the *Notice* concerning area code relief. Specifically, we consider whether we should amend the existing federal rules or develop additional federal guidelines for area code relief. At the present time, we decline to amend the existing federal rules for area code relief or specify any new federal guidelines for the implementation of area code relief. We recognize the integral role state commissions play in our numbering resource optimization policies and continue to rely on them to implement timely area code relief. We also address the advantages and disadvantages of geographic splits and all-services overlays, and the approaches most commonly used by states to implement area code

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Trials to the National Thousands-Block Number Pooling Rules by September 1, 2000, Public Notice, CC Docket No. 99-200, DA 00-1995 (rel. Aug. 30, 2000).

¹⁸ *Numbering Resource Optimization*, Order, CC Docket No. 99-200, FCC 00-333 (rel. Aug. 31, 2000).

¹⁹ *First Report and Order*, 15 FCC Rcd at 7686, para. 249.

relief. We decline to state a preference for either all-services overlays or geographic splits as a method of area code relief. Moreover, we encourage state commissions to consider the use of reverse overlays and expanded overlays, as well as boundary realignments, as a means of allocating new numbering resources to areas facing exhaust.

14. We also set forth a comprehensive audit program to verify carrier compliance with federal rules and orders and industry guidelines. We conclude that our comprehensive audit program will consist of "for cause" and random audits performed by an auditor designated by the Bureau.²⁰ Moreover, we direct the auditor to provide a comprehensive audit plan, including a proposal for specific enforcement measures against those carriers that are found to have violated our numbering guidelines and rules. We also conclude that the costs of designated agents involved in conducting audits will be allocated and recovered through the NANP administration fund administered by the North American Billing and Collection Agent (NBANC).

15. Regarding nationwide mandatory ten-digit dialing, we decline to adopt this measure at the present time. Furthermore, because implementation issues remain unresolved, we decline to adopt nationwide expansion of the "D digit" (the "N" of an NXX or central office code) to include the digits 0 or 1, or to grant state commissions the authority to expand the D digit as a numbering resource optimization measure at the present time.

16. In this *Second Report and Order*, we also clarify certain aspects of the administrative measures adopted in the *First Report and Order*. First, we address certain elements of our new requirements for monitoring carrier number usage, including the definition of Parent Operating Company Number (OCN), and addressing how numbers used for intermittent and cyclical purposes should be categorized under the uniform definitions established in the *First Report and Order*. We also address issues raised in several petitions for reconsideration of the 45-day period for reserved numbers. Next, we clarify the scope of access that state commissions have been granted to mandatorily reported data and numbering resource application information.

17. We also seek comment on several matters relating to our findings in the *Numbering Resource Optimization* proceeding in the attached *Second Further Notice*. The issues addressed include: our current prohibition on service-specific and technology-specific overlays, and whether we should modify the prohibition and permit states to implement service-specific and technology-specific overlays subject to certain conditions; the rate center problem, particularly what policies could be implemented at the federal level to reduce the extent to which the rate center system contributes to and/or accelerates numbering resource exhaust; and a proposal for a market-based approach for optimizing the use of numbering resources.

III. UTILIZATION THRESHOLD

18. *Background.* In the *First Report and Order*, we concluded that carriers not participating in thousands-block number pooling would be required to show that they had used a certain percentage of their existing inventory of numbers before receiving additional resources in

²⁰ We intend to use auditors in the Audits Branch of the Accounting Safeguards Division in the Bureau or other designated Commission agents.

a given rate center.²¹ We also concluded that pooling carriers should not have to meet such a utilization threshold to receive additional numbering resources in a rate center.²² In the *Further Notice*, we sought comment on several issues related to establishing a utilization threshold for non-pooling carriers.²³ Although we determined that non-pooling carriers should be required to meet a utilization threshold, we had no basis on which to establish a specific utilization threshold because the parties provided very little empirical data. In response to the *Notice*, parties had suggested utilization thresholds within the 60%-90% range. The utilization thresholds proposed by the parties, however, apparently were based on a calculation that included categories of numbers in addition to *assigned numbers* in the numerator (such as *administrative*, *aging*, and *reserved* numbers). We recognized that these differences in calculating utilization would result in different utilization levels and, therefore, tentatively concluded that a nationwide utilization threshold for growth numbering resources should be set initially at 50%, and increased by 10% annually until it reaches a maximum of 80%.

19. Additionally, we tentatively concluded that a carrier should be required to meet a rate center-based utilization threshold for the rate center in which it is seeking additional numbering resources. We sought comment on whether the rate center-based utilization should be used in combination with NPA-based utilization thresholds. Finally, we sought comment on whether state commissions should be allowed to set the rate-center based utilization threshold within a range and based on criteria that we establish.

20. In the *First Report and Order*, we recognized that some states were in the process of conducting utilization studies, and we hoped to examine those studies to learn what actual utilization levels carriers are now achieving. Several state commissions have since adopted utilization thresholds pursuant to delegated authority.²⁴ Connecticut, Florida, Massachusetts, New York, and Ohio, for example, have applied utilization thresholds to carriers that do not participate in thousands-block number pooling. California, New Hampshire, and Maine have applied utilization thresholds to both pooling and non-pooling carriers.²⁵

A. Initial Utilization Threshold

21. *Discussion.* We agree with those commenting parties that suggest that allowing carriers that have used only one-half of their existing inventories to receive additional numbering

²¹ *First Report and Order*, 15 FCC Rcd at 7616-17, para. 103.

²² *Id.*

²³ *Id.* at 7685-86, para. 248.

²⁴ See Letter from Trina M. Bragdon, Maine Commission, to Magalie Roman Salas, FCC, dated October 25, 2000.

²⁵ California, Florida, and Maine have filed petitions for reconsideration of our decision to exclude pooling carriers from the utilization requirement. California Petition for Reconsideration at 3; Florida Commission Petition for Reconsideration at 7; Maine Commission Petition for Reconsideration at 3-5. They argue that the utilization threshold we adopt here should be applied to pooling carriers as well.

resources does not reasonably encourage meaningful number optimization.²⁶ The record suggests that carriers are able to achieve utilization levels above 50% before needing more numbering resources.²⁷ Moreover, parties that support a 50% utilization threshold have provided no credible basis for adopting this level.²⁸ Although setting the utilization threshold is not an exact science, we agree with those commenters who state that allowing carriers to assign only one-half of the numbers in their inventory before asking for more numbers undermines our efforts to optimize the use of existing numbering resources. In other words, we believe that carriers with lower utilization levels do not need additional numbering resources. Rather, they can serve customers from their current inventory. Commenters have presented no persuasive evidence to contradict this reasoning; they offer no evidence that they (especially those with lower utilization rates) are technically or otherwise precluded from using more of their existing inventory before requesting more numbering resources. We also believe that a 50% utilization threshold provides no incentive for carriers to use numbers more efficiently, and that such a low initial utilization threshold may cause us to lose some of the momentum gained from the strategies adopted in the *First Report and Order*.²⁹

22. Instead, we adopt a 60% initial utilization threshold. We find that 60% is an appropriate initial utilization level for several reasons. First, sound numbering resource optimization policies should encourage carriers to use as many numbers as possible from their existing inventory before obtaining additional numbers from the NANPA or the Pooling Administrator. Also, state commission studies and our preliminary assessment of data carriers reported to the NANPA indicate that the average industry utilization levels range from approximately 45%-65%.³⁰ The data reported to the NANPA suggests that the average industry-

²⁶ California Commission Comments at 4; Maine Commission Comments at 2; Missouri Commission Comments at 3.

²⁷ California Commission Comments at 4; Consumer Commenters Comments at 13; Florida Commission Comments at 8-11; Maine Commission Comments at 3; Missouri Commission Comments at 3; New Hampshire Commission Comments at 6; New York Commission Comments at 1; *see also* Letter from Trina M. Bragdon, Maine Commission, to Magalie Roman Salas, FCC, dated October 25, 2000.

²⁸ GTE Comments at 7; SBC Comments at 11; Sprint Comments at 7. Although we recognize that Bell Atlantic and GTE are now operating as "Verizon Communications," we nonetheless refer to Bell Atlantic and GTE, where appropriate, rather than Verizon because the bulk of those parties' filings in this docket were made prior to the completion of the merger. *See Application of GTE Transferor, and Bell Atlantic Corporation Transferee, For Consent to Transfer Control of Domestic and International Sections of 214 and 310 Authorizations and Application to Transfer Control of a Submarine Cable Landing License*, CC Docket No. 98-184, Memorandum Opinion and Order, FCC 00-221 (rel. June 16, 2000).

²⁹ *See* New Hampshire Commission Comments at 3.

³⁰ *See* California Commission Comments at 4; Florida Commission Comments at 8-11; Maine Commission Comments at 3; Missouri Commission Comments at 3; New Hampshire Commission Comments at 6; New York Commission Comments at 1; Consumer Commenters Comments at 13; *see also* *Numbering Resource Utilization in the United States*, Report by Industry Analysis Division, Common Carrier Bureau, FCC at Table 1 (rel. Dec. 2000) (*Numbering Utilization Report*). This report may be downloaded (filename: UtilizationJun2000.ZIP or UtilizationJun2000.PDF) from the FCC-State Link Internet site at <<http://www.fcc.gov/ccb/stats>>. *See also* Letter from Trina M. Bragdon, Maine Commission, to Magalie Roman Salas, FCC, dated October 25, 2000.

wide utilization is approximately 50%.³¹ Thus, it appears that an initial threshold of 60% is high enough to encourage carriers to use numbers from their existing inventory before seeking more resources, yet low enough to be achievable by carriers that truly need additional resources. In addition, states have used utilization thresholds in this range with success.³² Furthermore, this initial threshold level, because it is demonstrably achievable,³³ will give carriers an opportunity to make an orderly transition to the higher thresholds we adopt below without compromising their ability to obtain numbering resources to serve customers in the short term.

23. The industry commenters differ from the public interest commenters³⁴ as to what role, if any, state commissions should play with respect to establishing utilization thresholds. The industry commenters argue that state commissions should not be allowed to deviate from the utilization threshold that we establish.³⁵ The public interest commenters contend that state commissions should be allowed to set specific utilization thresholds within a range established by us.³⁶ We agree with those commenters that argue disparate utilization thresholds may be more difficult to administer and may increase the difficulty of monitoring compliance.³⁷ We therefore decline to delegate additional authority to state commissions to set different utilization thresholds, with one exception. State commissions that are currently using a utilization threshold pursuant to delegated authority that exceeds 60% may continue to use their utilization threshold in those areas as long as it does not exceed the Commission's established ceiling of 75%.³⁸ States exercising this authority must ensure that utilization is being calculated in the manner established in the *First Report and Order*; that is, only *assigned numbers* are included in the numerator. This limited exception allows states to continue their forward progress already achieving success with higher utilization thresholds. The utilization thresholds that we adopt herein shall otherwise be applied on a uniform nationwide basis.

³¹ *Numbering Utilization Report* at Figures 2, 4, 6 & 8. The data shows that where carriers have 10 or more NXXs in a rate center, LECs report over 65% utilization, CLECs report approximately 20% utilization, paging carriers report nearly 50% utilization, and wireless carriers report over 55% utilization.

³² Before the *First Report and Order* was released, California allowed carriers to calculate utilization by dividing *assigned, aging, administrative, and reserved* numbers by the total numbers assigned to the carrier. Other states adopted utilization thresholds after the *First Report and Order* was released and require carriers to calculate utilization as we prescribed in the *First Report and Order*. We have not received complaints that carriers are not able to meet these thresholds when they need additional numbering resources.

³³ Specifically, California, Connecticut, Florida, Maine, Massachusetts, New Hampshire, and New York have required carriers to meet a 75% utilization threshold. Ohio requires carriers to meet a 65% utilization threshold.

³⁴ These commenters consist of state commissions, state attorneys general, and state consumer advocates.

³⁵ AT&T Comments at 7; Nextlink Comments at 7, 10; SBC Comments at 12; Verizon Comments at 13; VoiceStream Comments at 12; WinStar Comments at 10.

³⁶ California Commission Comments at 2-3; Consumer Commenters Comments at 14-15; Missouri Commission Comments at 5.

³⁷ AT&T Comments at 7.

³⁸ See *infra* para. 25.

24. We also find it appropriate to allow a brief transition period for carriers to make appropriate adjustments to the way in which they manage their numbering resource inventories. We conclude, therefore, that all carriers shall have until three months after the effective date of this *Second Report and Order* to meet the initial utilization threshold before applications for growth numbering resources will be denied because of failure to meet the threshold.³⁹ In the interim, however, carriers shall continue to be required to meet the months-to-exhaust (MTE) requirement before receiving growth resources.

B. Adjustments to the Utilization Threshold

25. *Discussion.* In the *Further Notice*, we tentatively concluded that the initial utilization threshold should be increased annually by 10% to a maximum of 80%.⁴⁰ We are persuaded that an annual increase in the utilization threshold is appropriate, but conclude that the utilization threshold should be increased by 5% annually instead of 10%, until it reaches 75% rather than 80%. We gradually increase the utilization level by 5% because we seek to give carriers sufficient time to increase the efficiency with which they use numbering resources above current levels and to use numbers currently in their inventories before they obtain more resources. We remain concerned that many carriers may be doing little if anything to groom their numbering inventories to minimize waste of these important resources; this mandate should make all carriers take significant and measurable steps to improve their utilization. Moreover, we strongly believe that as carriers become accustomed to the numbering resources optimization measures we have adopted, the efficiency with which they use numbering resources will increase.

26. The initial utilization threshold of 60% shall be effective three months after publication of this *Second Report and Order* in the Federal Register. The utilization threshold shall be increased by 5% on June 30, 2002, and annually thereafter until the utilization threshold reaches 75%.⁴¹ The 75% threshold is a reasonable compromise between the 60% ceiling recommended by some industry commenters⁴² and the 80% ceiling recommended by other commenters,⁴³ particularly since carriers are successfully meeting 75% utilization thresholds established by some state commissions.⁴⁴ In fact, some carriers are able to reach utilization levels as high as 80% before they need additional numbering resources.⁴⁵ This threshold

³⁹ See 47 C.F.R. 1.103.

⁴⁰ *First Report and Order*, 15 FCC Rcd at 7685, para. 248

⁴¹ The initial increase from 60% to 65% will occur on June 30, 2002. The increase to 75% will occur on June 30, 2004.

⁴² AT&T Comments at 2, 7.

⁴³ California Commission Comments at 2; New Hampshire Commission Comments at 5; Nextlink Comments at 4; Texas Commission Comments at 2.

⁴⁴ California Commission Comments at 4; Maine Commission Comments at 1-2; Missouri Commission Comments at 3-4; New Hampshire Commission Comments at 6.

⁴⁵ See *Numbering Resource Utilization Report*, *supra* note 30.

balances our goal of encouraging the efficient use of numbering resources with carriers' need to retain some flexibility in managing their inventories. In the future and as the market matures, however, carriers may be able to achieve greater efficiencies in their use of numbering resources and, therefore, a higher utilization threshold may be appropriate. We urge carriers to develop strategies and procedures to increase their utilization levels beyond the required thresholds in furtherance of our numbering resource optimization goals, and in anticipation of any future adjustments.

C. Applicability of Utilization Threshold to Pooling Carriers

27. *Discussion.* Petitioners and commenters sought reconsideration of our decision to exempt pooling carriers from the requirement to meet a utilization threshold to obtain growth numbering resources.⁴⁶ They argue that both non-pooling and pooling carriers should be required to satisfy the utilization threshold in addition to the MTE requirement. California asserts that the utilization threshold it established for carriers participating in its pooling trials has increased numbering efficiency in its pooling trials.⁴⁷

28. We are encouraged by the results achieved in pooling trials using a utilization threshold, and are persuaded that our national numbering resource optimization goals can be met more quickly and efficiently if we require all carriers, including pooling carriers, to meet a utilization threshold to obtain growth numbering resources.⁴⁸ We agree with Maine that applying the utilization threshold to pooling carriers helps ensure that only those thousands blocks that are needed are assigned.⁴⁹ Thus, the rationale we applied in establishing a utilization threshold for non-pooling carriers, we believe, applies equally in a pooling environment. Further, utilization rates provide an objective, uniform means of determining when carriers are in need of additional numbering resources. We therefore conclude that pooling carriers, also, shall be subject to meeting the utilization thresholds established herein to obtain growth numbering resources.

D. Application of Utilization Threshold for Growth Resources

29. *Discussion.* Several petitioners and commenters disagreed with our decision to require carriers to meet a utilization threshold in addition to MTE criteria to receive growth numbering resources,⁵⁰ generally asserting that the MTE calculation is sufficient to determine

⁴⁶ California Commission Petition for Reconsideration at 3; Florida Commission Petition for Reconsideration at 7; Maine Commission Petition for Reconsideration at 3-5; Oregon Commission Comments at 4; Texas Commission Comments at 2.

⁴⁷ California Public Utilities Commission and the People of the State of California Petition for Waiver at 2-7 (filed Aug. 4, 2000) (California Petition).

⁴⁸ See *First Report and Order*, 15 FCC Rcd at 7636, para. 142 (“[W]e may revisit the issue of whether to improve utilization threshold requirements on pooling carriers in the future if we find that such thresholds significantly increase number use efficiency.”)

⁴⁹ Petition of the Maine Public Utilities Commission for Waiver to Continue State Pooling Trials until National Pooling is Implemented at 3 (filed Aug. 14, 2000) (Maine Petition).

⁵⁰ ALTS Petition for Reconsideration and Clarification at 7; BellSouth Petition for Reconsideration at 15; PCIA Petition for Clarification and Reconsideration at 3; Sprint Petition for Reconsideration and Clarification at 5; (continued....)

carriers' need for numbering resources.⁵¹ Nextel opposes utilization thresholds for growth numbering resources and asserts that an MTE calculation more accurately reflects a carrier's numbering resource demands.⁵² As we stated in the *First Report and Order*, using MTE as the sole criterion for evaluating need for numbering resources is inadequate, primarily because much of the MTE data cannot be verified until after the carrier has already obtained the numbering resources. Also, the MTE forecast is highly subjective and dependent on good faith projections by each carrier. Moreover, there is no retrospective accountability for carriers' forecasts.⁵³ In contrast, the utilization threshold provides a more objective measure of carriers' need for numbering resources. We, thus, affirm our conclusion that carriers must meet both the MTE and the utilization threshold requirements to receive growth numbering resources.

E. Calculation of Utilization Level

30. *Discussion.* Some carriers have asked us to reconsider the manner in which we calculate the utilization levels.⁵⁴ We determined in the *First Report and Order* that utilization for a given geographic area (rate center or NPA) must be calculated by dividing all *assigned numbers* by the total numbering resources assigned to the carrier in that geographic area and multiplying the result by 100.⁵⁵ Some commenting parties suggest that the utilization calculation should include *administrative, aging, intermediate, and reserved numbers* in the numerator, or that the utilization threshold should otherwise be reduced because carriers have very little or no control over numbering resources in these categories.⁵⁶ These arguments are unpersuasive. As we stated in the *First Report and Order*, basing the utilization calculation on *assigned numbers* provides a more accurate representation of the percentage of numbers being used to serve customers, which we believe is the proper analysis for furthering our numbering optimization goals.⁵⁷ Moreover, the utilization thresholds that we adopt herein take into consideration that only *assigned numbers* are used in the numerator to calculate utilization.⁵⁸ In establishing them, we have considered available data on carrier utilization and experience with utilization thresholds in several states. Therefore, there is no need to alter the definition of utilization or to include

(Continued from previous page)

VoiceStream Petition for Reconsideration at 9-10; CompTel Comments at 3; Nextel Comments at 3; USTA Comments 2; Verizon Comments at 2.

⁵¹ Nextel Comments at 3; VoiceStream Comments at 10

⁵² Nextel Comments at 3.

⁵³ *First Report and Order*, 15 FCC Rcd at 7617, para. 104

⁵⁴ ALTS Petition for Reconsideration and Clarification at 5; AT&T Petition for Reconsideration at 4; BellSouth Petition for Reconsideration at 11; SBC Petition for Reconsideration and Clarification at 7; Verizon Petition for Suspension of Enforcement Date and Reconsideration at 5.

⁵⁵ *First Report and Order*, 15 FCC Rcd at 7619, para. 109.

⁵⁶ BellSouth Comments at 9-10; Sprint Comments at 5; Time Warner Comments at 5.

⁵⁷ *First Report and Order*, 15 FCC Rcd at 7618, para. 107.

⁵⁸ That is, we believe that carriers would be able to meet a higher utilization threshold before needing additional numbering resources if they could include numbers other than *assigned* in the numerator.

administrative, aging, intermediate or reserved numbers in the numerator.

F. Geographic Application of Utilization Threshold

31. *Discussion.* In the *First Report and Order*, we determined that the utilization threshold should be calculated and applied per rate center because numbering resources are assigned per rate center.⁵⁹ Most commenters agree with this conclusion,⁶⁰ and very few commenters support an NPA-wide utilization requirement.

32. Some ILECs suggest, however, that the utilization threshold should be calculated on a per-switch basis in rate centers that have multiple switches, particularly where they have not deployed LNP capability.⁶¹ According to BellSouth, in the absence of thousands-block number pooling, numbers cannot be shared easily among multiple switches in the same rate center.⁶² They assert that there are technical constraints on their ability to share numbering resources among multiple switches within the same rate center and that a low utilization rate in one or more switches could prevent it from meeting the rate center utilization threshold.⁶³ SBC argues in its comments that the utilization threshold should be calculated at the “lowest code assignment point” – the rate center, where there is only one switch, or the switch, where there is more than one in a rate center.⁶⁴

33. We are not persuaded at this time that we should adopt a switch-based utilization or “lowest code assignment point” utilization as suggested by SBC.⁶⁵ We are concerned that allowing carriers to receive additional numbering resources when they have not reached the overall rate center utilization threshold will increase the likelihood that numbering resources will become stranded in underutilized switches. We also believe that switch-based utilization undermines our policy of encouraging rate center consolidation, which allows numbering resources to be used over a wider geographic area. Switch-based utilization calculation would represent, in essence, rate center de-consolidation. We urge carriers to pursue intra-rate center and intra-company porting of numbers and other strategies to share numbers among switches, both to minimize stranded numbers and to alleviate the need to get additional numbering resources without meeting the established utilization threshold in each rate center. Because a

⁵⁹ *First Report and Order*, 15 FCC Rcd at 7617, para. 105 (stating that the rate center-based utilization “more accurately reflects how numbering resources are assigned”).

⁶⁰ ALTS Comments at 6; CompTel Comments at 5; Consumer Commenters Comments at 11-12; Nextel Comments at 3; Nextlink Comments at 5; PCIA Comments at 6-7; Sprint Comments at 8; Time Warner Comments at 6; USTA Comments at 4; Verizon Comments 2-3; WorldCom Comments at 3; AT&T Reply Comments at 15.

⁶¹ Bell Atlantic Comments at 8; SBC Comments at 7; *see also* BellSouth Petition for Reconsideration at 20; Letter from Kathleen B. Levitz, BellSouth, to Magalie Roman Salas, FCC, dated October 19, 2000.

⁶² BellSouth Petition for Reconsideration at 20.

⁶³ BellSouth Petition for Reconsideration at 20; Letter from Kathleen B. Levitz, BellSouth, to Magalie Roman Salas, FCC, dated October 19, 2000; *see also* USTA Comments at 4-5.

⁶⁴ SBC Comments at 53.

⁶⁵ SBC Comments at 7.

number of parties have indicated that they are unable to port numbers between switches until they have implemented pooling,⁶⁶ we seek comment in the attached *Second Further Notice* on the need, and specific criteria to be used, for a “safety valve” for carriers that do not meet the utilization threshold for a given rate center, but have a demonstrable need for additional numbering resources. In the interim, until an alternative “safety valve” process is established, carriers that do meet the utilization threshold in a given rate center may continue to seek waivers from the Commission to obtain additional numbering resources.

IV. THOUSANDS-BLOCK NUMBER POOLING

A. Selection of Thousands-Block Number Pooling Administrator

34. In the *First Report and Order*, we determined that implementation of thousands-block number pooling is essential to extending the life of the NANP by making the assignment and use of NXX codes more efficient.⁶⁷ We therefore mandated nationwide thousands-block number pooling in the 100 largest metropolitan statistical areas (MSAs), and set forth requirements and a national framework for implementation. Specifically, we required participation in pooling by carriers that are required to be LNP-capable, either because they provide service in one of the largest 100 MSAs, or pursuant to a request from another carrier,⁶⁸ and directed that thousands-block number pooling be deployed first in NPAs that are located in the largest 100 MSAs.⁶⁹ We also directed covered Commercial Mobile Radio Service (CMRS) providers to implement thousands-block number pooling after the forbearance from the LNP requirements expires on November 24, 2002.⁷⁰ In addition, we required states that have implemented their own pooling trials under delegated authority to bring these trials into conformity with the national framework set forth in the *First Report and Order*.⁷¹ Finally, we adopted certain technical requirements to ensure a consistent nationwide pooling architecture.⁷²

35. We also concluded that thousands-block number pooling should be administered by a single national Pooling Administrator, but delayed implementation of pooling on a

⁶⁶ See, e.g., Letter from Kathleen B. Levitz, BellSouth, to Magalie Roman Salas, FCC, dated November 30, 2000. Even after pooling is implemented, some carriers argue that they will only be able to port numbers between switches in thousands-blocks. *Id.*

⁶⁷ *First Report and Order*, 15 FCC Rcd at 7625, para. 122.

⁶⁸ *Id.* at 7627, para. 125.

⁶⁹ *Id.* at 7645, para. 158.

⁷⁰ *Id.* at 7632, para. 134.

⁷¹ *Id.* at 7651, para. 169; see also *id.* at 7643-49, paras. 156-66; 7653-61, paras. 172-191 for a general description of the national framework for thousands-block number pooling. We have stayed these requirements pending resolution of petitions filed by Maine and California. See *infra* section IV.B.

⁷² See *First Report and Order*, 15 FCC Rcd at 7656, para. 181 (adopting the T1S1.6 Technical Requirements as the technical standard for thousands-block number pooling); *id.* at 7657, para. 182 (stating that the inclusion of Efficient Data Representation (EDR) in the pooling software used for thousands-block number pooling is significant because it will reduce the strain on the network from the large volume of number porting).

nationwide basis until the national Pooling Administrator is selected through a competitive bidding process.⁷³ We delegated authority to the Commission's Office of the Managing Director (OMD), with the assistance of the Common Carrier Bureau and the Office of the General Counsel, to prepare the necessary bidding information and to develop an evaluation process for the Commission to use in soliciting bids for a national Pooling Administrator.⁷⁴ We also directed the North American Numbering Council (NANC)⁷⁵ to make revisions to its proposed Thousands-Block Pooling Administrator Requirements Document to specify the technical requirements for national pooling administration.⁷⁶ On September 5, 2000, the Common Carrier Bureau released a Public Notice seeking comment on the technical requirements recommended by the NANC.⁷⁷ After reviewing the comments received from several parties,⁷⁸ OMD, with the assistance of a technical consultant, MITRE Corporation,⁷⁹ developed a Request for Proposal (RFP) to be used in the selection of the national Pooling Administrator. To facilitate an expeditious implementation of national thousands-block number pooling, OMD determined that a limited competitive bidding process is appropriate, and thus identified and is inviting bids from three potential bidders known for having experience in numbering administration: Mitretek Systems, NeuStar, Inc., and Telcordia Technologies, Inc. The procurement of a national Pooling Administrator is being conducted in accordance with the requirements of the Federal Acquisition Regulation (FAR).⁸⁰

36. We note that as a consultant to the Commission for pooling administration, MITRE's fees are part of the cost of establishing pooling administration. MITRE's services have been an integral aspect of the Commission's establishment of pooling administration. Therefore,

⁷³ *Id.* at 7639-43, paras. 148-55.

⁷⁴ *Id.* at 7643, para. 155. The NANC submitted its proposed technical requirements on July 20, 2000. See Letter from John Hoffman, Chairman, North American Numbering Council, to Lawrence E. Strickling, Chief, Common Carrier Bureau, dated July 20, 2000.

⁷⁵ The NANC was created under the Federal Advisory Committee Act, 5 U.S.C. App 2 (1988), to advise the Commission and to make recommendations, reached through consensus, that foster efficient and impartial number administration. The membership of NANC, which includes twenty-eight voting members and four special non-voting members, was selected to represent all segments of the telecommunications industry as well as regulatory entities and consumer groups with interests in number administration. The current NANC charter directs the Council to develop recommendations on numbering policy issues and facilitate number conservation including identification of technical solutions to number exhaust.

⁷⁶ *First Report and Order*, 15 FCC Rcd at 7643, para. 155.

⁷⁷ *The Commission Seeks Comments On The Thousands-Block Pooling Administrator Technical Requirements*, Public Notice, CC Docket 99-200, DA 00-2011 (rel. Sept. 5, 2000).

⁷⁸ Commenting parties include: AT&T; BellSouth; California Commission; Cox; Florida Commission; Maine Commission; NeuStar; New Hampshire Commission; New York Commission; Pennsylvania Office of Consumer Advocate; Missouri Commission; Texas Commission; RCN Telecom Services; SBC; Telcordia; USTA; WorldCom.

⁷⁹ The technical consultant is MITRE Corporation. MITRE is a section 501(c)(3) not-for-profit corporation that operates federally funded research and development centers for various agencies.

⁸⁰ The FAR is Chapter 48 of the C.F.R. The FAR governs the acquisition by contract of supplies and services by and for the use of the Federal Government.

MITRE's fees will be borne by carriers in a competitively neutral manner in the same way that the direct costs of pooling administration are borne.

37. Of particular concern with this procurement is the fairness of the bidding process, in light of the NANC's earlier interactions with NeuStar in its capacity as NANPA and for several state pooling trials.⁸¹ Telcordia, for example, stated its belief that as a Pooling Administrator, NeuStar would have an advantage in the bidding process,⁸² and asked the Commission to be vigilant to ensure that NeuStar did not use its NANPA and Number Portability Administrator Center (NPAC) administrator positions to gain an unfair competitive advantage in bidding to provide national pooling administration.⁸³ In response to these concerns, we have taken affirmative steps to structure the procurement process to ensure that no party has an unfair competitive advantage. First, we asked the NANC to "scrub" its proposed Requirements Document, and ensure that its technical requirements are competitively neutral and do not favor any particular party. We then solicited comments from the public on the proposed technical requirements to ensure that all interested parties had an opportunity to voice any concerns or issues about the content of the technical requirements.⁸⁴ Next, we hired a neutral third party consultant to help us evaluate and further refine the technical requirements, develop an RFP, and assist us with the evaluation of competitive bids to facilitate an equitable process. We believe that the technical expertise of the consultant, coupled with its status as a neutral third party, adds safeguards to the procurement process and helps to eliminate any perceived or actual advantages for any one party. Moreover, we ensured that no potential bidder had access to any information pertaining to the RFP or the selection process, unless all potential bidders had access to such information. We also ensured that all potential bidders obtained any non-proprietary information relevant to the RFP or the selection process that they requested. It is anticipated that the national Pooling Administrator selection will be made in the first quarter of 2001.

1. Pooling Administrator Term of Appointment

38. *Background.* In the *First Report and Order*, we indicated our intent to have the national Pooling Administrator serve until the completion of the current NANPA's term.⁸⁵ This would effectively give the national Pooling Administrator an initial term of less than two years. Several commenters, including Telcordia, opined that the proposed term is too short.⁸⁶ Telcordia asserts that the length of the award cycle makes it difficult for a Pooling Administrator bidder to recoup its start up costs.⁸⁷ Telcordia states that, like the NANPA contract, the national Pooling

⁸¹ See, e.g., Telcordia Comments at 2-3.

⁸² *Id.* at 2.

⁸³ *Id.* at 3.

⁸⁴ *The Commission Seeks Comments On The Thousands-Block Pooling Administrator Technical Requirements*, Public Notice, CC Docket 99-200, DA 00-2011 (rel. Sept. 5, 2000).

⁸⁵ *First Report and Order*, 15 FCC Rcd at 7643, para. 155. The NANPA's term ends in November 2002.

⁸⁶ Telcordia Comments at 3; Telcordia Petition for Reconsideration at 1.

⁸⁷ *Id.*

Administrator award period should be set at five years.⁸⁸ Other parties disagree.⁸⁹ WorldCom, for example, states that the Commission should not reconsider its decision to make the initial Pooling Administrator term coterminous with the current NANPA term, so as not to foreclose potential synergies between the NANPA and the Pooling Administrator.⁹⁰

39. *Discussion.* We conclude that the term of the thousands-block number Pooling Administrator will be five years. Thus, the Pooling Administrator's initial contract will not be coterminous with the NANPA's term. We agree with Telcordia's assertion that the Pooling Administrator contract need not be tied to the NANPA's contract.⁹¹ We believe that a five-year award cycle will better enable the Pooling Administrator to recoup its startup costs, because it allows the Administrator to spread its startup costs over a longer period of time.⁹² We note that a five-year contract should enhance competition by allowing bidders to offer a more attractive annual contract price, thus increasing the interest of bidders in the contract.⁹³ A longer term will also benefit carriers, who will be able to spread their costs associated with thousands-block number pooling administration over a longer period of time. Moreover, we note that if the Pooling Administrator term were coterminous with the NANPA term, by allocating up to nine months of the Pooling Administrator term to preparation for the national rollout, the Pooling Administrator would have less than a year of operation before the term would end.⁹⁴

40. We nevertheless agree with WorldCom that it may be desirable in the future to link the thousands-block number pooling administration and central office code administration duties to take advantage of any synergies that may be achieved by one entity serving in both capacities.⁹⁵ We however are cognizant that vendor diversity for number administration services may have advantages for the industry and the public.⁹⁶ We therefore intend to revisit the question of whether the NANPA's and the Pooling Administrator's contract terms should be coterminous in the future.

B. State Pooling Trials – California and Maine Petitions

41. *Background.* As we enunciated in the *First Report and Order*, uniform standards for thousands-block number pooling are necessary to minimize the confusion and additional

⁸⁸ *Id.*

⁸⁹ See WorldCom Opposition.

⁹⁰ WorldCom Opposition at 14.

⁹¹ Telcordia Petition for Reconsideration at 1.

⁹² Telcordia Comments at 3-4; Telcordia Petition for Reconsideration at 1-2.

⁹³ Telcordia raised concerns that a short-term contract would likely prevent the Pooling Administrator from recouping its start-up costs. See Telcordia Comments at 3; Telcordia Petition for Reconsideration at 1.

⁹⁴ *First Report and Order*, 15 FCC Rcd at 7643, para. 156.

⁹⁵ WorldCom Opposition at 14; see also *First Report and Order*, 15 FCC Rcd at 7642, para. 152.

⁹⁶ *First Report and Order*, 15 FCC Rcd at 7642, para. 152.

expense related to compliance with inconsistent regulatory requirements.⁹⁷ We recognized in the *First Report and Order* that pooling trials already underway might not conform to the standards set forth in the national framework.⁹⁸ Thus, we required state commissions to bring their pooling trials into conformity with the national framework by September 1, 2000.⁹⁹ Our goal in establishing the September 1, 2000 deadline was to give state commissions time to bring their pooling trials into conformity with the national framework, and to facilitate uniformity in the implementation of thousands-block number pooling on a nationwide basis.¹⁰⁰

42. On August 4, 2000, the California Commission requested a waiver from compliance with the Commission's directive in the *First Report and Order* to conform their thousands-block number pooling trial to the Commission's national pooling rules by September 1, 2000.¹⁰¹ On August 14, 2000, the Maine Commission sought similar relief.¹⁰² Specifically, both petitioners seek to continue applying their utilization thresholds until the national pooling rollout begins.¹⁰³ Maine also specifically seeks relief from our sequential numbering rules.¹⁰⁴ California and Maine seek waivers from complying with the September 1, 2000 deadline so that they may continue to require pooling carriers to meet a utilization threshold, which they assert has proven integral to the success of their number pooling trials.¹⁰⁵ Although both petitioners request relief from the national pooling rules in general, their petitions enumerate specific arguments supporting only their requests to continue to apply a utilization threshold for pooling carriers.¹⁰⁶ California and Maine further assert that conforming to national pooling rules would be detrimental to their efforts to delay the exhaust of area codes.¹⁰⁷ Both California and Maine state that they will conform to national number pooling rules when national pooling implementation begins.¹⁰⁸

43. In support of its waiver request, Maine states that uniformity is the exception and

⁹⁷ *Id.* at 7651, para. 169.

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ *See generally* California Petition.

¹⁰² *See generally* Maine Petition. New Hampshire sought similar relief in comments it filed in support of California and Maine's Petitions. *See generally* New Hampshire Commission Comments.

¹⁰³ California Petition at 1-2; Maine Petition at 1.

¹⁰⁴ Maine Petition at 1.

¹⁰⁵ California Petition at 2; Maine Petition at 2-3.

¹⁰⁶ *See generally* California Petition; Maine Petition.

¹⁰⁷ California Petition at 3; Maine Petition at 7.

¹⁰⁸ California Petition at 2; Maine Petition at 1.

not the rule in telephone regulation.¹⁰⁹ Maine believes that each state's circumstances are different and "that if it must bear the responsibility of area code relief, it should be given the flexibility to implement conservation measures which meet its specific needs."¹¹⁰ California and Maine are also concerned about the possibility that, under the Commission's national rules, pooling carriers will be allowed to acquire more new numbers than they need by submitting a months to exhaust calculation based upon completely subjective projections of future numbering needs.¹¹¹ On August 31, 2000, the Commission released an Order granting California and Maine a stay of the requirement to comply with national pooling rules until December 31, 2000, or until we ruled on the merits of the petitions, whichever date is sooner.¹¹²

44. *Discussion.* In applying utilization thresholds to pooling carriers as discussed above, we grant California and Maine the primary relief sought in their petitions. Specifically, they and all other states that have commenced pooling trials in which they apply a utilization threshold to pooling carriers may continue to use their thresholds if the thresholds meet or exceed the 60% utilization threshold established herein for all other carriers, using our methodology for calculating utilization.¹¹³ States using a utilization threshold that exceeds the currently established initial threshold of 60% in an active pooling trial need not decrease their threshold in that area, but may continue to use their threshold up to a maximum level of 75%. When the national Pooling Administrator takes over the administration of these pooling trials, states will have the option of maintaining the higher utilization threshold rather than lowering the threshold to conform to the national level.¹¹⁴

45. Maine also seeks relief from our sequential numbering rules.¹¹⁵ Maine states that the *First Report and Order* implements a standard for sequential numbering that provides little guidance to carriers and provides them with ample room to avoid strict compliance.¹¹⁶ Maine describes neither what its sequential numbering rules are, nor how its sequential numbering rules differ from the national rules. Moreover, Maine proffers no reason why it cannot comply with the national rules. Also, contrary to Maine's assertions, we have not received other comments that our rules do not provide enough guidance. Moreover, we believe that the national rules should address Maine's concerns about sequential numbering. We also believe the benefit of

¹⁰⁹ Maine Reply Comments at 2.

¹¹⁰ Maine Reply Comments at 2.

¹¹¹ California Petition at 4; Maine Petition at 6. See *supra* section III for a more detailed discussion of months to exhaust calculations and utilization thresholds.

¹¹² *Numbering Resource Optimization*, Order, CC Docket No. 99-200, FCC 00-333 (rel. Aug. 31, 2000).

¹¹³ See *supra* section III.

¹¹⁴ We note that state commissions that currently apply a higher utilization threshold to non-pooling carriers pursuant to delegated authority may also continue to apply their thresholds up to a maximum level of 75%. See *supra* para. 23.

¹¹⁵ Maine Petition at 1.

¹¹⁶ *Id.* at 5.

having a uniform requirement outweighs the potential inconvenience and confusion from the existence of disparate requirements. We therefore conclude that all service providers must assign numbers in accordance with the sequential numbering rules we established in the *First Report and Order*.¹¹⁷

46. Finally, we conclude that all states must conform all other aspects of their pooling trials to the national framework. They will be given a transition period of three months from the date of publication of this *Second Report and Order* in the Federal Register to make any necessary adjustments. Both the California and Maine Commissions are to be commended for their stewardship of numbering resources in their respective states. Moreover, we recognize the need for state commissions to have some flexibility in rendering numbering administration decisions pursuant to their delegated authority. We agree, however, with AT&T that "state commissions have long been on notice that their interim pooling authority would be superseded by national standards, and they presumably established their pooling trials with that fact in mind."¹¹⁸ We find that national requirements sufficiently support our numbering resource optimization goals, while ensuring that service providers are subject to the same rules and requirements for each state in which they operate. We also find that compliance with a national, uniform framework for thousands-block number pooling will permit service providers to avoid having to conform with different requirements for every jurisdiction in which they operate, which would be unwieldy and inefficient for service providers from both a regulatory and a financial perspective. Moreover, a lack of uniformity would harm consumers, who would likely incur the costs imposed on service providers operating under disparate pooling regimes.

C. Thousands-Block Number Pooling for Covered CMRS Carriers

47. *Background.* In the *Further Notice*, we sought comment on whether covered CMRS carriers should be required to participate in pooling by the LNP forbearance period on November 24, 2002.¹¹⁹ In the alternative, we sought comment on whether we should allow a transition period between the time that covered CMRS carriers must implement LNP and the time they must participate in pooling, and if so, what the minimum reasonable allowance for such a transition period would be. We noted that by determining, in the *First Report and Order*, that CMRS carriers would be required to participate in pooling once they have acquired LNP capability, we were providing more than two years of lead time for carriers to perform the necessary preparations.¹²⁰

48. State commissions generally oppose granting any additional time to CMRS carriers, arguing that, because carriers have been on notice for over two years that they would be required to implement pooling, they should not require additional time to make the necessary

¹¹⁷ *First Report and Order*, 15 FCC Rcd at 7684-85, paras. 244-245.

¹¹⁸ AT&T Opposition at 2.

¹¹⁹ *First Report and Order*, 15 FCC Rcd at 7686, para. 249.

¹²⁰ *Id.*

system changes.¹²¹ Carriers, on the other hand, assert that they need additional time to make changes to their systems to implement pooling. For example, VoiceStream states that to implement pooling, carriers must modify their local service management systems (LSMSs), service control points (SCPs), service order administration systems (SOAs), and operations support systems (OSSs).¹²²

49. *Discussion.* In the *First Report and Order*, we found that implementation of thousands-block number pooling in major markets is essential to extending the life of the NANP by making the use of NXX codes more efficient.¹²³ In determining that CMRS carriers would be required to participate in pooling once they acquired LNP capability, we noted that CMRS providers would be able to contribute meaningfully to the numbering efficiencies to be gained by thousands-block number pooling.¹²⁴

50. Based on the record before us, we decline to adopt a transition period between the time that covered CMRS carriers must implement LNP and the time they must participate in any mandatory number pooling. While carriers will have to modify some of their systems to implement pooling, we agree with states that, because carriers are on notice that they will be required to participate in pooling, and because pooling and LNP involve substantially similar technical modifications, carriers should be able to implement pooling in the same time frame that they achieve LNP capability.¹²⁵ Carriers have not provided us with sufficient evidence demonstrating that they will not be able to implement pooling by the deadline for implementation of LNP.¹²⁶

51. We are not persuaded by carriers' assertions that a brief transition period is necessary to allow them time to troubleshoot any problems that may occur after LNP deployment.¹²⁷ Carriers have not identified sufficiently any specific additional risks of implementing LNP and pooling at the same time. For instance, by the time wireless carriers begin to participate in pooling, number pools will be well established in many areas of the

¹²¹ See, e.g., California Commission Comments at 6-8; Consumer Commenters Comments at 20-21; Maine Commission Comments at 5; Missouri Commission Comments at 3; New Hampshire Commission Comments at 7; Texas Commission Comments at 3-4.

¹²² VoiceStream Comments at 14.

¹²³ *First Report and Order*, 15 FCC Rcd at 7625, para. 122.

¹²⁴ *Id.* at 7635, para. 140.

¹²⁵ Thousands-block number pooling implementation requires carriers to make the same network changes as those required to implement LNP. See Number Resource Optimization Working Group Modified Report to the North American Numbering Council on Number Optimization Method, October 20, 1998 at 91; see also North American Numbering Council Wireless Number Portability Subcommittee Report on Wireless Number Portability Technical, Operational and Implementation Requirements Phase II Version 1.7, submitted to the Commission on September 26, 2000; CTIA Report on Wireless Number Portability Version 2.0.

¹²⁶ Carriers have been on notice for several years that they must comply with our LNP requirements by November 24, 2002.

¹²⁷ See, e.g., AT&T Comments at 8-9; BellSouth Comments at 10; Bell Atlantic Comments at 8-9.

country, and many of the initial implementation problems will have previously been worked out. Moreover, carriers have not explained why any potential risks could not be anticipated and addressed prior to the LNP implementation deadline. In declining to adopt a transition period, we note that the fundamental administrative and technological elements for thousands-block number pooling are currently, or will soon be, available. For example, there already are guidelines for the administration and assignment of thousands blocks to LNP-capable service providers required to participate in thousands-block number pooling.¹²⁸ In addition, NPAC Release 3.0, which is LNP software that includes efficient data representation (EDR) for number pooling, is currently being tested.¹²⁹ EDR allows a location routing number (LRN) to be associated with a block of one thousand numbers as a single record.¹³⁰ Because EDR allows one thousand numbers to be downloaded and stored as a single record, instead of one-thousand records, it is expected to significantly extend a carrier's SCP capacity for thousands-block number pooling.¹³¹ The availability of the Thousands-Block Pooling Administration Guidelines, as well as the NPAC Release 3.0 software, should help CMRS carriers implement pooling by the LNP implementation deadline.

V. AREA CODE RELIEF AND PENNSYLVANIA NUMBERING ORDER PETITIONS FOR RECONSIDERATION AND CLARIFICATION

A. Introduction

52. In the *First Report and Order*, we set forth a number of administrative and technical measures that focus on conservation of numbering resources within each NPA or area code. By maximizing efficient use of numbers within area codes, we reduce the need to introduce new area codes, which protects consumers from the expense, trouble and dislocation that area code relief entails and also can help prevent premature exhaust of the existing NANP. We recognize, however, that the adoption of these numbering optimization measures does not eliminate the need for states to continue to implement area code relief in area codes that are approaching depletion. Therefore, in the *Notice*, we considered what action we could take to assist states in implementing area code relief in a manner that is consistent with other numbering resource optimization measures that we may adopt in the *Numbering Resource Optimization* proceeding.

53. In this section, we address whether we should amend the existing federal guidelines or develop additional federal guidelines for area code relief. We also address the advantages and disadvantages of geographic splits and all-services overlays, the approaches most commonly used by states to accomplish area code relief, and whether area code overlays are preferable to geographic splits from a numbering resource optimization perspective. Moreover,

¹²⁸ The latest "Thousand Block NXX-X Pooling Administration Guidelines" (INC 99-0127-023) can be found at <<http://www.atis.org>>.

¹²⁹ See *LNP Working Group Status Report to the NANC*, October 17, 2000, North American Numbering Council Meeting, at 1.

¹³⁰ See *First Report and Order*, 15 FCC Rcd at 7655, para. 177.

¹³¹ *Id.*

we examine the possible uses of reverse overlays and expanded overlays as area code relief options. Furthermore, we reexamine our current prohibition on service-specific and technology-specific overlays. Finally, we address related petitions for clarification or reconsideration that were filed in response to the *Pennsylvania Numbering Order*.¹³²

B. Background

54. Traditionally, when the supply of numbers available within an area code is estimated to exhaust during the planning horizon, some form of area code relief must be implemented so that customers in that area can continue to obtain the services they desire from the carrier of their choice. The implementation of new area codes has been the primary relief measure employed in geographic areas experiencing numbering resource shortages brought on by the rapid growth in demand for central office codes or NXX codes. Pursuant to Section 251(e)(1) of the Act, the Commission has delegated to state commissions the authority to direct the form of area code relief, to perform the functions associated with initiating and planning area code relief, and to adopt final area code relief plans, subject to Commission guidelines for numbering administration.¹³³

55. On September 28, 1998, we released the *Pennsylvania Numbering Order*, delegating additional authority to state commissions to order NXX code rationing in conjunction with area code relief decisions, in the absence of industry consensus.¹³⁴ The order further approved a mandatory thousands-block number pooling trial in Illinois.¹³⁵ The order provided that state commissions could order voluntary pooling trials,¹³⁶ but in view of our efforts to develop national pooling standards, we declined to delegate to state commissions the general

¹³² *Pennsylvania Numbering Order*, 13 FCC Rcd at 19025, para. 23.

¹³³ 47 U.S.C. § 251(e)(1); see also *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Second Report and Order and Memorandum Opinion and Order, 11 FCC Rcd 19392 (1996) (*Local Competition Second Report and Order*), vacated in part, *California v. FCC*, 124 F.3d 934 (8th Cir. 1997), rev'd *AT&T v. Iowa Utils. Bd.*, 199 S. Ct. 721 (1999). The authority delegated to the states includes determination of the boundaries of a new area code; the implementation date for the new area code; directing public education efforts regarding area code changes; and the mechanism for introducing the new area code (e.g., via an area code split, overlay, or a boundary realignment). State commissions were also delegated the authority to perform the functions associated with initiation and development of area code relief plans. The Commission found that enabling states to initiate and develop area code relief plans was generally consistent with our delegation of new area code implementation matters to the state commissions based on their unique familiarity with local circumstances. The Commission made this delegation, however, only to those states wishing to perform area code relief initiation and development. Because the Commission recognized that many state commissions may not wish to perform these functions because the initiation and development of area code relief can require specialized expertise and staff resources and development that some state commissions may not have, it required states seeking to perform any or all of these functions to notify the new NANP administrator within 120 days of the selection of the NANP administrator.

¹³⁴ *Pennsylvania Numbering Order*, 13 FCC Rcd at 19025, para. 24.

¹³⁵ *Id.* at 19029-30, para. 30.

¹³⁶ *Id.* at 19027-28, para. 27.