

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

In the Matter of )
)
Numbering Resource Optimization ) CC Docket No. 99-200
)
Petition for Declaratory Ruling and Request ) CC Docket No. 96-98
For Expedited Action on the July 15, 1997 )
Order of the Pennsylvania Public Utility )
Commission Regarding Area Codes 412, 610, )
215, and 717 )

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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TABLE OF CONTENTS

Paragraph Number
I. INTRODUCTION.....1
II. BACKGROUND AND OVERVIEW .....4
III. UTILIZATION THRESHOLD .....18
A. INITIAL UTILIZATION THRESHOLD .....21
B. ADJUSTMENTS TO THE UTILIZATION THRESHOLD.....25
C. APPLICABILITY OF UTILIZATION THRESHOLD TO POOLING CARRIERS .....27
D. APPLICATION OF UTILIZATION THRESHOLD FOR GROWTH RESOURCES .....29
E. CALCULATION OF UTILIZATION LEVEL.....30
F. GEOGRAPHIC APPLICATION OF UTILIZATION THRESHOLD .....31

- IV. THOUSANDS-BLOCK NUMBER POOLING .....34
  - A. SELECTION OF THOUSANDS-BLOCK NUMBER POOLING ADMINISTRATOR .....34
    - 1. Pooling Administrator Term of Appointment.....38
  - B. STATE POOLING TRIALS – CALIFORNIA AND MAINE PETITIONS .....41
  - C. THOUSANDS-BLOCK NUMBER POOLING FOR COVERED CMRS CARRIERS.....47
- V. AREA CODE RELIEF AND PENNSYLVANIA NUMBERING ORDER PETITIONS FOR RECONSIDERATION AND CLARIFICATION .....52
  - A. INTRODUCTION.....52
  - B. BACKGROUND.....54
  - C. FEDERAL GUIDELINES FOR AREA CODE RELIEF .....56
  - D. GEOGRAPHIC SPLITS VERSUS ALL-SERVICES AREA CODE OVERLAYS .....62
    - 1. Reverse Overlays .....71
    - 2. Expanded Overlays .....73
  - E. PENNSYLVANIA NUMBERING ORDER PETITIONS FOR RECONSIDERATION AND CLARIFICATION .....76
- VI. OTHER NUMBERING RESOURCE OPTIMIZATION MEASURES.....81
  - A. AUDITS .....81
    - 1. Types of Audits.....84
    - 2. Audit Responsibility .....89
    - 3. Audited Information and Procedures .....94
  - B. MANDATORY NATIONWIDE TEN-DIGIT DIALING.....100
  - C. EXPANSION OF THE D DIGIT .....105
  - D. CLARIFICATION OF DEFINITIONS.....107
    - 1. Parent OCN.....107
    - 2. Classification of Numbers Used for Intermittent or Cyclical Purposes .....110
  - E. RECONSIDERATION OF RESERVED NUMBER PERIOD .....113
  - F. CLARIFICATION OF STATE COMMISSIONS’ ACCESS TO DATA .....116
    - 1. State Commissions’ Access to Mandatory Reporting Data .....116
    - 2. State Commissions’ Access to Numbering Resource Application Information.....120
- VII. FURTHER NOTICE OF PROPOSED RULEMAKING.....124
  - A. SERVICE-SPECIFIC AND TECHNOLOGY-SPECIFIC OVERLAYS .....124

B.	THE RATE CENTER PROBLEM.....	144
C.	LIABILITY OF RELATED CARRIERS.....	149
D.	STATE COMMISSIONS’ ACCESS TO MANDATORY REPORTING DATA .....	151
E.	FEE FOR NUMBER RESERVATIONS.....	152
F.	ENFORCEMENT.....	153
G.	STATE COMMISSIONS’ AUTHORITY TO CONDUCT “FOR CAUSE” AND “RANDOM AUDITS” .....	155
H.	DEVELOPING MARKET-BASED APPROACHES FOR OPTIMIZING NUMBERING RESOURCES.....	156
	1. Commission Authority to Charge for Numbers.....	158
	2. The Need for a Market-Based Allocation System .....	161
	3. Structure of Markets .....	164
	4. Timing and Geographic Scope of Implementation .....	177
I.	RECOVERY OF POOLING SHARED INDUSTRY AND DIRECT CARRIER-SPECIFIC COSTS .....	179
J.	THOUSANDS-BLOCK NUMBER POOLING FOR NON-LNP-CAPABLE CARRIERS .....	183
K.	WAIVER OF GROWTH NUMBERING REQUIREMENTS .....	186
VIII.	PROCEDURAL MATTERS .....	190
IX.	ORDERING CLAUSES .....	199
	Final Rules .....	Appendix A
	Final Regulatory Flexibility Analysis .....	Appendix B
	Initial Regulatory Flexibility Analysis .....	Appendix C
	List of Parties .....	Appendix D

## 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)<sup>1</sup> are used

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<sup>1</sup> 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.<sup>2</sup> 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.<sup>3</sup> 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.<sup>4</sup> 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.

<sup>2</sup> 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*).

<sup>3</sup> 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.

<sup>4</sup> 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*,<sup>5</sup> 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.<sup>6</sup> 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.<sup>7</sup> 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.<sup>8</sup>

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.

<sup>5</sup> 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 and Order on Reconsideration, 13 FCC Rcd 19009, 19025, para. 23 (rel. Sept. 28, 1998) (*Pennsylvania Numbering Order*).

<sup>6</sup> 47 U.S.C. § 251(e)(1).

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

<sup>8</sup> See NANPA, NPA Relief Activities, Planned NPAs Not Yet in Service, available at <[www.nanpa.com/area\\_codes/npa\\_planned.html](http://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.<sup>9</sup> 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.<sup>10</sup>

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.<sup>11</sup> 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.<sup>12</sup> 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

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<sup>9</sup> *First Report and Order*, 15 FCC Rcd at 7578, para. 4.

<sup>10</sup> 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.

<sup>11</sup> 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.

<sup>12</sup> 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.<sup>13</sup> 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*.<sup>14</sup> On July 20, 2000, the Bureau released an order delegating to 15 states the authority to implement number conservation measures.<sup>15</sup> 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.<sup>16</sup> 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.<sup>17</sup> We also released an order on August 31, 2000,

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

<sup>14</sup> *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).

<sup>15</sup> *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).

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

<sup>17</sup> *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.<sup>18</sup>

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.<sup>19</sup> 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).

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

<sup>19</sup> *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.<sup>20</sup> 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

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<sup>20</sup> 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.<sup>21</sup> We also concluded that pooling carriers should not have to meet such a utilization threshold to receive additional numbering resources in a rate center.<sup>22</sup> In the *Further Notice*, we sought comment on several issues related to establishing a utilization threshold for non-pooling carriers.<sup>23</sup> 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.<sup>24</sup> 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.<sup>25</sup>

#### 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

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

<sup>22</sup> *Id.*

<sup>23</sup> *Id.* at 7685-86, para. 248.

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

<sup>25</sup> 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.<sup>26</sup> The record suggests that carriers are able to achieve utilization levels above 50% before needing more numbering resources.<sup>27</sup> Moreover, parties that support a 50% utilization threshold have provided no credible basis for adopting this level.<sup>28</sup> 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*.<sup>29</sup>

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%.<sup>30</sup> The data reported to the NANPA suggests that the average industry-

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<sup>26</sup> California Commission Comments at 4; Maine Commission Comments at 2; Missouri Commission Comments at 3.

<sup>27</sup> 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.

<sup>28</sup> 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).

<sup>29</sup> *See* New Hampshire Commission Comments at 3.

<sup>30</sup> *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%.<sup>31</sup> 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.<sup>32</sup> Furthermore, this initial threshold level, because it is demonstrably achievable,<sup>33</sup> 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 commenters<sup>34</sup> 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.<sup>35</sup> The public interest commenters contend that state commissions should be allowed to set specific utilization thresholds within a range established by us.<sup>36</sup> We agree with those commenters that argue disparate utilization thresholds may be more difficult to administer and may increase the difficulty of monitoring compliance.<sup>37</sup> 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%.<sup>38</sup> 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.

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<sup>31</sup> *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.

<sup>32</sup> 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.

<sup>33</sup> 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.

<sup>34</sup> These commenters consist of state commissions, state attorneys general, and state consumer advocates.

<sup>35</sup> 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.

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

<sup>37</sup> AT&T Comments at 7.

<sup>38</sup> *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.<sup>39</sup> 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%.<sup>40</sup> 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%.<sup>41</sup> The 75% threshold is a reasonable compromise between the 60% ceiling recommended by some industry commenters<sup>42</sup> and the 80% ceiling recommended by other commenters,<sup>43</sup> particularly since carriers are successfully meeting 75% utilization thresholds established by some state commissions.<sup>44</sup> In fact, some carriers are able to reach utilization levels as high as 80% before they need additional numbering resources.<sup>45</sup> This threshold

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<sup>39</sup> See 47 C.F.R. 1.103.

<sup>40</sup> *First Report and Order*, 15 FCC Rcd at 7685, para. 248

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

<sup>42</sup> AT&T Comments at 2, 7.

<sup>43</sup> California Commission Comments at 2; New Hampshire Commission Comments at 5; Nextlink Comments at 4; Texas Commission Comments at 2.

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

<sup>45</sup> 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.<sup>46</sup> 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.<sup>47</sup>

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.<sup>48</sup> We agree with Maine that applying the utilization threshold to pooling carriers helps ensure that only those thousands blocks that are needed are assigned.<sup>49</sup> 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,<sup>50</sup> generally asserting that the MTE calculation is sufficient to determine

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<sup>46</sup> 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.

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

<sup>48</sup> 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.”)

<sup>49</sup> 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).

<sup>50</sup> 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.<sup>51</sup> Nextel opposes utilization thresholds for growth numbering resources and asserts that an MTE calculation more accurately reflects a carrier's numbering resource demands.<sup>52</sup> 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.<sup>53</sup> 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.<sup>54</sup> 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.<sup>55</sup> 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.<sup>56</sup> 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.<sup>57</sup> Moreover, the utilization thresholds that we adopt herein take into consideration that only *assigned numbers* are used in the numerator to calculate utilization.<sup>58</sup> 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

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

<sup>51</sup> Nextel Comments at 3; VoiceStream Comments at 10

<sup>52</sup> Nextel Comments at 3.

<sup>53</sup> *First Report and Order*, 15 FCC Rcd at 7617, para. 104

<sup>54</sup> 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.

<sup>55</sup> *First Report and Order*, 15 FCC Rcd at 7619, para. 109.

<sup>56</sup> BellSouth Comments at 9-10; Sprint Comments at 5; Time Warner Comments at 5.

<sup>57</sup> *First Report and Order*, 15 FCC Rcd at 7618, para. 107.

<sup>58</sup> 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.<sup>59</sup> Most commenters agree with this conclusion,<sup>60</sup> 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.<sup>61</sup> According to BellSouth, in the absence of thousands-block number pooling, numbers cannot be shared easily among multiple switches in the same rate center.<sup>62</sup> 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.<sup>63</sup> 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.<sup>64</sup>

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.<sup>65</sup> 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

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<sup>59</sup> *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”).

<sup>60</sup> 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.

<sup>61</sup> 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.

<sup>62</sup> BellSouth Petition for Reconsideration at 20.

<sup>63</sup> 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.

<sup>64</sup> SBC Comments at 53.

<sup>65</sup> SBC Comments at 7.



number of parties have indicated that they are unable to port numbers between switches until they have implemented pooling,<sup>66</sup> 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.<sup>67</sup> 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,<sup>68</sup> and directed that thousands-block number pooling be deployed first in NPAs that are located in the largest 100 MSAs.<sup>69</sup> 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.<sup>70</sup> 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*.<sup>71</sup> Finally, we adopted certain technical requirements to ensure a consistent nationwide pooling architecture.<sup>72</sup>

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

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<sup>66</sup> 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.*

<sup>67</sup> *First Report and Order*, 15 FCC Rcd at 7625, para. 122.

<sup>68</sup> *Id.* at 7627, para. 125.

<sup>69</sup> *Id.* at 7645, para. 158.

<sup>70</sup> *Id.* at 7632, para. 134.

<sup>71</sup> *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.

<sup>72</sup> 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.<sup>73</sup> 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.<sup>74</sup> We also directed the North American Numbering Council (NANC)<sup>75</sup> to make revisions to its proposed Thousands-Block Pooling Administrator Requirements Document to specify the technical requirements for national pooling administration.<sup>76</sup> On September 5, 2000, the Common Carrier Bureau released a Public Notice seeking comment on the technical requirements recommended by the NANC.<sup>77</sup> After reviewing the comments received from several parties,<sup>78</sup> OMD, with the assistance of a technical consultant, MITRE Corporation,<sup>79</sup> 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).<sup>80</sup>

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,

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<sup>73</sup> *Id.* at 7639-43, paras. 148-55.

<sup>74</sup> *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.

<sup>75</sup> 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.

<sup>76</sup> *First Report and Order*, 15 FCC Rcd at 7643, para. 155.

<sup>77</sup> *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).

<sup>78</sup> 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.

<sup>79</sup> 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.

<sup>80</sup> 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.<sup>81</sup> Telcordia, for example, stated its belief that as a Pooling Administrator, NeuStar would have an advantage in the bidding process,<sup>82</sup> 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.<sup>83</sup> 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.<sup>84</sup> 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.<sup>85</sup> 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.<sup>86</sup> Telcordia asserts that the length of the award cycle makes it difficult for a Pooling Administrator bidder to recoup its start up costs.<sup>87</sup> Telcordia states that, like the NANPA contract, the national Pooling

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<sup>81</sup> See, e.g., Telcordia Comments at 2-3.

<sup>82</sup> *Id.* at 2.

<sup>83</sup> *Id.* at 3.

<sup>84</sup> *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).

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

<sup>86</sup> Telcordia Comments at 3; Telcordia Petition for Reconsideration at 1.

<sup>87</sup> *Id.*

Administrator award period should be set at five years.<sup>88</sup> Other parties disagree.<sup>89</sup> 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.<sup>90</sup>

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.<sup>91</sup> 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.<sup>92</sup> 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.<sup>93</sup> 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.<sup>94</sup>

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.<sup>95</sup> We however are cognizant that vendor diversity for number administration services may have advantages for the industry and the public.<sup>96</sup> 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

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<sup>88</sup> *Id.*

<sup>89</sup> See WorldCom Opposition.

<sup>90</sup> WorldCom Opposition at 14.

<sup>91</sup> Telcordia Petition for Reconsideration at 1.

<sup>92</sup> Telcordia Comments at 3-4; Telcordia Petition for Reconsideration at 1-2.

<sup>93</sup> 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.

<sup>94</sup> *First Report and Order*, 15 FCC Rcd at 7643, para. 156.

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

<sup>96</sup> *First Report and Order*, 15 FCC Rcd at 7642, para. 152.

expense related to compliance with inconsistent regulatory requirements.<sup>97</sup> 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.<sup>98</sup> Thus, we required state commissions to bring their pooling trials into conformity with the national framework by September 1, 2000.<sup>99</sup> 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.<sup>100</sup>

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.<sup>101</sup> On August 14, 2000, the Maine Commission sought similar relief.<sup>102</sup> Specifically, both petitioners seek to continue applying their utilization thresholds until the national pooling rollout begins.<sup>103</sup> Maine also specifically seeks relief from our sequential numbering rules.<sup>104</sup> 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.<sup>105</sup> 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.<sup>106</sup> California and Maine further assert that conforming to national pooling rules would be detrimental to their efforts to delay the exhaust of area codes.<sup>107</sup> Both California and Maine state that they will conform to national number pooling rules when national pooling implementation begins.<sup>108</sup>

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

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<sup>97</sup> *Id.* at 7651, para. 169.

<sup>98</sup> *Id.*

<sup>99</sup> *Id.*

<sup>100</sup> *Id.*

<sup>101</sup> *See generally* California Petition.

<sup>102</sup> *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.

<sup>103</sup> California Petition at 1-2; Maine Petition at 1.

<sup>104</sup> Maine Petition at 1.

<sup>105</sup> California Petition at 2; Maine Petition at 2-3.

<sup>106</sup> *See generally* California Petition; Maine Petition.

<sup>107</sup> California Petition at 3; Maine Petition at 7.

<sup>108</sup> California Petition at 2; Maine Petition at 1.

not the rule in telephone regulation.<sup>109</sup> 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."<sup>110</sup> 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.<sup>111</sup> 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.<sup>112</sup>

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.<sup>113</sup> 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.<sup>114</sup>

45. Maine also seeks relief from our sequential numbering rules.<sup>115</sup> 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.<sup>116</sup> 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

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<sup>109</sup> Maine Reply Comments at 2.

<sup>110</sup> Maine Reply Comments at 2.

<sup>111</sup> 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.

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

<sup>113</sup> *See supra* section III.

<sup>114</sup> 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.

<sup>115</sup> Maine Petition at 1.

<sup>116</sup> *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*.<sup>117</sup>

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.”<sup>118</sup> 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.<sup>119</sup> 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.<sup>120</sup>

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

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

<sup>118</sup> AT&T Opposition at 2.

<sup>119</sup> *First Report and Order*, 15 FCC Rcd at 7686, para. 249.

<sup>120</sup> *Id.*

system changes.<sup>121</sup> 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).<sup>122</sup>

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.<sup>123</sup> 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.<sup>124</sup>

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.<sup>125</sup> 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.<sup>126</sup>

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.<sup>127</sup> 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

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<sup>121</sup> 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.

<sup>122</sup> VoiceStream Comments at 14.

<sup>123</sup> *First Report and Order*, 15 FCC Rcd at 7625, para. 122.

<sup>124</sup> *Id.* at 7635, para. 140.

<sup>125</sup> 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.

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

<sup>127</sup> 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.<sup>128</sup> In addition, NPAC Release 3.0, which is LNP software that includes efficient data representation (EDR) for number pooling, is currently being tested.<sup>129</sup> EDR allows a location routing number (LRN) to be associated with a block of one thousand numbers as a single record.<sup>130</sup> 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.<sup>131</sup> 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,

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

<sup>129</sup> See *LNPA Working Group Status Report to the NANC*, October 17, 2000, North American Numbering Council Meeting, at 1.

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

<sup>131</sup> *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*.<sup>132</sup>

## 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.<sup>133</sup>

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.<sup>134</sup> The order further approved a mandatory thousands-block number pooling trial in Illinois.<sup>135</sup> The order provided that state commissions could order voluntary pooling trials,<sup>136</sup> but in view of our efforts to develop national pooling standards, we declined to delegate to state commissions the general

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<sup>132</sup> *Pennsylvania Numbering Order*, 13 FCC Rcd at 19025, para. 23.

<sup>133</sup> 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 (8<sup>th</sup> 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.

<sup>134</sup> *Pennsylvania Numbering Order*, 13 FCC Rcd at 19025, para. 24.

<sup>135</sup> *Id.* at 19029-30, para. 30.

<sup>136</sup> *Id.* at 19027-28, para. 27.

authority to order mandatory number pooling.<sup>137</sup> The *Pennsylvania Numbering Order*, however, encouraged state commissions to seek limited delegations of authority to implement other number conservation measures.<sup>138</sup>

### C. Federal Guidelines for Area Code Relief

56. *Background.* As discussed above, state commissions were delegated 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 the Commission's guidelines for numbering administration.<sup>139</sup> In the *Notice*, we sought comment generally on whether we should amend the existing federal guidelines or develop additional federal guidelines for area code relief, to facilitate the optimization of numbering resources.<sup>140</sup>

57. *Discussion.* We decline to amend the existing federal rules for area code relief or to specify any new federal guidelines for the implementation of area code relief at the present time. State commissions may continue to authorize area code relief in accordance with previous Commission rulings. We continue to believe that state commissions are uniquely positioned to determine when, and in what form, to implement area code relief.<sup>141</sup>

58. Some commenters suggest that the Commission should impose limits on the time state commissions may take to complete the implementation process for new area codes.<sup>142</sup> We decline to do so at this time. We agree that timely implementation of area code relief is critically important to telecommunications carriers' ability to compete in the telecommunications marketplace. We are also, however, sensitive to the states' desire to minimize the consumer impact of area code relief by not implementing new area codes any sooner than necessary. Recent experiences have revealed how difficult it is to balance both of these concerns.

59. NANP administration must reflect sensitivity to the growth and dynamic nature of the telecommunications industry. The ready availability, and use, of numbering resources by communications service providers is essential to the public receiving the communications services it wants and needs. Unavailability of numbers, or an inefficient allocation of available

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<sup>137</sup> *Id.* at 19027, para. 27. Subject to conditions, we permitted state commissions to withhold a certain number of NXX codes within a new area code for purposes of number pooling. *Id.*

<sup>138</sup> *Id.* at 19030, para. 31.

<sup>139</sup> *Local Competition Second Report and Order*, 11 FCC Rcd at 19512, para. 271.

<sup>140</sup> *Notice*, 14 FCC Rcd at 10427, para. 247.

<sup>141</sup> See California Commission Comments at 43; Ohio Commission Comments at 40. State commissions face an enormous burden in determining when, and in what form, to implement area code relief. In the initial stages, state commissions must expend resources to convene public meetings and to plan for area code relief. They must also work with the NANPA and the industry to effect the chosen area code relief plan, and bear the costs of notifying the public. Furthermore, state commissions inevitably bear the brunt of consumer dissatisfaction with whatever method of area code relief is chosen.

<sup>142</sup> AirTouch Comments at 13; Sprint Comments at 24.

numbers, could prevent or discourage consumers from taking new services.<sup>143</sup> Thus, the timely implementation of area code relief is essential if new providers are to enter and new services are to appear in the telecommunications marketplace. We continue to believe that we must rely on state commissions to make area code relief decisions because of their unique position to ascertain and weigh the very local and granular information inherent in area code relief decision making. In addition, no commenter has proposed a workable federal rule or “trigger” to require area code relief if states fail to implement it in what they believe to be a timely manner. Because of the importance of this issue to competition, however, we emphasize that we will continue to monitor area code relief carefully, and reserve the right to take a stronger role in this process should circumstances warrant. We acknowledge that the decision of when to implement area code relief is difficult, and that consumers can be harmed if new area codes are implemented too early or too late. The implementation of new area codes before they are necessary forces consumers to go through the expense and dislocation of changing telephone numbers or dialing patterns earlier or more often than necessary. On the other hand, delayed implementation of necessary area code relief can leave carriers without the numbering resources they need to provide consumers with the services they are demanding.<sup>144</sup> Long term rationing and other restrictions on access to numbers poses an insidious threat to competition, as it can cause carriers to move their business to where numbers are more readily available, robbing consumers of competitive choices.

60. In general, numbering administration should promote entry into the communications marketplace by making numbering resources available on an efficient and timely basis, should not unduly favor or disadvantage a particular industry segment or group of consumers, and should not unduly favor one technology over another.<sup>145</sup> In applying these principles, state commissions must take all necessary steps to prepare an NPA relief plan that may be adopted by the state commission when numbering resources in the NPA are in imminent danger of being exhausted.<sup>146</sup> Furthermore, the implementation of any numbering resource optimization measures adopted in this proceeding does not eliminate the need for states to continue to implement area code relief in those area codes that are approaching depletion.<sup>147</sup>

61. We also reaffirm our commitment to the guidelines enumerated in the *Pennsylvania Numbering Order* regarding the rationing of NXX codes. In prior orders, we have declined to grant state commissions authority to adopt NXX code rationing procedures prior to

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<sup>143</sup> See Bell Atlantic Comments at 39 (stating that area code relief has been delayed with accompanying harm to consumers).

<sup>144</sup> Section 253 of the Act provides that no state requirement may prohibit or have the effect of prohibiting the ability of any entity to provide telecommunications service. 47 U.S.C. § 253(a).

<sup>145</sup> 47 C.F.R. § 52.9(a)(1)-(3).

<sup>146</sup> See, e.g., Paging Network Comments at 2.

<sup>147</sup> As determined in the *Pennsylvania Numbering Order*, state commission implementation of number conservation measures could not be used as “substitutes for area code relief or to avoid making difficult and potentially unpopular decisions on area code relief.” See *Pennsylvania Numbering Order*, 13 FCC Rcd at 19027, para. 26.

adopting an area code relief plan, except in the most extreme circumstances.<sup>148</sup> Some commenting parties suggest, nonetheless, that more and more states are relying on rationing as a means to defer area code relief.<sup>149</sup> As determined in the *Pennsylvania Numbering Order*, the rationing of NXX codes should only occur when it is clear that an NPA will run out of NXX codes before timely implementation of a relief plan.<sup>150</sup> Rationing may only be used to ensure that an area code does not exhaust completely before the state commission, acting expeditiously, can implement a new area code. Specifically, a state commission may order rationing only if it has ordered a specific form of area code relief and has established an implementation date, and the industry is unable to agree on a rationing plan.<sup>151</sup> If the state commission has not yet chosen a relief method and established a relief date, the NANPA, as central office code administrator, and the industry should devise the jeopardy conservation or rationing measures, consistent with the current industry practice. We also emphasized in the *Pennsylvania Numbering Order* that state commissions may not use rationing as a substitute for area code relief.<sup>152</sup> We intend to closely monitor situations where states may be using central office code rationing in lieu of timely area code relief and may take appropriate action if we deem it necessary to ensure our rules are followed.<sup>153</sup> Under no circumstances should consumers be precluded from receiving telecommunications services of their choice from providers of their choice for a want of numbering resources. For consumers to benefit from the competition envisioned by the 1996 Act, it is imperative that competitors in the telecommunications marketplace face as few barriers to entry as possible.

#### D. Geographic Splits Versus All-Services Area Code Overlays

62. *Background.* A geographic split occurs when the geographic area served by an area code is split into two or more geographic regions and one region maintains the old area code

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<sup>148</sup> See, e.g., *Florida Public Service Commission Petition for Expedited Decision for Grant of Authority to Implement Number Conservation Measures*, Order, 14 FCC Rcd 17506, 17522, para. 40 (1999) (*Florida Delegation Order*); *Massachusetts Department of Telecommunications and Energy Petition for Waiver of Section 52.19 to Implement Various Area Code Conservation Methods in the 508, 617, 781, and 978 Area Codes*, Order, 14 FCC Rcd 17447, 17464, para. 41 (1999) (*Massachusetts Delegation Order*); *New York State Department of Public Service Petition for Additional Delegated Authority to Implement Number Conservation Measures*, Order, 14 FCC Rcd 17467, 17481-82, para. 32, 33 (1999) (*New York Delegation Order*); but see *California Public Utilities Commission Petition for Delegation of Additional Authority Pertaining to Area Code Relief and NXX Code Conservation Measures*, Order, 14 FCC Rcd 17485, 17503-04, para. 37, 40 (1999) (*California Delegation Order*); (noting that unique circumstances exist in California which require public participation in the area code relief planning process at least 30 months prior to the submission of a recommended relief plan to the California Commission).

<sup>149</sup> See, e.g., AT&T Comments at 64.

<sup>150</sup> *Pennsylvania Numbering Order*, 13 FCC Rcd at 19025-26, para. 24.

<sup>151</sup> *Id.*

<sup>152</sup> *Pennsylvania Numbering Order*, 13 FCC Rcd at 19027, para. 25; see also *First Report and Order*, 15 FCC Rcd at 7581, para. 7.

<sup>153</sup> See *First Report and Order*, 15 FCC Rcd at 7652, para. 171; see also Letter from William E. Kennard, Chairman, FCC, to Loretta M. Lynch, President, California Commission, dated October 18, 2000.

and one (or more) receive one (or more) new area codes.<sup>154</sup> An all-services area code overlay occurs when a new area code is introduced to serve the same geographic area as an existing area code.<sup>155</sup> The Commission has concluded that, if a state commission chooses to implement an all-services overlay, the all-services overlay plan must include mandatory ten-digit local dialing by all customers between and within area codes in the area covered by the new code.<sup>156</sup> NANPA data reveal that state commissions implement new area codes through the implementation of geographic splits significantly more often than through the use of overlays.<sup>157</sup> In the *Notice*, we sought comment on the advantages and disadvantages of all-services overlays and geographic splits from a numbering resource optimization perspective, and whether there is a need for additional rules or guidelines at the federal level with respect to the implementation of geographic splits by state authorities.<sup>158</sup> We also sought comment on whether there is a need to modify our existing guidelines with respect to the implementation of all-services overlays.<sup>159</sup>

63. *Discussion.* Several commenting parties identified a number of disadvantages of geographic splits as a measure of area code relief when compared with overlays.<sup>160</sup> For example, SBC states that, from a numbering resource optimization perspective, geographic splits result in the less efficient use of NPA resources, especially where carriers stand in line on one side of the geographic split while resources sit unused and unusable, on the other side.<sup>161</sup> Geographic splits also require approximately half of the subscribers in the existing NPA to change to the new NPA. As a result, these subscribers may incur additional cost, including disruption to users due to the need for reprogramming Customer Premises Equipment (CPE) and changes made to stationery and advertising.<sup>162</sup> Because geographic splits require approximately half of the subscribers in the existing NPA to change to a new NPA, successive geographic splits create substantial costs for

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<sup>154</sup> 47 C.F.R. § 52.19(c)(1).

<sup>155</sup> 47 C.F.R. § 52.19(c)(3).

<sup>156</sup> *Local Competition Second Report and Order*, 11 FCC Rcd at 19518, para. 286.

<sup>157</sup> Of the over 100 area codes introduced in the United States since 1995, 17 have been accomplished through all-services overlays. See NANPA, NPAs Introduced, November 1, 2000. This document is available at <[http://www.nanpa.com/area\\_codes/npa\\_introduced.html](http://www.nanpa.com/area_codes/npa_introduced.html)>.

<sup>158</sup> *Notice*, 14 FCC Rcd at 10428, para. 249.

<sup>159</sup> *Id.* at 10429, para. 252.

<sup>160</sup> Numbering Resource Optimization Working Group Modified Report to the North American Numbering Council on Number Utilization Methods (Oct. 21, 1998) at § 14.0 (NANC Report). This report is available at <<http://www.fcc.gov/ccb/Nanc/nanccorr.html>>. WorldCom states that geographic splits should be preferred if they can be implemented in a way that recognizes actual community geography. See WorldCom Comments at 61.

<sup>161</sup> SBC Comments at 97.

<sup>162</sup> North Carolina Commission Comments at 17; WHERE HAVE ALL THE NUMBERS GONE? at 16. The tangible costs that consumers may experience include time and effort associated with notifying others of the change in area code, increased confusion and difficulty in competing calls to parties whose area codes have changed, monetary costs associated with reprinting stationery with the new area code, and time and effort associated with reprogramming telephone automatic dialing systems, and other equipment, to incorporate the new area code. *Id.*

subscribers, thus increasing the consequences associated with inaccurately forecasting growth versus non-growth areas. Splits can also often create dialing confusion by requiring customers to use one dialing pattern for some calls (seven digits) and another dialing pattern for others (ten digits).<sup>163</sup>

64. Other commenters identified a number of advantages of geographic splits as a measure of area code relief. For example, the Ohio Commission states that geographic splits can be implemented in many NPAs with minimal effects on the vast majority of callers' seven-digit local calling patterns.<sup>164</sup> Thus, with the implementation of geographic splits, any given customer's premises will be served by one NPA, and customers maintain seven-digit intra-NPA dialing.<sup>165</sup> Geographic splits also allow customers the ability to associate an NPA with a unique geographic area.<sup>166</sup> Moreover, geographic splits allow for equal availability of unassigned NXXs in both the new and the old NPA to all industry segments.<sup>167</sup> Other commenters suggest that splits are competitively neutral and offer the benefits of increased competition.<sup>168</sup>

65. Although we recognize that there are advantages and disadvantages to geographic splits as a form of area code relief, we decline to follow the recommendations of parties urging that we enumerate additional rules or guidelines at the federal level with respect to the implementation of geographic splits. We agree with the North Carolina Commission that state commissions continue to need the flexibility to make decisions regarding area code relief and to set the boundaries of a geographic split in the most appropriate way, considering the technical implications for carriers' networks, the local circumstances, consumer preferences, and communities of interest.<sup>169</sup> Although we do not establish additional rules or guidelines regarding the implementation of geographic splits at the present time, we require the state commissions to abide by the same general requirements that this Commission has imposed on the NANPA with regard to numbering administration. Thus, state commissions that choose to implement geographic splits must ensure that numbering resources are made available on an equitable basis; that numbering resources are made available on an efficient and timely basis; that relief not unduly favor or disfavor any particular telecommunications industry segment or group of telecommunications consumers; and that the relief not unduly favor one telecommunications technology over another.

66. Several commenting parties also identified a number of advantages of all-services overlays as a measure for area code relief. From a numbering optimization perspective, an all-

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<sup>163</sup> Bell Atlantic Comments at 38.

<sup>164</sup> Ohio Commission Comments at 40.

<sup>165</sup> RCN Comments at 16.

<sup>166</sup> North Carolina Commission Comments at 17.

<sup>167</sup> NANC Report at § 14.

<sup>168</sup> AT&T Comments at 5; Level 3 Comments at 12; RCN Comments at 16.

<sup>169</sup> See North Carolina Commission Comments at 17; see also Ohio Commission Comments at 40 (noting that additional constraints on geographic splits should not be implemented).

services overlay creates a new numbering resource that is available for use throughout the entire geographic area covered by the old NPA code,<sup>170</sup> allowing resources to follow demand throughout an area receiving area code relief. As a result, the consequences associated with inaccurately forecasting growth versus non-growth areas may be reduced. Other commenters note that all-services area code overlays are the least disruptive means of providing numbering relief because overlays only affect the assignment of new numbers; existing consumers are not required to change their telephone numbers, in contrast to geographic splits.<sup>171</sup> Businesses avoid the expense of reprinting stationery and business cards, and they will not lose any business opportunities or goodwill due to missed calls.<sup>172</sup> This advantage is particularly significant in high-demand areas where there is a need for more frequent area code relief, because prospective all-services overlays can be implemented without requiring existing consumers to change their telephone numbers, in contrast to geographic splits. Moreover, some commenting parties suggest that area code overlays can be implemented quickly and are perhaps less expensive to implement than splits because no customers are forced to change their numbers.<sup>173</sup>

67. Some commenters identified a number of disadvantages of all-services overlays.<sup>174</sup> First, customers must use ten-digit dialing for calls in their own area, both to call numbers that use the overlay area code and, pursuant to the Commission's mandate, to call numbers within their own area code.<sup>175</sup> Thus, although an overlay does not require existing customers to change their own telephone numbers, it leads to additional costs associated with ten-digit dialing and it reduces the ability of customers readily to identify geographic areas with specific NPAs.<sup>176</sup> Second, from a numbering optimization perspective, if an all-services overlay is implemented on a prospective basis (*i.e.*, no existing customers are reassigned to the new NPA), it does not free up new numbering resources within the existing NPA. Thus, new entrants in a market are less likely to be able to obtain numbers in the existing NPA, and therefore may be less able to compete effectively against incumbents for customers desiring numbers in the existing NPA. Furthermore, Cox contends that there is no inherent benefit to all-services overlays because all-services overlays do not increase the total numbering resources throughout the NPA.<sup>177</sup>

68. Some commenting parties state that all-services overlays should be the preferred

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<sup>170</sup> BellSouth Comments at 18; PrimeCo Comments at 10; SBC Comments at 94.

<sup>171</sup> Bell Atlantic Comments at 38; Small Business Alliance Comments at 3.

<sup>172</sup> SBC Comments at 94; Small Business Alliance Comments at 3.

<sup>173</sup> Bell Atlantic Comments at 38; BellSouth Comments at 20.

<sup>174</sup> NANC Report at § 12.1.

<sup>175</sup> *Local Competition Second Report and Order*, 11 FCC Rcd at 19518, para. 287.

<sup>176</sup> NANC Report at § 12.1; *see also* Cox Comments at 24 (noting that there are significant unmeasured costs, such as costs of converting to ten-digit dialing and costs of replacing or updating legacy customer equipment).

<sup>177</sup> Cox Comments at 24.



method of choice for area code relief at the present time.<sup>178</sup> SBC, for example, urges the Commission to adopt a presumption in favor of all-services overlays in the largest 100 MSAs and require all-services overlays where either an exhausting area code has failed to last for the recommended interval in the Industry Numbering Committee's (INC's) NPA relief planning guidelines or the new area code is projected to last less than the recommended interval in the guidelines.<sup>179</sup> At this time, we decline to adopt a presumption in favor of all-services overlays as a method of area code relief. We believe that state commissions are singularly situated to determine the best available relief plan among the alternatives presented based on local geography, local needs, the public interest, and carrier compatibility. State commissions are uniquely positioned to evaluate the best relief plan on a case-by-case basis and, therefore, the determinations of appropriate relief should be left to state commissions.<sup>180</sup> We also believe that specific circumstances and considerations in each relief area should determine which option—geographic split or all-services overlay—would best suit the area.<sup>181</sup> Thus, state commissions may continue to make decisions regarding the relative merits of area code splits and overlays so long as they act consistently with the Commission's guidelines.<sup>182</sup> In addition to these two options, state commissions should consider whether a third option, boundary realignments, would better serve their area code relief needs.

69. Several commenters in this proceeding also suggest suspending or eliminating the ten-digit dialing requirement for all-services overlays.<sup>183</sup> Ameritech, for example, contends that suspending the ten-digit dialing requirement will provide the incentive for states to implement all-services area code overlays.<sup>184</sup> SBC states that developments since the *Local Competition Second Report and Order* have eliminated the need for the ten-digit dialing requirement.<sup>185</sup> The North Carolina Commission states that, although the ten-digit dialing requirement mitigates dialing disparity resulting from the implementation of an overlay that could be conceived as a competitive disadvantage, it does not justify the inconvenience of ten-digit dialing being forced upon citizens who are not yet enjoying any benefits of a competitive marketplace.<sup>186</sup> Other

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<sup>178</sup> BellSouth Comments at 18; Richard Eyre Comments at 1.

<sup>179</sup> SBC Comments at 94-95. The INC is a standing committee of the Carrier Liason Committee (CLC), one of the fora sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). The INC addresses issues associated with the planning, administration, allocation, assignment and use of numbering resources and related dialing considerations, and has developed guidelines for the assignment and administration of all types of numbering resources, as well as for the administration of area code relief.

<sup>180</sup> See, e.g., AT&T Comments at 67; California Commission Comments at 43.

<sup>181</sup> ALTS Comments at 28.

<sup>182</sup> SBC Comments at 94.

<sup>183</sup> Ameritech Reply Comments at 15; North Carolina Commission Comments at 18; SBC Comments at 101 (noting that the ten-digit dialing requirement is outmoded and unnecessary today).

<sup>184</sup> Ameritech Reply Comments at 15.

<sup>185</sup> SBC Comments at 102.

<sup>186</sup> North Carolina Commission Comments at 18.

commenters, however, support the retention of the mandate that calls placed both within and outside of the subscriber's NPA use ten digits when an overlay is implemented.<sup>187</sup> The Small Business Alliance, for example, notes that ten-digit dialing is so common in many areas that customers automatically give their area code and number when leaving a message on voice mail or on an answering machine.<sup>188</sup>

70. We continue to believe that imposing the ten-digit dialing requirement on the implementation of all-services overlays will ensure that competitors, including small entities, do not suffer competitive disadvantages.<sup>189</sup> We therefore retain the mandatory ten-digit dialing requirement when all-services overlays are implemented.<sup>190</sup> Thus, "no area code overlay may be implemented unless there exists, at the time of implementation, mandatory ten-digit dialing for every telephone call within and between all area codes in the geographic area covered by the overlay area code."<sup>191</sup> We require mandatory ten-digit dialing for all calls in areas served by overlays to ensure that competition will not be deterred in overlay area codes as a result of dialing disparity. We believe that local dialing disparity would occur absent mandatory ten-digit dialing, because all existing telephone users would remain in the old area code and dial seven digits to call others in that area code, while new users with the overlay code would have to dial ten digits to reach any customers in the old code.<sup>192</sup> Requiring ten-digit dialing for all calls avoids the potentially anti-competitive effect of all-services area code overlays.

### 1. Reverse Overlays

71. *Background.* A "reverse overlay" involves the creation of a single area served by two or more existing NPAs when a previously established NPA boundary is eliminated.<sup>193</sup> The Public Utility Commission of Texas (Texas Commission) has deployed reverse overlays in the Dallas area (214/972) and the Houston area (713/281).<sup>194</sup> In the *Notice*, we sought comment on the use of reverse overlays as a method for area code relief.<sup>195</sup>

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<sup>187</sup> AT&T Comments at 67; ALTS Comments at 30-31 (stating that the ten-digit dialing requirement is essential to ensuring that an overlay does not disadvantage competitive LECs and their customers).

<sup>188</sup> Small Business Alliance Comments at 3.

<sup>189</sup> *Local Competition Second Report and Order*, 11 FCC Rcd at 19519, para. 288.

<sup>190</sup> 47 C.F.R. § 52.19(c)(3)(ii).

<sup>191</sup> *Id.*

<sup>192</sup> *Local Competition Second Report and Order*, 11 FCC Rcd at 19518, para. 287.

<sup>193</sup> *Notice*, 14 FCC Rcd at 10429, para. 253.

<sup>194</sup> *See Public Utility Commission of Texas Petition for Expedited Waiver of 47 C.F.R. § 52.19(c)(3)(ii) for Area Code Relief*, Order, 13 FCC Rcd 21798 (1998) (granting the Texas Commission a waiver of the ten-digit dialing requirement in section 52.19(c)(3)(ii) for a period not to exceed 6 months from the date of implementation of the reverse overlays).

<sup>195</sup> *Notice*, 14 FCC Rcd at 10429, para. 253.

72. *Discussion.* We find that reverse overlays can be useful tools to allow the use of otherwise “stranded” numbering resources, and encourage the industry and state commissions to consider their use. According to SBC, reverse overlays have all of the advantages of all-service overlays, and they also eliminate inefficiencies created by a previous, erased geographic split line.<sup>196</sup> GTE states that the reverse overlays deployed in Dallas and Houston were handled easily with few customer problems.<sup>197</sup> Such an overlay plan can be especially useful in areas where the NPAs from the previous split are exhausting unevenly and relief is necessary in one but not the other.<sup>198</sup> Reverse overlays can also be very useful where a slow-growing NPA is adjacent to a fast-growing NPA that is nearing exhaust. Rather than using a new NPA to relieve the area code that is nearing exhaust, the state could turn the adjacent, slow-growing NPA into an overlay, thereby freeing up NPA-NXXs in the slower-growing code that might otherwise have continue to lie fallow for years. This approach, if widely deployed, could significantly extend the life of the supply of NPAs in the NANP. We therefore strongly encourage states and the industry to consider it.

## 2. Expanded Overlays

73. *Background.* The NANC has identified an “expanded overlay” proposal that would implement an overlay covering a region that is larger than an existing NPA.<sup>199</sup> The “expanded overlay” proposal would not replace or change assignment boundaries for existing NPAs, but rather permits the allocation of numbering resources over a potentially larger geographic region.<sup>200</sup> In the *Notice*, we sought comment on the feasibility of expanded area code overlays as a means of allocating new numbering resources to areas facing exhaust of existing NPAs.<sup>201</sup> In particular, we sought comment on the practicality of this approach in light of its potential effect on rating and billing of calls between the overlay NPA and underlying NPAs.<sup>202</sup> We also sought comment on whether there are any practical limits to the size of overlay NPAs.<sup>203</sup>

74. *Discussion.* We encourage state commissions to consider the use of expanded overlays as a means of allocating new numbering resources to areas facing exhaust. There is no requirement that overlay area codes be implemented to use the same geographic boundaries as the underlying area codes. Potentially, use of such expanded overlay area codes could have

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<sup>196</sup> SBC Comments at 98.

<sup>197</sup> GTE Comments at 72.

<sup>198</sup> NANC Report at § 12.2; *see also* SBC Comments at 98 (noting that metropolitan areas where area code splits have been ordered are prime candidates for reverse overlays).

<sup>199</sup> NANC Report at § 12.3. We also note that the Georgia Commission implemented an expanded NPA overlay for the 770 and 404 NPAs in Atlanta. *See* North American Numbering Plan Planning Letter, PL-NANP-102, Nov. 21, 1997. This document is available at <<http://www.nanpa.com>>.

<sup>200</sup> NANC Report at § 12.3.1.

<sup>201</sup> *Notice*, 14 FCC Rcd at 10430, para. 255.

<sup>202</sup> *Id.*

<sup>203</sup> *Id.*

significant numbering resource optimization benefits, because it would allow for use of a single area code to provide relief to multiple existing codes. Furthermore, as Cox asserts, an expanded NPA overlay could provide ways to improve efficiency of NXX code usage within densely populated areas.<sup>204</sup>

75. Allocating new numbering resources over a larger geographic region than existing NPAs would give states enhanced flexibility to accommodate demand for numbers in high-growth areas that may not correspond to existing area code boundaries. Thus, the relative benefits of an overlay are maximized when the overlay covers the greatest area possible.<sup>205</sup> We note that the creation of expanded area codes may also raise complex rating and billing issues, however, because the overlay NPA would have a larger coverage area than the underlying NPAs it overlaps.<sup>206</sup> We therefore encourage the state commissions and the telecommunications industry to work together to solve these issues if an expanded overlay is implemented in a certain area.

#### **E. Pennsylvania Numbering Order Petitions for Reconsideration and Clarification**

76. We also address petitions for clarification or reconsideration that were filed in response to the *Pennsylvania Numbering Order*.<sup>207</sup> In the *Pennsylvania Numbering Order*, the Commission delegated additional authority to state commissions to order number rationing in jeopardy situations and encouraged state commissions to seek further limited delegations of authority to implement other innovative number conservation methods. The Commission, however, clarified that state commissions do not have the authority to order the return of NXX codes or thousand number blocks to the code administrator.<sup>208</sup>

77. Several parties filed petitions for clarification or reconsideration of the *Pennsylvania Numbering Order* as it relates to states' authority to order the return of central office codes or thousand number blocks.<sup>209</sup> In the *First Report and Order*, we recognized that state commissions may be able to resolve certain issues more quickly and decisively than an industry consensus process. In this regard, we granted authority to state commissions to direct

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<sup>204</sup> Cox Comments at 29.

<sup>205</sup> See WorldCom Comments at 64. AT&T, however, states that it is unconvinced that expanded overlays would have significant numbering resource optimization benefits. AT&T Comments at 67.

<sup>206</sup> See AT&T Comments at 67 (stating that expanded overlays make it more difficult for customers to determine whether they will be billed for calls as toll or local).

<sup>207</sup> *Pennsylvania Numbering Order*, 13 FCC Rcd 19011, para. 1.

<sup>208</sup> *Id.* at 19026, para. 24.

<sup>209</sup> Connecticut Commission Pennsylvania Numbering Order Petition for Reconsideration at 7; Maine Commission Pennsylvania Numbering Order Petition for Reconsideration at 1; New Hampshire Commission Pennsylvania Numbering Order Petition for Reconsideration at 2; Pennsylvania Commission Pennsylvania Numbering Order Petition for Reconsideration at 7; see also *Pennsylvania Numbering Order*, 13 FCC at 19026.

the NANPA to reclaim unactivated or unused NXX codes.<sup>210</sup> Similarly, we gave the same authority to the states to direct the Pooling Administrator in state pooling trials, as well as the national thousands-block number Pooling Administrator once national thousands-block number pooling has been established, to reclaim unactivated or unused thousands-blocks.<sup>211</sup> In light of the delegation of authority to the states, the requests that the Commission clarify the *Pennsylvania Numbering Order* or reconsider the state commissions' authority to reclaim unused and reserved NXX codes and thousand-number blocks are moot. Accordingly, we dismiss as moot this aspect of the petitions for clarification or reconsideration that were filed in response to the *Pennsylvania Numbering Order*.

78. Several parties also request clarification or reconsideration of the *Pennsylvania Numbering Order* restricting state commissions from imposing number conservation methods (e.g., NXX code rationing) until after a final decision is made regarding the implementation of area code relief.<sup>212</sup> As discussed above,<sup>213</sup> we reaffirm our commitment to the guidelines enumerated in the *Pennsylvania Numbering Order* that the rationing of NXX codes should only occur when it is clear that an NPA will run out of NXX codes before timely implementation of a relief plan.<sup>214</sup> We emphasize that state commissions may not use rationing as a substitute for area code relief.<sup>215</sup> In prior orders, the Commission and Bureau have also declined to grant state commissions authority to adopt NXX code rationing procedures prior to adoption of an area code relief plan, except in the most extreme circumstances.<sup>216</sup> Because of the difficulty in getting needed numbering resources experienced by some carriers in areas subject to rationing, we are not persuaded that Commission precedent should be changed at this time. Thus, we decline to alter this aspect of the *Pennsylvania Numbering Order*.

79. We believe that the authority the Commission and the Bureau delegated to several state commissions to implement other relief measures will provide them with the tools they need to address the inefficiencies of numbering use in their states. For example, the Commission and the Bureau have granted several state commissions the authority to maintain pre-NPA relief

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<sup>210</sup> *First Report and Order*, 15 FCC Rcd at 7680, para. 237.

<sup>211</sup> *Id.* at 7681, para. 238.

<sup>212</sup> California Commission Pennsylvania Numbering Order Petition at 1-2; Connecticut Commission Pennsylvania Numbering Order Petition at 3-5; Maine Commission Pennsylvania Numbering Order Petition at 1; Massachusetts Commission Pennsylvania Numbering Order Petition at 7-8; New Hampshire Commission Pennsylvania Numbering Order Petition at 1-2; Pennsylvania Commission Pennsylvania Numbering Order Petition at 2.

<sup>213</sup> *See infra* para. 61.

<sup>214</sup> *Pennsylvania Numbering Order*, 13 FCC Rcd at 19025, para. 24.

<sup>215</sup> *Id.* at 19027, para. 26.

<sup>216</sup> *See, e.g., Florida Delegation Order*, 14 FCC Rcd at 17522, para. 39; *Massachusetts Delegation Order*, 14 FCC Rcd at 17464, para. 41; *New York Delegation Order*, 14 FCC Rcd at 17481-82, paras. 32, 34; *but see California Delegation Order*, 14 FCC Rcd at 17503-04, para 38, 40 (noting that unique circumstances exist in California which require public participation in the area code relief planning process at least 30 months prior to the submission of a recommended relief plan to the California Commission).

NXX code rationing measures for six months following implementation of area code relief.<sup>217</sup> The Commission and the Bureau reasoned that a continuation of rationing after area code relief neither contradicts the *Pennsylvania Numbering Order*,<sup>218</sup> as the requisite area code relief has been implemented, nor has the potential—in contrast to rationing prior to area code relief—to forestall area code relief indefinitely. In addition, state commissions were also granted the authority to hear and address claims for an extraordinary need for numbering resources in an NPA subject to a rationing plan.<sup>219</sup> This grant of authority empowers the state commissions to ensure that carriers in dire need of numbering resources can obtain the numbering resources they need to continue to provide service to their prospective customers, if the rationing plan will not ensure that the carriers will have adequate and timely access to numbering resources.

80. The California Commission also requests reconsideration of the *Pennsylvania Numbering Order* to the extent that it restricts state commissions from initiating mandatory number pooling.<sup>220</sup> With the release of the *First Report and Order*, we adopted a nationwide system for allocating numbers in blocks of one thousand, rather than ten thousand, wherever possible, and announced our intention to establish a plan for national rollout of thousands-block number pooling. The Commission and the Bureau have also granted several state commissions the authority to initiate thousands-block number pooling trials.<sup>221</sup> In fact, the California Commission was delegated authority to initiate thousands-block number pooling trials in California on September 15, 1999. Accordingly, we dismiss as moot this aspect of the California Commission's petition for reconsideration.

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<sup>217</sup> See, e.g., *Florida Delegation Order*, 14 FCC Rcd at 17517-18, paras. 26, 28; *Massachusetts Delegation Order*, 14 FCC Rcd at 17458-59, para. 27; *Wisconsin Delegation Order*, 15 FCC Rcd at 1310-11, paras. 30, 31. Where area code relief takes the form of an area code split, the Commission granted several states the authority to direct that whatever rationing plan was in place prior to area code relief continue to be applied in both the newly implemented area code and the relieved area code for a period of up to six months following the date of implementation of area code relief. Correspondingly, if the area code relief is in the form of an all-services overlay, the states may direct that the pre-existing rationing plan be applied to both the overlay code and the relieved code for a period of six months following the date of implementation of area code relief. Whether the rationing plan in place prior to relief was an industry consensus plan, or whether it was a state commission-ordered plan, only those terms in place prior to area code relief may remain in place following area code relief. The state commissions may order a continuation of rationing for up to six months, but neither the state commissions, nor the telecommunications industry participants in a consensus plan, may alter the terms of the rationing plan. We found this limitation appropriate to prevent a potentially contentious re-opening of the terms of a previously settled code rationing plan, resulting in uncertainty and a drain on resources.

<sup>218</sup> The *Pennsylvania Numbering Order* stated that state commission implementation of number conservation measures could not be used “as substitutes for area code relief or to avoid making difficult and potentially unpopular decisions on area code relief.” *Pennsylvania Numbering Order*, 13 FCC Rcd at 19027, para. 26.

<sup>219</sup> See, e.g., *California Delegation Order*, 14 FCC Rcd at 17500-501, para. 32; *Massachusetts Delegation Order*, 14 FCC Rcd at 17462-463, para. 37.

<sup>220</sup> California Commission *Pennsylvania Numbering Order* Petition at 2.

<sup>221</sup> See, e.g., *Numbering Resource Optimization*, Order, CC Docket No. 96-98, 99-200, DA 00-1616 (rel. July 20, 2000).

## VI. OTHER NUMBERING RESOURCE OPTIMIZATION MEASURES

### A. Audits

81. *Background.* In the *Notice*, we opined that auditing is the only comprehensive method for verifying the validity and accuracy of utilization data submitted by users of numbering resources.<sup>222</sup> We stated that audits could also be used to verify compliance with non-quantitative rules or guidelines.<sup>223</sup> We further stated that audit requirements may independently serve as a deterrent to carrier noncompliance or self-serving behavior, such as hoarding of numbers.<sup>224</sup> Consequently, we proposed that any data collection and need verification measures proposed should be supplemented with a comprehensive audit program that verifies carrier compliance with federal numbering rules and industry numbering guidelines.<sup>225</sup>

82. *Discussion.* We adopt our proposal to supplement the need verification measures and data collection requirements, adopted in the *First Report and Order*, with a comprehensive audit program to verify carrier compliance with federal rules and orders and industry guidelines. In addressing need verification measures in the *First Report and Order*, we adopted a more verifiable, needs-based approach to allocating initial and growth numbering resources predicated on proof that carriers need numbering resources when, where, and in the quantity requested. We find that an audit program is an important adjunct to these measures.

83. A comprehensive auditing program can serve many useful purposes. First, it can provide a level of confidence in the accuracy of data reported by carriers. Our ability to monitor numbering resource use and accurately predict NPA and NANP exhaust is dependent on the quality of the data submitted by the carriers. Auditing provides a way of verifying the accuracy of these data. Auditing also helps ensure that carriers are complying with our rules promoting efficient number usage because it serves as a deterrent. The mere possibility of an audit, we believe, will prevent behavior that is contrary to numbering resource optimization goals, such as stockpiling of unneeded resources. Finally, auditing will allow us to identify inefficiencies in the manner in which carriers use numbers, such as excessive use of certain categories of numbers such as administrative, aging, or intermediate numbers.

#### 1. Types of Audits

84. *Background.* In the *Notice*, we identified the three commonly used types of audits: “for cause” audits, regularly scheduled audits, and random audits.<sup>226</sup> “For cause” audits are conducted if there is a reason to believe that the information a carrier provided is inaccurate or misleading, or that a carrier has violated the Commission’s rules or orders or applicable

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<sup>222</sup> *Notice*, 14 FCC Rcd at 10358-9, para. 83.

<sup>223</sup> *Id.*

<sup>224</sup> *Id.*

<sup>225</sup> *Id.*

<sup>226</sup> *Id.* at 10359, para. 84.

industry guidelines.<sup>227</sup> Regularly scheduled audits, for our purposes, would be conducted on a fixed schedule for all entities that obtain numbering resources.<sup>228</sup> Random audits are unscheduled audits of users of numbering resources selected at random.<sup>229</sup> We sought comment on whether and, if so, how, all three types of audits should be employed as part of a comprehensive audit program to monitor carrier compliance with number allocation and administration rules and guidelines.<sup>230</sup> We also sought comment on the comparative costs and benefits associated with performing each type of audit.<sup>231</sup>

85. *Discussion.* After careful consideration, we conclude that our comprehensive audit program will consist of “for cause” and random audits. Given that we have strengthened our rules concerning need verification measures and data collection, we believe that we can better accomplish our goals with the use of these two types of audits. We agree with Omnipoint that regularly scheduled audits would be “exorbitantly expensive” to the industry, which includes thousands of code-holding carriers, or valueless due to the extended period of time between audits.<sup>232</sup>

86. We observe that there is broad agreement among commenters that “for cause” audits should be included in our comprehensive audit program. “For cause” audits may be initiated based on information drawn from a variety of sources. For example, “for cause” audits could be triggered by the Bureau, the NANPA or the Pooling Administrator, or a state commission that has reason to believe that a service provider may have violated the Commission’s rules or orders, or applicable industry guidelines. “For cause” audits could also be triggered by inconsistencies or anomalies, including inaccurate or misleading data, identified by the NANPA or the Pooling Administrator in reported mandatory utilization and forecast data,<sup>233</sup> or by the Bureau or a state commission conducting its own review of submitted utilization and forecast data.<sup>234</sup>

87. To request that a “for cause” audit be conducted for any of the above stated reasons, the NANPA, the Pooling Administrator or a state commission must make a written request to the entity designated by the Commission to conduct audits (the Auditor). Such request shall state the reason for which a “for cause” audit is being requested and shall include

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<sup>227</sup> *Id.* at 10359, para. 85.

<sup>228</sup> *Id.* at 10359, para. 86.

<sup>229</sup> *Id.* at 10360, para. 87.

<sup>230</sup> *Id.* at 10359, para. 84.

<sup>231</sup> *Id.*

<sup>232</sup> *See* Omnipoint Reply Comments at 12-13.

<sup>233</sup> The NANPA is required to renew submitted utilization and forecast data and to identify inconsistencies and anomalies in such.

<sup>234</sup> *Cf.* CinBell Comments 8 (recommending that anomalies in information reported to NANPA trigger “for cause” audits).



documentation of the alleged anomaly, inconsistency, or violation of the Commission rules or orders or applicable industry guidelines. The Auditor shall determine from the application whether a “for cause” audit is warranted. Also, the Auditor may, as an additional deterrent, and at its own discretion, conduct a “for cause” audit and follow-up audits of service providers that previously were subject to “for cause” audits.<sup>235</sup>

88. Because “for cause” audits are conducted only if there are specific allegations of non-compliant or inappropriate conduct on the part of a carrier, we conclude that we should also monitor carrier compliance with our rules and orders and applicable industry guidelines through the use of random audits. We decline to employ only “for cause” audits in our program, as suggested by some commenters,<sup>236</sup> because we believe it would weaken our ability to effectively monitor compliance with all rules, orders, and applicable guidelines. In conjunction with the use of “for cause” audits, we find that random audits will provide our comprehensive audit program with more flexibility to accomplish our auditing goals. Since random audits are not necessarily triggered by allegations of non-compliant or inappropriate conduct, they can serve as a strong deterrent to any carrier who might misuse numbering resources.<sup>237</sup> We agree with the Texas Commission that random audits are particularly important to ensure continuous compliance with applicable rules and regulations.<sup>238</sup> We disagree with Level 3 that random audits will expose a company to the arbitrary application of a costly process.<sup>239</sup> All carriers should be prepared at any time to show their compliance with our requirements; the use of random audits will spare the vast majority of carriers from having to do so while providing a similar deterrent effect.

## 2. Audit Responsibility

89. *Background.* We identified the NANPA, the Commission, and the state commissions in the *Notice* as possible candidates to conduct numbering resource audits.<sup>240</sup> We sought comment on whether we should direct the NANC to select an entity to audit carrier number utilization and forecast data using a competitive bidding process subject to our approval.<sup>241</sup> We acknowledged that the NANPA may not be the best choice to audit code holders because the NANPA, in its capacity as central office code administrator, would be subject to periodic audits for related issues.<sup>242</sup> We also sought comment on who should conduct audits, and on whether audit responsibility should be apportioned among these or other neutral third

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<sup>235</sup> See AT&T Comments at 22; North Carolina Commission Comments at 7; Texas Commission Comments at 14; VoiceStream Comments at 17.

<sup>236</sup> See Connect Reply Comments at 6-7; Nextlink Reply Comments at 25; RCN Comments at 7; Time Warner Comments at 21.

<sup>237</sup> See SBC Comments at 56.

<sup>238</sup> See Texas Commission Comments at 14.

<sup>239</sup> See Level 3 Comments at 7.

<sup>240</sup> *Notice*, 14 FCC Rcd at 10360, para. 88.

<sup>241</sup> *Id.*

<sup>242</sup> *Id.*

parties.<sup>243</sup>

90. *Discussion.* Although numerous commenters, including some state commissions, supported selecting NANPA as the auditor for our program, we decline to do so. We recognize, as do some commenters, that the selection of the NANPA as the auditor could pose a potential conflict of interest since the NANPA is subject to similar audits for numbering compliance.<sup>244</sup> Instead, the Commission will ensure, by using auditors in the Audits Branch of the Accounting Safeguards Division in the Common Carrier Bureau or other designated agents, that “for cause” and random audits are properly and promptly conducted. We disagree with AirTouch that federal regulatory agencies do not have the necessary resources to conduct audits of the breadth that is needed.<sup>245</sup> Since auditors are already employed by the Commission, we expect that only minimal costs will be incurred in implementing the auditing program. In addition, the Commission may designate agents under section 251(e)(1) to conduct audits or otherwise assist in the comprehensive numbering audit program.

91. Many of the state commissions responding to the *Notice* proposed that we delegate authority to the states to conduct their own audits in addition to the audits prescribed herein.<sup>246</sup> We decline to delegate authority to the states to conduct the audits prescribed herein at the present time. We are concerned that some states may not, as indicated by the California Commission, have the resources to properly conduct the audits that we require.<sup>247</sup> In addition, we are concerned that states may employ different standards in performing the audits. Many carriers operate in multiple states, and one of our goals in adopting a national auditing framework is to prevent carriers from having to comply with differing demands in different states. In declining to delegate authority to states to perform audits under the national program, we do not intend to preempt any state authority to perform audits under state law.

92. Nevertheless, we do believe that a certain level of state participation in our auditing program is desirable. Thus, we have granted states the ability to request “for cause” audits, as noted above.<sup>248</sup> In the attached *Further Notice*, we seek comment on whether and under what circumstances state commissions should be given the independent authority to conduct “for cause” and “random” audits either in lieu of, or in addition to, the national audit program established herein.<sup>249</sup> In addition, we will permit states that have the resources to do so to participate on Commission audit teams if they wish to do so.<sup>250</sup> We note that the state

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<sup>243</sup> *Id.*

<sup>244</sup> SBC Comments at 57-58.

<sup>245</sup> AirTouch Comments at 22.

<sup>246</sup> *See, e.g.*, Connecticut Commission Comments at 13; North Carolina Commission Comments at 7.

<sup>247</sup> California Commission Comments at 16.

<sup>248</sup> *See supra* section VI.A.1.

<sup>249</sup> *See infra* section VII.G.

<sup>250</sup> *See* 47 C.F.R. § 0.291(b). To improve operating and administrative efficiency, the Commission delegated authority to the Common Carrier Bureau to coordinate joint audits with state commissions when: (i) there is a shared (continued....)

commissions, through resolutions adopted by the National Association of Regulatory Utility Commissioners (NARUC), have encouraged such joint audit efforts.<sup>251</sup>

93. Although not selected to perform the audits in our comprehensive program, the NANPA, in its capacity as code administrator, will continue to have audit-type responsibilities. Specifically, it must examine the data it receives from service providers for anomalies and inconsistencies. This audit-type responsibility is distinct from the audit program that we are establishing. Thus, our actions in establishing an audit program do not relieve NANPA of its responsibility to examine and verify data submitted by service providers. To the contrary, we require NANPA to continue to discharge these responsibilities, which will alert it to any information that may lead to the initiation of a “for cause” audit by the Auditor.

### 3. Audited Information and Procedures

94. *Background.* We sought comment on the process by which specific auditing procedures should be established, as well as on the development of statistical and analytical approaches that would be required to evaluate the quality and validity of reported data.<sup>252</sup> We asked parties to comment on how we may structure an audit process that is flexible enough to focus on new problems or issues as they arise.<sup>253</sup> We noted that the NANC and the INC have been working to develop a comprehensive audit process, and we directed the NANC to provide a progress report regarding this work effort to the Common Carrier Bureau on or before the deadline for initial comments in this proceeding.<sup>254</sup> We also sought comment on the best method for soliciting the input of state commissions, recognizing that state commissions should have a major role in the development of this framework and procedures.<sup>255</sup>

95. *Discussion.* On July 18, 2000, the NANC submitted a progress report to the Common Carrier Bureau regarding its work with the INC in developing a comprehensive audit process.<sup>256</sup> Although we do not adopt the report in its entirety, we do adopt several of its proposals. In this regard, we delegate authority to the Chief of the Common Carrier Bureau to

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policy interest, and (ii) the states have procedures for protecting confidential information equivalent to those of the Commission. To the extent that the Commission imposes a higher standard of confidentiality than state law, the state is required to adhere to the higher Federal standard. *Amendment of Parts 0, 1, and 64 of the Commission's Rules with Respect to Delegation of Authority to the Chief, Common Carrier Bureau*, Report and Order, 5 FCC Rcd 4601 (1990); *Delegation of Authority to the Chief, Common Carrier Bureau*, Memorandum Opinion and Order, 50 Fed. Reg. 18487-03 (1985), *on reconsideration*, 104 FCC2d. 733 (1986).

<sup>251</sup> See, e.g., Resolution Urging Pro-Competitive, Pro-Consumer Federal-State Joint Audits, Sponsored by the NARUC Committees on Finance & Technology and Communications at the NARUC Annual Convention and Regulatory Symposium held in July 2000 in Los Angeles, California (July 26, 2000).

<sup>252</sup> Notice, 14 FCC Rcd at 10361, para. 89.

<sup>253</sup> *Id.*

<sup>254</sup> *Id.* at 10361, para. 90.

<sup>255</sup> *Id.*

<sup>256</sup> See Number Administration Auditor Technical Requirements, dated July 18, 2000.

develop a comprehensive audit plan including detailed analytical audit procedures for both “for cause” audits and random audits. The plan should identify compliance issues based on risk assessment and should include a schedule of audits that focuses audit resources on the critical issues pertaining to numbering resource optimization.

96. We also adopt the NANC’s proposal that the Auditor provide standard audit reports. Specifically, we require draft audit reports, no later than 30 days after the completion of an audit, that contain a summary of the auditor’s results. Based on the final audit report, to the extent the Common Carrier Bureau finds evidence of potential violations, it shall refer the matter to the Enforcement Bureau for possible enforcement action, which may include, for example, monetary forfeitures, revocation of interstate operating authority and cease and desist orders. In the *Further Notice* attached to this *Second Report and Order*, we seek comment on whether and how numbering resources should be denied as an additional enforcement mechanism.

97. *Auditing Costs.* Based on our assessment in the *Notice* that auditing and other administrative solutions for allocating and administering numbering resources appear to involve changes in the manner in which these resources are overseen and managed, we tentatively concluded that the costs for our proposed solutions should be allocated and recovered through the existing NBANC fund.<sup>257</sup> In addition, we tentatively concluded that section 251(e)(2)<sup>258</sup> requires that the costs of the administrative solutions be borne by all telecommunications carriers on a competitively neutral basis and that including the costs in the NBANC fund would result in the allocation and recovery of costs from all telecommunications carriers on such a basis.<sup>259</sup>

98. We conclude that the costs associated with our comprehensive auditing program are numbering administration costs and, as such, they should be borne by all telecommunications carriers on a competitively neutral basis. Although we intend that the audits will be conducted by auditors in the Bureau’s Audits Branch,<sup>260</sup> to the extent that designated agents other than Commission staff are used to perform the work related to our comprehensive audit program, we conclude that the costs associated with such work performed by designated agents should be allocated and paid for through the NBANC fund.<sup>261</sup>

99. Finally, we decline to provide a specific cost recovery mechanism for carrier specific auditing costs, including those associated with providing requested documentation or information needed by the Auditor to conduct the audit. We believe that these costs will be minimal since the carrier’s primary responsibility when being audited is to provide the Auditor

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<sup>257</sup> *Notice*, 14 FCC Rcd at 10367, para. 103.

<sup>258</sup> 47 U.S.C. § 251(e)(2).

<sup>259</sup> *Notice*, 14 FCC Rcd at 10368, para. 104.

<sup>260</sup> Although the costs incurred by the Bureau’s Audits Branch with respect to the auditing program will not be allocated and paid for through the NBANC fund, we note that such costs generally will be allocated and recovered through annual regulatory fees and thus still will be borne by carriers on a competitively neutral basis.

<sup>261</sup> According to the NBANC Status Report and Fund Projection dated October 10, 2000, the funds set aside for auditing costs for the current fund year totaled \$350,000.

with requested information. Moreover, we believe that these costs will not significantly affect a carrier's ability to be competitive in the marketplace.

## B. Mandatory Nationwide Ten-Digit Dialing

100. *Background.* Currently, the standard dialing pattern is seven-digit dialing within an NPA, and ten-digit dialing (or one plus ten digit) between NPAs. Ten-digit dialing is required in both the relieved and the new NPA when all-services overlays are implemented as area code relief. In the *Notice*, we sought comment on whether we should adopt nationwide ten-digit dialing, (*i.e.*, the dialing of ten digits for all calls, regardless of whether they are inter-NPA, intra-NPA, or toll) or whether we should encourage states to implement ten-digit dialing.<sup>262</sup> We recognized that mandatory ten-digit dialing increases the supply of numbers available for use, through the reclamation of protected codes,<sup>263</sup> and potentially through permitting the use of either 0 or 1 as the first digit of an NXX code (the fourth, or "D digit, of a ten-digit telephone number).<sup>264</sup> We also sought comment on any technical problems and costs associated with ten-digit dialing.<sup>265</sup>

101. *Discussion.* We decline to adopt nationwide mandatory ten-digit dialing at the present time as a numbering resource optimization measure. As discussed above, we also continue to require that, where all-services overlays are used, ten-digit dialing is required not only between the original NPA and the overlay NPA, but also within each NPA, to prevent anti-competitive impacts on new entrants that may have few or no numbers in the original NPA.<sup>266</sup>

102. Several commenting parties support mandatory nationwide ten-digit dialing.<sup>267</sup> Commenters support the conversion to ten-digit dialing as a numbering resource optimization measure, particularly in densely populated areas with NPAs that are projected to exhaust shortly.<sup>268</sup> Airtouch, for example, contends that mandatory ten-digit dialing will eliminate the need for protected NXX codes, thereby significantly increasing the number of NXX codes that

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<sup>262</sup> *Notice*, 14 FCC Rcd at 10378, para. 126.

<sup>263</sup> In fact, to preserve seven-digit dialing for inter-NPA calls within a community of interest, many states have authorized the use of "protected codes." Where a community of interest contains portions of two or more NPAs, a particular NXX code that has been assigned for use within one of the NPAs is "protected," or made unassignable in the adjacent NPA. This permits every switch in the local calling area to route calls based on the NXX code, rather than the NPA-NXX, even across NPA boundaries. In addition, other protected codes are reserved for special services, such as N11 codes. Thus, protected codes are not available for number assignments to end users. NANC Report at §§ 10.5.2 and 10.5.3.1.

<sup>264</sup> *Notice*, 14 FCC Rcd at 10376, para. 123.

<sup>265</sup> *Id.* at 10378, para. 125.

<sup>266</sup> *See* 47 C.F.R. § 52.19 (c)(3)(ii).

<sup>267</sup> GTE Comments at 34; OPASTCO Comments at 6; PrimeCo Comments at 10; USTA Comments at 7; U S West Comments at 16.

<sup>268</sup> *See, e.g.*, Small Business Alliance Comments at 9.

can be assigned in an area, and will permit expanded use of the D digit.<sup>269</sup> Other commenters, however, explicitly reject the adoption of this measure.<sup>270</sup> Several commenting parties state that mandatory ten-digit dialing would allow future area code relief projects, particularly all-services overlays, to be less disruptive to consumers,<sup>271</sup> and might foster new and different uses for NPA overlays.

103. It appears, however, that at the present time, the numbering resource optimization benefits of ten-digit dialing are limited.<sup>272</sup> Protected codes, which enable seven-digit dialing across area code boundaries, may be reclaimed without regard to whether mandatory nationwide ten-digit dialing is implemented. In fact, the NANC recommends that protected codes should be eliminated in all instances.<sup>273</sup> Also, the record in this proceeding reveals that expansion of the D digit to optimize the effectiveness of ten-digit dialing raises significant implementation concerns.<sup>274</sup> SBC, for example, states that D digit expansion would require substantial time and effort, as well as modification of all switching systems and networks to allow the “unblocked” “0” or “1” D digit to be recognized as the fourth digit of a ten-digit number.<sup>275</sup> Perhaps an advantage that could be realized at this time from implementing mandatory ten-digit dialing is that it might liberate state commissions from having to face dialing pattern questions as they make area code relief decisions, perhaps allowing them to focus more sharply on numbering resource optimization concerns. We have concluded, however, that we should leave area code relief decisionmaking with the states at the present time.<sup>276</sup>

104. In addition, the record in this proceeding indicates that a nationwide transition to ten-digit dialing would require some technical modifications to switches, operations support systems, and customer premises equipment. The NANC Report states that, although the industry cost of implementing ten-digit dialing will vary according to each geographic area and service provider, some carriers could experience substantial costs associated with modifications to switch translations and OSS, directory publishing, changes to announcement systems, and customer education. Implementation of ten-digit dialing will also require upgrades to the Public Safety Answering Point (PSAP) systems used to respond to 911 calls. More importantly,

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<sup>269</sup> AirTouch Comments at 9.

<sup>270</sup> See, e.g., California Commission Comments at 24 (stating that the determination of whether to impose a dialing pattern which includes both the area code and customer’s seven-digit number is best left to the states); Maine Commission Comments at 19; North Carolina Commission Comments at 11-12.

<sup>271</sup> See CinBell Telephone Comments at 14; Nextel Comments at 23; PrimeCo Comments at 10; VoiceStream Comments at 25-26.

<sup>272</sup> See, e.g., Texas Office of Public Util. Counsel and NASUCA Comments at 47.

<sup>273</sup> See NPA Code Relief Planning and Notification Guidelines, INC 97-0404-016, § 5.0, November 2000, available at <www.atis.org>.

<sup>274</sup> AT&T Comments at 37; SBC Comments at 106-7; USTA Comments at 7.

<sup>275</sup> SBC Comments at 100.

<sup>276</sup> See *supra* sections V.C-D.

mandatory ten-digit dialing does present some disruptive effects, particularly for consumers. Consumers often object to the inconvenience and confusion associated with having to remember and dial three extra digits.<sup>277</sup> For the foregoing reasons, we decline to require mandatory nationwide ten-digit dialing at the present time.

### C. Expansion of the D Digit

105. *Background.* In the *Notice*, we recognized that expansion of the fourth digit of a ten-digit telephone number, the so-called “D” digit (the “N” of an NXX or central office code),<sup>278</sup> would increase the quantity of NXXs available within an NPA by approximately 25% if accompanied by the implementation of ten-digit dialing.<sup>279</sup> Accordingly, we sought comment on the costs and benefits of expanding the D digit, and on whether we should mandate the adoption of this measure at the national level to ensure its effectiveness or on a statewide or NPA-wide basis.<sup>280</sup> Furthermore, we sought comment on whether states should independently implement the expansion of the D digit as a numbering optimization measure.<sup>281</sup>

106. *Discussion.* We decline to adopt nationwide expansion of the D digit to include 0 or 1, or to grant state commissions the authority to implement the expansion of the D digit as a numbering resource optimization measure at the present time. We agree with commenting parties that D digit expansion raises some implementation concerns.<sup>282</sup> The record in this proceeding reveals that implementation of this measure will require some technical modifications to switches, operations support systems, and customer premises equipment.<sup>283</sup> For example, since service providers may be using NXXs that begin with “0” or “1” for intra-network use, they will need to develop an alternate technical solution.<sup>284</sup> In addition, several commenting parties contend that D digit expansion must be done simultaneously by all participants in the NANP

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<sup>277</sup> NANC Report at § 10.8.2.

<sup>278</sup> NANC Report at § 10.1; *see also* AirTouch Comments at 9; Bell Atlantic Comments at 19-20. NXX codes that begin with “0” and “1” are restricted by industry agreement and are used for switches to access operators, toll dialing and/or inter-NPA calling. NANC Report at § 10.5.2.2. In order for these restricted NXX codes to be available for assignment, a uniform ten-digit dialing pattern must be implemented. *Id.*

<sup>279</sup> NANC Report at § 10.5.2.2. Release of the D digit removes the current restriction on the fourth digit in the numbering sequence allowing the digit to be a 0 or 1. Thus, NXXs in the form 000-199 could be assigned which theoretically provides a 25% increase in the current NANP.

<sup>280</sup> *Notice*, 14 FCC Rcd at 10380, para. 129.

<sup>281</sup> *Id.*

<sup>282</sup> *See, e.g.*, USTA Comments at 7.

<sup>283</sup> *See* Ameritech Comments at 37 (stating that D digit expansion involves serious adverse impacts and costly network and operation support system (OSS) modifications); AT&T Comments at 37; BellSouth Comments at 18 (noting that most switches in the public switched telephone network (PSTN) cannot route such numbers and there is no OSS ready for such a fundamental change); Citizens Utility Bd., et al. Comments at 44; SBC Comments at 106-07; *see also* NANC Report at § 10.6.1.3.

<sup>284</sup> *See* Nortel Networks October 4, 2000 *ex parte*; Telcordia October 24, 2000 *ex parte*; *see also* NANC Report at § 10.6.1.3.

because otherwise calls can not be completed to exchanges where carriers continue to retain the D digit for internal use.<sup>285</sup> The INC also states that this modification is expected to be a multi-year process for carriers to implement, and therefore, expansion of the D digit would need to be implemented as the final phase of the measures associated with ten-digit dialing.<sup>286</sup> For the foregoing reasons, we decline at this time to adopt nationwide expansion of the D digit to include 0 or 1, or grant state commissions the authority to implement the expansion of the D digit as a numbering resource optimization measure at the present time.<sup>287</sup> We recognize that the current use of 0 or 1 as the D digit is extensive and therefore steps must be taken to identify and eliminate all such uses prior to any release of the D digit. We therefore direct carriers to begin identifying and eliminating specialized uses of 0 or 1 as the D digit in anticipation of the eventual expansion of the D digit.

## D. Clarification of Definitions

### 1. Parent OCN

107. In the *First Report and Order*, we mandated that all carriers that receive numbering resources from the NANPA, or that receive numbering resources from a Pooling Administrator, report forecast and utilization data to the NANPA.<sup>288</sup> We also required carriers that receive numbering resources from another carrier to report forecast and utilization data for such numbers in their inventories.<sup>289</sup>

108. We required the NANPA to develop a reporting form for both utilization and forecast data.<sup>290</sup> To ensure that the NANPA has a means for associating each carrier's reported data with carrier identification information, we required that the reporting forms for utilization and forecast information include company name, company headquarters address, OCN, parent company OCN, and the primary type of business in which the numbers are being used.<sup>291</sup> We stated that carriers should report their utilization and forecast information by separate legal entity, identifying each entity by its OCN.<sup>292</sup> We also directed the NANPA to withhold numbering resources from any United States carrier that fails to provide its utilization and forecast information as mandated in the *First Report and Order* until such information has been

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<sup>285</sup> NANC Report at § 10.7.2.2.

<sup>286</sup> NANC Report at §§ 10.2, 10.3, and 10.7.2.1; *see also* AirTouch Comments at 9 (supporting expansion of the D digit through federally required ten-digit dialing at the national level).

<sup>287</sup> *See, e.g.*, Cox Comments at 20-21.

<sup>288</sup> *First Report and Order*, 15 FCC Rcd at 7594, para. 40.

<sup>289</sup> *Id.*

<sup>290</sup> *Id.* at 7598, para. 52.

<sup>291</sup> *Id.*

<sup>292</sup> *Id.* at 7594, para. 41.



provided.<sup>293</sup>

109. We directed reporting carriers to identify a parent OCN to enable us to determine the relationships among them and to monitor number usage for corporations and groups of companies as well as individual carrier entities.<sup>294</sup> We are aware that, because of varying and complex corporate structures, reporting carriers may have more than one entity that could be deemed its “parent.” For example, if a reporting carrier is a subsidiary of company A, which is in turn a subsidiary of company B, both companies A and B could be deemed the parent of the reporting carrier. We therefore clarify that the reporting carrier should identify as its parent, and provide the OCN for, the highest related legal entity located within the state for which it is reporting data. Thus, in the example above, the appropriate parent would be company B, provided that company B is located within the relevant state. In the attached *Second Further Notice*, we seek comment on whether additional data regarding corporate relationships should be reported with carriers’ mandatory number utilization and forecast reports, and whether or how that information should be used to ensure the widest possible compliance with our number usage monitoring and optimization efforts, without unduly burdening reporting entities.<sup>295</sup>

## 2. Classification of Numbers Used for Intermittent or Cyclical Purposes

110. Numbers used for intermittent purposes are numbers designated for use by a particular customer that may be “working” in the Public Switched Telephone Network (PSTN) periodically, but that remain designated for the customer’s use even if they are not “working” at other times. These may include numbers contained in blocks assigned to Centrex or Private Branch Exchange (PBX) users, or to large corporations that require an inventory of spare numbers to accommodate internal usage on short notice. These customers typically use all or a portion of a block of numbers at any given time. Numbers used for cyclical purposes are similarly designated numbers that are typically “working” for regular intervals of time. Customers with numbers used for cyclical purposes typically wish to retain the same number even when the numbers are not “working.” A customer’s summer home telephone number that is in service for six months out of the year, or a college student’s telephone number that is in service only for the school year are examples of numbers used for cyclical purposes.

111. To the extent that these numbers are “working” on the mandatory reporting date, they should be reported as *assigned numbers*.<sup>296</sup> It is less clear how these numbers must be reported when they are not “working.” We note that many commenters assumed that numbers used for intermittent or cyclical purposes must be reported as *reserved numbers* during the period in which they are not “working,” and that this assumption has prompted several parties to seek

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<sup>293</sup> *Id.* at 7609-10, para. 84. We also noted that, if a carrier failed to provide the necessary reports, the NANPA must notify the carrier in writing allowing ten days for the carrier either to provide the report or show that it already has done so. *Id.*

<sup>294</sup> *See infra* section VII.C for discussion of whether carriers should be held accountable when related carriers fail to report numbering utilization and forecast information.

<sup>295</sup> *See infra* paras. 149-150.

<sup>296</sup> *See First Report and Order*, 15 FCC Rcd at 7585, para. 16.

reconsideration of our decision to limit the reservation period to 45 days. In the *First Report and Order*, we defined *reserved numbers* as “numbers held by service providers at the request of specific end use customers for their future use.”<sup>297</sup> We also determined that after the 45-day reservation period, carriers have to treat these previously “reserved” numbers as “available.” Our purpose in establishing *reserved numbers* and limiting the reservation period to 45 days was to allow carriers the ability to set aside numbers for specific customers’ use in the near term. We did not intend, however, to prevent carriers from maintaining the same telephone number or block of numbers for customers that activate service to particular lines on an intermittent or cyclical basis.

112. We affirm that numbers used for intermittent or cyclical purposes that are not “working” on the mandatory reporting date should be reported as *reserved numbers*. We nevertheless agree that customers should not be subject to losing these numbers when they are turned off for short periods of time. On the other hand, we are concerned that some of these numbers that remain unused indefinitely could be used to provide service to other customers. We therefore address concerns that the 45-day reservation period is too short to accommodate the needs of end user customers to retain numbers used for intermittent or cyclical purposes in the next section. Specifically, in the next section, we increase the maximum reservation period to 180 days. We believe that this approach strikes an appropriate balance between carriers’ legitimate need to provide numbers for intermittent or cyclical uses to their customers, and our responsibility to ensure that scarce numbering resources do not lie fallow for unlimited periods of time. We also seek comment in the attached *Second Further Notice* on whether we should allow carriers to extend the reservation period for numbering resources, for a fee, which could further alleviate the concerns raised by carriers regarding numbers used for intermittent or cyclical purposes.

#### **E. Reconsideration of Reserved Number Period**

113. In the *First Report and Order*, we concluded that *reserved numbers*, defined as numbers held by service providers at the request of specific end use customers for their future use, may be held in reserve status for a maximum of 45 days.<sup>298</sup> In petitions for reconsideration<sup>299</sup> of the *First Report and Order*, as well as numerous *ex partes*,<sup>300</sup> several parties have asserted that the 45-day reservation period is a major departure from current business practices and should be increased to enable them to meet specific customer needs.

114. We conclude that the maximum period for reserving numbers should be increased

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<sup>297</sup> *Id.* at 7587-88, paras. 22-23.

<sup>298</sup> *Id.*

<sup>299</sup> *See, e.g.*, AT&T Petition for Reconsideration; SBC Petition for Reconsideration and Clarification; Qwest Petition for Reconsideration.

<sup>300</sup> *See, e.g.*, Letter from Don Melton, Director, State of Arkansas Department of Information Services, to FCC, dated July 21, 2000; Letter from Kathleen B. Levitz, BellSouth, to Magalie Roman Salas, FCC, dated August 25, 2000; Letter from Glen Whitmer, Assistant Director, Computing and Communicating Services Office, University of Illinois, Urbana-Champaign, to FCC, dated August 14, 2000.

to 180 days. In deciding how much additional time to allow, we considered suggestions that the reservation period be increased to as much as 12 months.<sup>301</sup> We are persuaded by commenters and petitioners that 45 days does not adequately address the needs of many customers who need to know their telephone numbers for a period of time before telephone service is activated,<sup>302</sup> but remain cautious about extending the period too much because of the potential for accelerating the exhaust of some NPAs.<sup>303</sup> Given the need for customers, especially business customers, to plan for implementation and/or expansion of telephone service, print stationery and business cards prior to commencing business, and have their telephone numbers printed in telephone directories, we find it reasonable to extend the reservation period to 180 days. This provision shall be effective upon release of this *Second Report and Order*.

115. We also note that we are considering a proposal from the NANC on the issue of charging fees to extend the number reservation period.<sup>304</sup> In the attached *Second Further Notice*, we seek comment on the NANC's proposal to allow unlimited reservations on a month-to-month basis in exchange for a fee.<sup>305</sup> If we choose to mandate a reservation extension fee in the future, we will reconsider whether the 180-day period remains appropriate.

## **F. Clarification of State Commissions' Access to Data**

### **1. State Commissions' Access to Mandatory Reporting Data**

116. In the *First Report and Order*, we granted all state commissions access to the semi-annually reported mandatory forecast and utilization data, subject to appropriate confidentiality protections.<sup>306</sup> We recognized that, with access to the data, states would be better able to meet their obligations regarding the implementation of area code relief and to act on their delegations of additional numbering authority. We declined, however, to delegate authority to the state commissions to impose additional regularly scheduled reporting requirements on carriers because of our belief that such authority would undermine the purpose of establishing regularly scheduled, uniform federal reporting requirements.<sup>307</sup>

117. We granted state commissions access to mandatorily reported forecast and utilization data to eliminate the need for them to require carriers to report separately and

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<sup>301</sup> See AT&T Petition for Reconsideration at 8; BellSouth Petition for Reconsideration and Clarification at 8. See also ALTS Petition for Reconsideration and Classification; Sprint Petition for Reconsideration; USTA Petition for Clarification and Reconsideration.

<sup>302</sup> See, e.g., Bell South Petition for Reconsideration and Clarification at 5-11.

<sup>303</sup> Allowing numbers to remain in the reserved category indefinitely decreases the amount of available numbering resources, which in turn accelerates the need for area code relief.

<sup>304</sup> See Letter from John Hoffman, Chairman, North American Numbering Council, to Dorothy Attwood, Chief, Common Carrier Bureau, dated September 20, 2000.

<sup>305</sup> See *infra* para. 152.

<sup>306</sup> *First Report and Order*, 15 FCC Rcd at 7606, para. 75.

<sup>307</sup> *Id.* at 7606, para. 76.

duplicatively, utilization and forecast data that they are already reporting to the NANPA on a regular basis. In doing so, we considered the need for states to have this information as well as the considerable burden such requests could place on carriers. We also considered the burden on the NANPA in responding to excessive individual state requests for information. We recognize, however, that some state commissions may desire to have access to carrier-specific data on file with the NANPA more frequently or in different formats. For example, states might wish to receive data at frequent intervals, per individual or class of carrier, per geographic area, or they could request all data collected on all reporting carriers within their state.

118. We clarify that our grant of access to mandatorily reported forecast and utilization data includes all such data, as submitted semi-annually by reporting carriers. The NANPA shall provide mandatorily reported forecast and utilization data to any requesting state twice per year, consistent with its collection of such data twice per year.<sup>308</sup> Commencing with the second collection of mandatorily reported data, currently scheduled for February 1, 2001, a state may request a single report containing disaggregated data reported by carriers operating in its state beginning 30 days after each deadline for collection of the data, up to the next deadline for reporting. Because state commissions have emphasized the need to receive the data in a format that would enable them readily to perform their own data analyses, we require that the NANPA provide the data via secured electronic transfer, which may include e-mail, or on a computer disk. NANPA shall, in the alternative upon request from a state commission, provide the data in paper copy form without any cost to the state.

119. In the event state commissions wish to receive the data in different formats involving processing or culling of the data, such as customized reports that provide data by carrier or class of carrier, geographic area, or other categories, the NANPA may create and provide such customized reports to requesting states as an enterprise service.<sup>309</sup> We emphasize, however, that the NANPA may only charge a fee for enterprise services that is reasonable; that is, based on the cost of processing and compiling the data from its existing database, preparing the customized report, and providing it to the state commission. Once the NANPA's proposal for providing customized reports as an enterprise service is approved,<sup>310</sup> state commissions are free to negotiate with the NANPA a reasonable price for the customized reports. We also emphasize that states are free to take the data that the NANPA must provide to them and process the data themselves, or have it processed by another entity that is able to do the work more cost-effectively than the NANPA while maintaining the confidentiality of the data.<sup>311</sup> The

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<sup>308</sup> That is, states are entitled to one report per data collection cycle. We believe that states should have direct access to mandatory data and we address this issue in the attached *Second Further Notice*. See *infra* section VII.D.

<sup>309</sup> The February 20, 1997 NANPA Requirements Document at § 7.0 states that enterprise services are “services not described elsewhere in this Requirements Document that may be provided by the new NANPA for a specific fee. Enterprise services and their associated fees are subject to prior approval by the NANC.” See *Administration of the North American Numbering Plan*, Third Report and Order, 12 FCC Rcd 23040 (1997).

<sup>310</sup> See 47 C.F.R. § 52.12(f) (stating that the NANPA shall identify all direct costs associated with enterprise services and submit them to the NANC for review, and to the Commission for appropriate review and action). See also *Administration of the North American Numbering Plan*, Third Report and Order, 12 FCC Rcd 23040 (1997).

<sup>311</sup> Any such entity would be subject to the same confidentiality requirements that the states are subject to when given access to carrier-specific, disaggregated data.

confidentiality protections specified in the *First Report and Order* apply to any customized reports provided by the NANPA or any other entity to the states, to the extent that such reports contain carrier-specific, disaggregated data.

## 2. State Commissions' Access to Numbering Resource Application Information

120. In the *First Report and Order*, we granted to state commissions access to carriers' applications for initial and growth numbering resources.<sup>312</sup> We also required that the state commissions treat this information as confidential.<sup>313</sup> We did not specify in the *First Report and Order* whether the NANPA, the Pooling Administrator in pooled areas, or carriers themselves must provide such access, or the scope of information that should be made available.

121. We clarify that state commissions seeking access to carriers' numbering resource applications should request copies of such application materials directly from the carriers operating within their states. Not burdening the NANPA and the Pooling Administrator with the obligation to provide states with numbering resource applications will foster fairness in nationwide numbering administration by limiting the extent to which state-specific requests can increase the cost of national numbering administration. We also find that the burden to carriers of providing to the state commission a copy of what the carrier has provided to the administrator, if requested, is minimal.

122. We also clarify that all carriers that receive numbering resources must comply with state requests for copies of numbering resource application materials. Access to these materials is specifically provided for in the *First Report and Order* and herein. Thus, carriers that a state demonstrates to the NANPA or Pooling Administrator have failed to comply with a state request for numbering resource application materials shall be denied numbering resources. In furtherance of our goal of a uniform nationwide carrier reporting scheme, state commissions may not require carriers to submit additional or different application materials from those submitted to the NANPA or the Pooling Administrator when requesting numbering resources, so that carriers may simply submit duplicate copies of such materials to the states, upon request.<sup>314</sup> State commissions may, however, determine whether this information must be provided whenever an application for numbering resources is made, or whether it may be provided less frequently or only in particular circumstances. To ensure that state commissions are aware of when an application for numbering resources has been submitted, state commissions may request notification from the NANPA.

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<sup>312</sup> *First Report and Order*, 15 FCC Rcd at 7609, para. 82.

<sup>313</sup> *Id.*

<sup>314</sup> We do not preclude the NANPA or the Pooling Administrator from providing application materials as an enterprise service to states that prefer to receive such materials from a single source, as long as the costs associated with providing these materials are borne by the requesting states. As with other enterprise service offerings, any associated fees shall be reasonable and supported by detailed cost analysis from which the reasonableness of the fees may be determined. Similarly, we do not preclude carriers from providing more or different information to the states if the carrier agrees to do so or if the state has a separate basis for the request (*e.g.*, for auditing purposes).

123. Finally, we clarify that our grant to state commissions of access to numbering resource application materials is not intended to delay the processing of carriers' applications for numbering resources. Notwithstanding the state commissions' role in determining the validity of data submitted pursuant to our mandatory reporting requirements,<sup>315</sup> our intent is not to give state commissions a veto over approval of applications, nor is it to introduce an additional layer of review for applications. The NANPA and the Pooling Administrator are responsible for determining whether application materials are sufficient in the first instance.<sup>316</sup> State commissions, nevertheless, may continue to review applications for initial numbering resources when a carrier disputes a decision to withhold such numbering resources and seeks resolution from the state commission.<sup>317</sup> In the attached *Second Further Notice*, we find some merit and seek comment whether states should have password-protected access to mandatorily reported data received by the NANPA. As we have in the past, we will continue to consider individual requests for authority from states' for the collection of information from carriers that the requesting state believes is necessary and that is not captured in the national data collection.

## VII. FURTHER NOTICE OF PROPOSED RULEMAKING

### A. Service-Specific and Technology-Specific Overlays

124. *Background.* The Commission has prohibited service-specific and technology-specific overlays, initially in the *Ameritech Order*,<sup>318</sup> and then more broadly in the *Local Competition Second Report and Order*. In the *Ameritech Order*, we rejected a wireless-only overlay plan proposed by Ameritech for the 708 area code on the grounds that it would be unreasonably discriminatory and would unduly inhibit competition. We expressed concern about several facets of Ameritech's area code relief plan: the proposal to continue assigning 708 numbers to wireline carriers but to exclude paging and cellular carriers from such assignments; the proposal to require paging and cellular carriers to take back 708 numbers previously assigned to their subscribers, while wireline carriers would not be required to do so; and the proposal to assign all numbers to paging and cellular carriers exclusively from the existing 312 and new 630 area codes, while wireline carriers (and perhaps others) would continue to receive 708 numbers.<sup>319</sup> We found that Ameritech's plan would place paging and cellular companies at a distinct competitive disadvantage because their customers would suffer the cost and inconvenience of having to surrender existing numbers and go through the process of reprogramming their equipment, changing over to new numbers, and informing callers of their new numbers.<sup>320</sup> We also found that any numbering resource optimization benefits from this

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<sup>315</sup> *First Report and Order*, 15 FCC Rcd at 7598-99, para. 54.

<sup>316</sup> We required in the *First Report and Order* the NANPA, with cooperation from the NANC, to develop criteria to assess applications for initial and growth numbering resources.

<sup>317</sup> *First Report and Order*, 15 FCC Rcd at 7615, para. 98.

<sup>318</sup> *Proposed 708 Relief Plan and 630 Numbering Plan Area Code by Ameritech – Illinois*, Declaratory Ruling and Order, 10 FCC Rcd 4596 (1995) (*Ameritech Order*).

<sup>319</sup> *Ameritech Order*, 10 FCC Rcd at 4605, 4607-09, 4610-12, paras. 21-36.

<sup>320</sup> *Id.* at 4608.

plan were outweighed by the disproportionate burden that the plan would place on paging and cellular carriers.<sup>321</sup> In the *Local Competition Second Report and Order*, we adopted our rule prohibiting service-specific and technology-specific overlays relying on the analysis outlined in the *Ameritech Order*.<sup>322</sup>

125. The Connecticut Commission, the Massachusetts Commission, and the California Commission have filed petitions to amend or waive the Commission's rules prohibiting technology-specific or service-specific overlays so they can implement such overlays.<sup>323</sup> The Ohio Commission and Pennsylvania Commission have filed petitions for additional delegated authority to implement service-specific and technology-specific area code overlays.

126. In the *Notice*, we indicated that we continued to believe that service-specific and technology-specific overlays raised serious competitive concerns, but that in light of the current numbering crisis, we decided to reexamine our policies and to consider whether we should modify or lift the restriction on these area code relief methods.<sup>324</sup> Specifically, we sought comment on whether technology-specific and service-specific overlays could yield potential new benefits that were not previously contemplated, and on how a technology-specific or service-specific overlay could be implemented in a manner that would promote numbering resource optimization objectives.<sup>325</sup> We also sought comment on whether there are specific services or technologies that could be assigned numbers from a technology or service-specific overlay area code without raising the competitive concerns that were cited in the *Ameritech Order*.<sup>326</sup> Moreover, we sought comment on whether we should consider exceptions to the current prohibition on a case-by-case basis or whether we should adopt general rules or guidelines.<sup>327</sup> Furthermore, we sought comment on whether we should address requests for service-specific and technology-specific overlays at the federal level, or whether we should delegate authority to the states to establish service-specific and technology-specific overlays within federal rules and guidelines.<sup>328</sup>

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<sup>321</sup> *Id.*

<sup>322</sup> *Local Competition Second Report and Order*, 11 FCC Rcd at 19512.

<sup>323</sup> See *Connecticut Department of Public Utility Control Files Petition for Rulemaking, Public Comment Invited*, Public Notice, 13 FCC Rcd 7416 (1998) (Connecticut Petition); *Common Carrier Bureau Seeks Comment on Massachusetts Department of Telecommunications and Energy Petition for Waiver to Implement a Technology-Specific Overlay in the 508, 617, 781, and 978 Area Codes*, Public Notice, 10 FCC Rcd 5083 (1999); *Common Carrier Bureau Seeks Comment on a Petition of the California Public Utilities Commission and the People of the State of California for a Waiver to Implement a Technology-Specific or Service-Specific Area Code*, Public Notice, 14 FCC Rcd 7490 (1999).

<sup>324</sup> *Notice*, 14 FCC Rcd at 10431, para. 257.

<sup>325</sup> *Id.* at 10431-32, paras. 257-259.

<sup>326</sup> *Id.* at 10431, para. 258.

<sup>327</sup> *Id.* at 10432, para 261.

<sup>328</sup> *Id.*

127. Commenters were generally split about whether the Commission should permit service-specific and technology-specific overlays. The majority of state commissions support lifting the prohibition, arguing that service-specific and technology-specific overlays are important additional tools to address the current numbering crisis.<sup>329</sup> Carriers, on the other hand, argue that the Commission should retain the current prohibition because service-specific and technology-specific overlays would place them at a competitive disadvantage and would result in inefficient use of numbering resources.<sup>330</sup> Subsequent to the close of the comment cycle on the *Notice*, however, SBC and the Joint Wireless Commenters presented proposals in *ex parte* filings that would permit service-specific and technology-specific overlays on a transitional basis.<sup>331</sup>

128. *Discussion.* We conclude that we should revisit the prohibition against service-specific and technology-specific overlays. We are persuaded by commenters who argue that this action is warranted by changes in the use of numbering resources that have occurred since the Commission's previous decisions.<sup>332</sup> State commissions, in particular, have urged that we permit them to implement service and technology-specific overlays to address the escalating demand for numbering resources. They argue that there is widespread public support for such overlays, especially as a means of avoiding new area codes for home and business phones.<sup>333</sup> By temporarily diverting a portion of the demand for numbering resources in existing area codes, implementation of service- or technology-specific overlays may help ease the transition to needed area code relief prior to the complete implementation of pooling, reducing end-user costs and inconveniences.

129. We nonetheless remain concerned about the potential competitive and efficiency implications of service and technology-specific overlays. We seek comment, however, on the

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<sup>329</sup> See, e.g., California Commission Comments at 46-50; Connecticut Commission Comments at 8-11; Citizens Util. Bd., et al. Comments at 35-36; Maine Commission Comments at 27-29; New Hampshire Commission Comments at 21-22; New Jersey Commission Comments at 7; New York Commission Comments at 22; North Carolina Commission Comments at 18; Ohio Commission Comments at 41-42; Texas Commission Comments at 33-36.

<sup>330</sup> See, e.g., AT&T Comments at 68-70; Bell Atlantic Comments at 38-39; BellSouth Comments at 19; GTE Comments at 74-76; WorldCom Comments at 64; Nextel Comments at 24-25; PageNet Comments at 5-9; PrimeCo Comments at 11; SBC Comments at 100-104; US West Comments at 8; VoiceStream Comments at 30-31; Winstar Comments at 45-46. *But see* Omnipoint Comments at 19 (arguing that in light of the current numbering crisis, Commission should reconsider prohibition and that service-specific and technology-specific overlays would provide wireless carriers with immediate access to numbers); Bell Atlantic Comments at 5-6, filed in response to *Connecticut Petition* (recommending that, in light of changes that have occurred in the use of numbering resources, Commission should reconsider prohibition against service and technology-specific overlays).

<sup>331</sup> See Letter from Judith St. Ledger-Roty and Todd Daubert, Kelley, Drye & Warren, LLP, to Magalie Roman Salas, Secretary, FCC, dated November 15, 2000 (joint filing on behalf of PCIA, AT&T Wireless, Nextel, Verizon Wireless, Verizon Wireless Messaging services and VoiceStream Wireless) (Joint Wireless Commenters November 15 *ex parte*); see also letter from Celia Nogales, SBC, to Magalie Roman Salas, Secretary, FCC, dated November 19, 1999 (SBC November 19 *ex parte*).

<sup>332</sup> See, e.g., California Commission Comments at 46; Texas Public Util. Counsel and NASUCA Comments at 41.

<sup>333</sup> See, e.g., California Commission Comments at 46; Connecticut Commission Comments at 10; Maine Commission Comments at 27-28.



conditions under which service-specific and technology-specific overlays must be implemented in order to promote competitive equity, maximize the efficient use of numbering resources, and minimize customer inconvenience.

130. We focus, in particular, upon proposals to permit state commissions to implement service- or technology-specific overlays on a “phased-in,” or transitional basis, subject to certain conditions.<sup>334</sup> As the pace of numbering exhaust has increased, many states have become increasingly reluctant to implement area code relief, in the face of significant consumer resistance. In area codes that are nearing exhaust, this reluctance has often led to severe number rationing schemes, and routinely individual carriers may find themselves unable to obtain numbering resources necessary to serve customers.<sup>335</sup> Over the past few years, the Commission has received six requests for extraordinary relief from carriers in danger of running completely out of numbers, and has granted relief three times.<sup>336</sup> In view of this situation, offering states the option to implement transitional service- or technology-specific overlays, subject to certain conditions, may help them to undertake necessary area code relief in a manner that they may perceive to be less objectionable to their citizens.

131. As an initial matter, we seek comment on the relative advantages from a numbering resource optimization perspective, a competitive perspective, and a consumer convenience perspective of service- or technology-specific overlays as opposed to all-services overlays. All-services overlays promote efficiency by ensuring that all users of numbering resources may obtain numbers from the overlay code. In contrast, service- or technology-specific overlays, which provide numbering resources to only a portion of number users, could run the risk of being underutilized. However, service- or technology-specific overlays might enhance the efficient use of underlying NPAs by removing a portion of the demand for numbering resources from those underlying area codes and increasing the amount of numbers available to carriers drawing resources from those area codes, for example, through a pooling mechanism. We further seek comment on how the perceived advantages of service- or technology-specific overlays relate to the specific conditions under which they are permitted. For example, assuming the ten-digit dialing requirement was retained for service- or technology-specific overlays, would a service- or technology-specific overlay be preferable to an all-services overlay from a

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<sup>334</sup> See Joint Wireless Commenters November 15 *ex parte*. See also SBC November 19 *ex parte*.

<sup>335</sup> Wireless carriers and CLECs are often hardest hit by restrictive numbering rationing measures. Wireless carriers are affected because of high growth rates and seasonal demand for services. CLECs are affected because they often need to obtain numbers in every rate center in an area code in order to establish a service footprint. However, in areas where there is pooling, wireline CLECs are able to obtain numbers through the pool mechanism, whereas wireless carriers, who do not currently have LNP capability, cannot.

<sup>336</sup> On March 12, 1999, the Common Carrier Bureau concurred with the conclusions of the New York Commission that Sprint PCS had adequately demonstrated its genuine and immediate need to obtain numbering resources in advance of the assignment schedule provided for in the 516 NPA rationing plan. See Sprint PCS Request for Emergency Numbering Relief in the 516 NPA, NSD File No. 99-25, DA 99-505 (Mar. 12, 1998). Similarly, on April 7, 1999, the Common Carrier Bureau concurred with the conclusions of the New York Commission that American Cellular Corporation had adequately demonstrated its genuine and immediate need to obtain numbering resources in advance of the assignment schedule provided for in the 914 NPA rationing plan. See Emergency Petition of American Cellular Corporation for Numbering Relief, NSD File No. 99-31, DA 99-663 (Apr. 7, 1999). On June 6, 2000, the Common Carrier Bureau granted AT&T Wireless an NXX Code in the 810 NPA.

consumer, competitive, or efficiency perspective?

132. Next, it is necessary to determine what services or technologies may be assigned to a transitional service- or technology-specific overlay code.<sup>337</sup> One option would be to distinguish carriers that have implemented LNP from those that have not. This option appears sensible for several reasons. In the first place, a carrier's ability to participate in certain number conservation measures is determined by whether or not it has implemented LNP. LNP-capable carriers can participate in number pooling; non-LNP-capable carriers cannot. Second, this distinction between LNP-capable carriers and non-LNP-capable carriers is itself largely interim in nature, as most non-LNP-capable carriers are required to implement LNP within the next two years.<sup>338</sup> For these reasons, we seek comment on whether it is appropriate to allow the creation of transitional technology-specific overlays that distinguish between carriers based on whether they have implemented LNP or not.<sup>339</sup>

133. On this basis, we envision that states could choose to implement transitional technology-specific overlays that provide numbering resources solely to non-LNP-capable carriers. It is also conceivable that a state commission could choose to implement a transitional technology-specific overlay to provide numbering resources solely to LNP-capable carriers, for example, through a thousands-block number pooling mechanism. Of course, a transitional overlay serving LNP-capable carriers would be subject to the same conditions and limitations as one that serves non-LNP-capable carriers, as further detailed below.

134. Because one of the Commission's principal concerns about the competitive effect of technology-specific overlays has centered on "take-backs" of numbers from existing customers of carriers assigned to the technology-specific overlay, we tentatively conclude that transitional technology-specific overlays may not include mandatory "take-backs" and may only be implemented on a prospective basis. As the Commission noted in the *Ameritech Order*, taking back telephone numbers from carriers served by a technology-specific overlay would impose costs on those carriers and their customers, who would suffer the cost and inconvenience

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<sup>337</sup> Parties have also suggested other alternatives, including fax-specific overlays and modem-specific overlays. It does not, however, appear possible to establish overlays that would separate out faxes or modems. These devices are generally used with ordinary wireline telephone connections often sharing the same number with an ordinary telephone, so there appears to be no reasonable way to distinguish the numbers associated with these devices from numbers associated with the provision of telephone services by the same carrier.

<sup>338</sup> Covered CMRS carriers in the largest 100 MSAs must implement pooling by November 24, 2002. *CMRS LNP Forbearance Order*, 14 FCC Rcd at 3112. Wireline and covered CMRS carriers outside the top 100 MSAs are required to deploy LNP in the future only if and when they receive a request from a competing carrier. *LNP First Memorandum Opinion and Order on Reconsideration*, 12 FCC Rcd at 7314. Covered CMRS carriers outside the largest 100 MSAs, however, must support separation of the Mobile Identification Number (MIN) and the Mobile Directory Number (MDN) used to identify a subscriber, in order to support roaming by subscribers with ported numbers. Non-covered CMRS carriers, such as paging carriers, are not subject to LNP requirements of any kind. *LNP First Report and Order and Further Notice and Further Notice of Proposed Rulemaking*, 11 FCC Rcd at 8433-34.

<sup>339</sup> Because we tentatively conclude that carriers should be included in an overlay on the basis of their technological capabilities, rather than on the basis of the type of service they provide, we will refer solely to technology-specific overlays from here on.

of surrendering their existing phone number, reprogramming their equipment, changing to new numbers, and informing callers of the new numbers.<sup>340</sup> In a technology-specific overlay context, “take-backs” would exclusively affect customers of the particular technologies for which the overlay is established. We agree with commenters that these costs would be significant, would impose a disparate impact on customers of the services affected by the “take-back,” and would thus adversely affect competition.<sup>341</sup> We seek comment on the tentative conclusion that transitional technology-specific overlays must be prospective, and may not include mandatory “take-backs.”

135. We seek comment on whether the geographic boundaries of a transitional technology overlay should conform to the boundaries of an existing area code, or whether it would be appropriate to allow a transitional technology-specific overlay that covered the geographic area of more than one pre-existing area code.<sup>342</sup> Further we seek comment on whether we should permit state commissions to implement transitional technology-specific overlays only where pooling has been implemented in the underlying area code, or where pooling will be implemented by the time carriers may begin taking numbers from the transitional technology-specific overlay, as proposed by the Joint Wireless Commenters.<sup>343</sup>

136. We also seek comment on how transitional technology-specific overlays should operate. Under the Joint Wireless Commenters’ proposal, non-LNP-capable carriers that qualify for additional numbering resources under the Commission’s rules would receive NXX codes only from the transitional overlay.<sup>344</sup> The proposal limits the duration of this segregation, however, by providing that the overlay code would be converted to an all-services overlay and used to supply numbering resources to all carriers serving the underlying geographic region after the underlying NPA reaches exhaust (specifically, when the Pooling Administrator needs additional NXX codes to meet the needs of the pool and there are no remaining NXX codes in the original NPA). In the alternative, we could provide that transitional technology-specific overlays be converted to all-services overlays no later than the date by which covered CMRS providers are required to participate in thousands-block number pooling. We find that the ultimate transition from technology specific to all-services overlay both maximizes the efficient use of numbering resources, and serves to mitigate certain of our concerns about the potential anti-competitive effects of segregation.<sup>345</sup> We seek comment on this approach and on the appropriate point for transition from technology-specific to all-services overlay.

137. In addition, we seek comment on whether and how our mandatory ten-digit

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<sup>340</sup> *Ameritech Order*, 10 FCC Rcd at 4608, para. 27.

<sup>341</sup> *See, e.g.*, AT&T Comments at 69-70.

<sup>342</sup> *See* Joint Wireless Commenters November 15 *ex parte*.

<sup>343</sup> *See* Joint Wireless Commenters November 15 *ex parte*.

<sup>344</sup> *Id.*

<sup>345</sup> *See* Letter from Douglas I. Brandon, AT&T Wireless, to Yog R. Varma, Deputy Chief, Common Carrier Bureau, dated November 20, 2000; *see also* Letter from Anne E. Hoskins, Verizon Wireless, to Yog R. Varma, Deputy Chief, Common Carrier Bureau, dated November 21, 2000.

dialing rule should apply in the context of transitional technology-specific overlays. Normally, ten-digit dialing is triggered when an overlay is established, *i.e.*, consumers dial ten digits for all local calls in an area with an overlay area code.<sup>346</sup> Under the Joint Wireless Commenters' proposal, the requirement for mandatory ten-digit dialing would be waived either until the overlay was converted to an all-services overlay (*i.e.*, numbering resources in the underlying area code were exhausted) or until the date upon which CMRS carriers are required to participate in thousands-block number pooling. The Joint Wireless Commenters propose, however, that permissive ten-digit dialing be provided when the transitional technology-specific overlay is implemented.

138. The Joint Wireless Commenters believe that this proposal may make transitional overlays more attractive to states, many of which have resisted implementing overlays because of the ten-digit dialing requirement. We are concerned about the potential competitive impacts that would result from a waiver of the ten-digit dialing requirement. We acknowledge, however, that the potential anti-competitive effect would be mitigated because ten-digit dialing would be waived only for a limited period of time. We seek comment on whether there is a basis to depart from the ten-digit dialing requirement for a transitional overlay. To the extent that such a departure would be necessary, we seek comment on whether it would be appropriate to waive the ten-digit dialing requirement as the Joint Wireless Commenters have proposed until the overlay is converted to an all-services overlay or until CMRS carriers are required to participate in thousands-block number pooling, whichever occurs earlier. To the extent that commenters disagree with this approach, we invite them to suggest alternatives.

139. Where a state chooses to implement a transitional technology-specific overlay to provide NXX code resources for non-LNP capable carriers, we seek comment about whether LNP-capable carriers should be prohibited from taking numbers out of the transitional overlay code prior to the time that it is converted to an all services overlay. Such a requirement would appear to be necessary to preserve the integrity of pooling by requiring all LNP-capable carriers to obtain numbering resources solely through the number pool mechanism. We do not intend, however, to in any way lessen covered CMRS carriers' incentive to timely implement LNP by appearing to provide them with a "protected" source of numbers. One way to achieve this objective might be to require that all transitional overlays convert to all-services overlays by the November 24, 2002 deadline for covered CMRS carriers to implement pooling.<sup>347</sup>

140. We further seek comment on whether there should be any limitations on when states are permitted to implement transitional technology-specific overlays. For example, the Joint Wireless Commenters advocate that transitional technology-specific overlays be used in situations where the underlying area code is relatively close to exhaust. For this reason, they recommend that the transitional overlay be established when the original NPA only has

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<sup>346</sup> *Local Competition Second Report and Order*, 11 FCC Rcd at 19518. The Commission mandates ten-digit dialing for all-services overlays based on the assumption that dialing parity is necessary to preserve competition between carriers assigned numbers in the underlying NPA and carriers assigned numbers in the overlay NPA. Under this requirement, ten-digit dialing is required within the overlay and within the existing NPA. Ten-digit dialing is also required for calls between the overlay code and the existing NPA.

<sup>347</sup> See *supra* section IV.C.

remaining the greater of (1) 30 NXX codes, or (2) a quantity of NXX codes equal to the number of rate centers in the underlying NPA.<sup>348</sup> Such a condition could potentially guard against implementation of a transitional overlay in areas where there are still sufficient numbering resources available to all carriers in the underlying area code.<sup>349</sup> We seek comment on this proposal and on whether it is possible to establish such a concrete set of triggering conditions for this form of area code relief. We also seek comment about whether an alternative set of triggering conditions would be more appropriate. For example, should states be permitted to implement transition technology-specific overlays when a specific overall NPA-wide utilization threshold is met? We further seek comment on whether there are any other additional conditions that should be placed on states' ability to implement transitional technology-specific overlays. For example, the Joint Wireless Commenters propose that where a state has implemented a transitional technology-specific overlay, any state imposed rationing scheme in either the underlying area code or the transitional overlay should be ended. We seek comment on whether this type of restriction should be imposed.

141. Finally, we also seek comment on whether we should permit states that wish to designate transitional service or technology-specific area codes for groups besides non-LNP-capable carriers to do so. If so, we seek comment on whether the considerations that would be applied in those situations would be similar or different to those above.

142. Apart from transitional service- or technology-specific overlays, we seek comment on whether it would be appropriate to permit states to establish long-term overlays for certain services. Such services may include services that currently utilize numbers located in any area, such as certain unified messaging services. They also may include certain automatic crash notification services and concierge services, in which the telephone number serves only to establish communication with a specific service provider, and not with other parties.<sup>350</sup> We seek comment on what other types of services may fall into this category. We also seek comment on whether establishing long-term service-specific overlays for such services would raise the same types of competitive concerns that we have identified with other service-specific overlays. In addition, we seek comment on whether these types of services use, or may in the future use, enough numbering resources that establishing long-term service-specific overlays to accommodate them would have numbering resource optimization benefits, or, in the alternative, would contribute to NANP exhaust by introducing new NPAs for which there is insufficient demand.

143. As explained above, our goal in opening this further inquiry into conditions under which service or technology-specific overlays may be implemented is to provide state commissions with additional number optimization tools, while ensuring that competitive equity and efficiency in numbering administration are preserved. In this light, we seek comment on any additional concerns or considerations that will inform our decision.

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<sup>348</sup> See Joint Wireless Commenters November 15 *ex parte*.

<sup>349</sup> See AT&T Wireless November 20, 2000 *ex parte*; Verizon Wireless November 21, 2000 *ex parte*.

<sup>350</sup> For example, General Motors' OnStar Service.

## B. The Rate Center Problem

144. One of the major contributing factors to numbering resource exhaust is the existence of multiple rate centers in each NPA and the demand by most carriers to have numbering resources in each rate center in which they operate.<sup>351</sup> The rate center system was established in the 1940s primarily to facilitate the routing and billing of telephone calls. Carriers typically need numbering resources in multiple rate centers to establish a footprint in a particular geographic area. This initial allocation of NXX codes and thousands blocks often results in the allocation of many more numbers than a carrier needs to serve its customers, which, in turn, leads to many numbers becoming "stranded" and unusable by other carriers.

145. The Commission has solicited comment on how to address and resolve the problems resulting from the existence of multiple rate centers in each NPA. Many of the questions raised focused on rate center consolidation, in which multiple rate centers are combined, thereby reducing the number of blocks or NXX codes that a carrier needs to establish a footprint in a given area. In the *Notice*, for example, we sought comment on how rate center consolidation potentially affects the efficiency of other methods of number conservation, such as number pooling.<sup>352</sup> We also questioned how rate center consolidation would affect the routing of E911 calls, which tend to use NXX codes for default routing to the nearest PSAP.<sup>353</sup> In addition, we asked whether the Commission should establish incentives for states to consolidate rate centers, and if so, by what means.<sup>354</sup> In the *716 Public Notice*, we further inquired about the possible tension between rate center consolidation and the INC guideline against the splitting of rate centers when area code relief in the form of a geographic split is implemented.<sup>355</sup>

146. We seek further comment on the rate center problem, particularly on 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. Rate center consolidation is but one option; other possible solutions include extending local calling areas, and encouraging call billing methods that are not NXX dependent.

147. The Commission has stated repeatedly that states have authority to consolidate rate centers. Indeed, we have conveyed the importance of rate center consolidation and encouraged states to consolidate rate centers wherever possible. We believe that consolidating rate centers prior to implementing thousands-block number pooling and area code relief will increase the efficiency of these measures, because carriers will need fewer initial and growth numbering resources to provide service in a given area. In the *First Report and Order*, we

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<sup>351</sup> *Notice*, 14 FCC Rcd at 10328, para. 15.

<sup>352</sup> *Id.* at 10375, para. 120.

<sup>353</sup> *Id.* at 10375, para. 121.

<sup>354</sup> *Id.* at 10369, para. 106.

<sup>355</sup> *Common Carrier Bureau Seeks Comment on the State of New York Department of Public Service Request for the Release of a New Area Code to Provide Relief for the 716 Numbering Plan Area*, Public Notice, CC Docket 96-98, NSD File No. L-00-161, DA 00-1806 (rel. Aug. 9, 2000) (*716 Public Notice*).

declined to mandate rate center consolidation as a precursor to the national rollout of thousands-block number pooling,<sup>356</sup> which some commenters had supported to encourage rate center consolidation.<sup>357</sup> We nevertheless encourage states to consider and implement rate center consolidation on their own. Particularly, we encourage states to explore rate center consolidation opportunities in areas where contiguous calling areas have identical or substantially similar rating schemes. Rate center consolidation in these areas is least likely to have a significant impact on carrier revenues, because minimal realignment of local, extended, and toll calling boundaries would be necessary.

148. We are mindful that rate center consolidation may be a difficult option for many states and carriers, especially incumbent local exchange carriers, because of the historic connection between rate centers and the billing, as well as routing, of calls. Rate center consolidation determines which calls are local versus toll, and thus consolidation may deprive some carriers of toll revenue. We therefore seek comment on ways of severing the connection between number assignment and call rating and routing. We also seek comment from the industry and state commissions on past and present rate center consolidation efforts, including information on the impact rate center consolidation has had on numbering optimization. Finally, we seek analysis of the benefits and costs of rate center consolidation in the 100 largest MSAs in the country, where we believe it would have the most significant effect. We believe that metropolitan regions are optimal candidates for rate center consolidation because they tend to involve more competing LECs and a higher demand for number resources.

### C. Liability of Related Carriers

149. Monitoring individual carriers' use of numbering resources is a necessary prerequisite to ensure efficient use of these resources and prevent the NANP from being exhausted prematurely. In the *First Report and Order*, the Commission established new semiannual reporting requirements to obtain more consistent, accurate, and complete reporting of numbering resource utilization and forecast data. Carriers are required to comply with the new reporting requirements, and the NANPA was directed to withhold numbering resources from non-compliant carriers. In the *First Report and Order*, the Commission did not address whether reporting carriers should be held accountable when related carriers fail to comply with the mandatory reporting requirements.

150. We believe that parent companies should play an active role in number conservation efforts, even if the parent companies are not themselves, reporting carriers. By encouraging, monitoring, and offering incentives for compliance from the top down, parent companies can contribute greatly to the success of our numbering resources optimization goals. We therefore tentatively conclude that carriers should, in certain instances, have numbering resources withheld when related carriers are subject to withholding for failure to comply with our mandatory reporting requirements. We seek comment on how to identify the relationships (*i.e.*, the existence of parent and sister companies) among reporting carriers, and what geographic limitations should be placed on those relationships in determining liability among related

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<sup>356</sup> *First Report and Order*, 15 FCC Rcd at 7628, para. 128.

<sup>357</sup> *See, e.g.*, AirTouch Comments at 4; Sprint Comments at 22.

carriers. Specifically, should related carriers nationwide be affected, or only related carriers located within the same state, NPA or rate center as the noncompliant carrier? Commenters that believe only the noncompliant carrier should be subject to withholding of numbering resources should provide specific comments on other ways of providing incentives for parent companies to encourage and require compliance from all of their related reporting carriers and to ensure that our numbering resource optimization goals are not undermined by the complexities of corporate structures.

#### **D. State Commissions' Access to Mandatory Reporting Data**

151. In the attached *Second Report and Order*, we clarified the scope of states' access to semi-annually reported data.<sup>358</sup> We also clarified that state commissions must continue to permit the NANPA to process requests for numbering resources in a timely fashion.<sup>359</sup> Some states assert that they require the same access to reporting data received by the NANPA; that is, full access to the database in which reported forecast and utilization data is stored.<sup>360</sup> We find some merit in this proposal, and thus tentatively conclude that states should have password-protected access to mandatorily reported data received by the NANPA. NeuStar has proposed to provide the states with password access to obtain information from the NANPA.<sup>361</sup> We seek comment on whether the type of access NeuStar proposes is necessary, sufficient or whether the access already granted is sufficient to accommodate the states' requests.

#### **E. Fee for Number Reservations**

152. We seek further comment on the NANC's proposal to allow unlimited reservations of numbers on a month-to-month basis.<sup>362</sup> In the attached *Second Report and Order*, we conclude that the period for reserving numbers should be increased to a maximum of 180 days with no extensions. Some commenters suggested that the reservation period should be extended to 12 months, with additional time for extensions. We seek comment on whether unlimited reservations of numbers are necessary, or whether there should be a constraint on the time period that numbers can be reserved. We note that the NANC recommended that the fee be paid by end users, and seek comment on whether imposing a fee on end users would provide the appropriate incentives in this context. Alternatively, we seek comment on whether charging a fee to carriers would provide more appropriate incentives for number use. Commenters should also enumerate whether unlimited reservations of numbers should be allowed and propose a time period for which numbers may be reserved. Commenters should also state whether a fee should be charged for reserving numbers, who should pay for the fee and a specific fee amount.

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<sup>358</sup> See *supra* section VI.F.

<sup>359</sup> *Id.*

<sup>360</sup> See California Commission July 21 Petition at 7-14; Maine Commission July 17 Petition at 11-13.

<sup>361</sup> See *NeuStar, Inc. Petition for Compensation Adjustment, Request for Approval of Implementation Schedule and Emergency Request for Interim Relief*, CC Docket No. 99-200 (June 30, 2000).

<sup>362</sup> See Letter from John Hoffman, Chairman, North American Numbering Council, to Dorothy Attwood, Chief, Common Carrier Bureau, dated September 20, 2000.



Commenters should also address how the fee revenues should be applied, particularly if, fees are charged to carriers by the Commission.

## **F. Enforcement**

153. In the attached *Second Report and Order*, we set forth a comprehensive audit program to verify carrier compliance with federal rules and orders and industry guidelines,<sup>363</sup> and conclude that auditors in the Accounting Safeguards Division, or other Commission designated agents, will perform the audits.<sup>364</sup> We also state that carriers found to be in violation of our requirements may be subject to possible enforcement action, which may include monetary forfeitures, revocation of interstate operating authority and cease and desist orders.<sup>365</sup>

154. In addition to our traditional enforcement tools, we tentatively conclude that carriers that violate our numbering requirements, or that fail to cooperate with the auditor to conduct either a “for cause” or random audit, should also be denied numbering resources in certain instances. We seek comment on this tentative conclusion. We also seek comment on the process by which this additional remedy should be invoked. Specifically, we seek comment on whether only the Commission should direct the NANPA or Pooling Administrator to withhold numbering resources. We note that section 220(f) bars public release of audit findings except as directed by the Commission or court.<sup>366</sup>

## **G. State Commissions’ Authority to Conduct “For Cause” and “Random” Audits**

155. In the attached *Second Report and Order*, we set forth a comprehensive audit program to verify carrier compliance with federal rules and orders and industry numbering guidelines, and conclude that the audit program will consist of “for cause” and random audits, performed by an auditor designated by the Common Carrier Bureau.<sup>367</sup> Although we believe that a national program will provide some degree of uniformity across the country in the way that audits are conducted, we recognize that state commissions would benefit from having a role in conducting these carrier audits.<sup>368</sup> We therefore seek comment on whether state commissions should be given independent authority to conduct “for cause” and random audits in lieu of or in addition to the national audit program established in the attached *Second Report and Order*, and what parameters should apply to any such authority. In particular, commenters should address concerns about state commissions employing different standards in performing “for cause” and random audits that might force carriers operating in multiple states to comply with different demands. In seeking comment on this issue, we do not address state commissions’ authority to

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<sup>363</sup> See *supra* section VI.A.

<sup>364</sup> See *supra* section VI.A.2.

<sup>365</sup> See *supra* section VI.A.3.

<sup>366</sup> 47 U.S.C. 220(f).

<sup>367</sup> See *supra* section VI.A.

<sup>368</sup> See *generally supra* section VI.A.

perform audits under state law.

## H. Developing Market-Based Approaches for Optimizing Numbering Resources

156. In the *Notice*, we sought comment on alternative mechanisms for establishing a market-based solution to improve the allocation and use of numbering resources, the administrative burdens a market-based solution might impose on carriers, and the likely effect on competition of such an approach.<sup>369</sup> At that time, most commenters opposed market-based allocation of numbering resources. The potential benefits of a flexible, market-oriented approach for allocating numbering resources, however, led us to seek additional comment on how the existing administrative measures could be supplemented or supplanted by market-based solutions and whether such an approach could strike this balance more effectively. In the *Further Notice*, we suggested that a market-based approach is the most pro-competitive, least intrusive way of ensuring that numbering resources are efficiently allocated.<sup>370</sup> In response to the *Further Notice*, many carriers expressed opposition to a market-based allocation system for numbering resources, while some state utility commissions generally supported it.

157. In this *Second Further Notice*, we discuss the need for a market-based allocation system for numbering resources, and seek specific proposals on how to structure such a system, including the scope of our statutory authority to do so. We continue to believe that market-based methodologies for allocating numbering resources, either in conjunction with or as a substitute for some or all of the existing allocation rules, may best ensure that numbers will be allocated efficiently, provided that they are structured on an equitable and non-discriminatory basis.

### 1. Commission Authority to Charge for Numbers

158. In the *Notice*, we sought comment on whether the Commission possesses the statutory authority to implement a market-based system for allocating numbering resources. Comments on this issue were limited. In the *Notice*, however, we did not request comment on specific market-based proposals. In this *Second Further Notice*, we provide more detailed information on the form that market-based mechanisms might take, and request that commenters propose specific market-based number allocation mechanisms. We seek comment on whether the Commission has the requisite authority to implement the proposals contained herein, as well as any proposed by commenters. If such authority is lacking, we request that commenters address what authority would be necessary. Commenters should address the scope of the Commission's plenary authority over numbering resource allocation in the United States pursuant to section 251(e). Commenters should also address statutory provisions pertaining to the Commission's authority to collect funds from carriers, as well as the statutory requirements on how such funds should be expended.

159. To emphasize that our goal in moving towards a market-based assignment process for numbers in the primary market is to increase the efficiency of numbering resource usage, and not to raise additional funds for Commission-approved programs (such as universal service, TRS,

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<sup>369</sup> *Notice*, 14 FCC Rcd at 10418, para. 230.

<sup>370</sup> *First Report and Order*, 15 FCC Rcd at 10428, para. 251.

etc.), we sought comment in the *Further Notice* on whether we should use any funds collected for numbers to offset other payments carriers currently make to fund these programs. We continue to believe that the collection of money for numbering resources in the primary market should not increase the telecommunications industry's aggregate obligation for regulatory contributions and collections such as universal service, and telecommunications relay services. We seek comment on whether the way in which collected funds are used affects the extent of our authority under the Act to implement market-based allocation mechanisms. Specifically, we seek comment on whether our authority under section 254 enables us to implement a market-based number allocation system as a means of funding universal service.<sup>371</sup>

160. We urge commenters to discuss how the Commission could structure a market-based allocation system that would retain its efficiency while working within the constraints of existing statutory authority. Commenters that believe that a market-based system could be structured more efficiently if the Commission had additional statutory authority to do so should describe the additional statutory authority that would be necessary.

## 2. The Need for a Market-Based Allocation System

161. The impetus for establishing a market-based numbering resource allocation system was our belief that the lack of efficiency in carrier utilization of numbers may be in part due to the failure of existing allocation rules to recognize the economic value of numbers. By explicitly recognizing the value of numbers, we seek to provide incentives for carriers to take and retain only as many numbers as they need, in the short term, to provide service to their customers.

162. Several parties argue that carriers already incur a great deal of costs under the current allocation system and that these costs impose sufficient discipline on them to discourage inefficient use.<sup>372</sup> Although we recognize that carriers incur costs under the present system for their use of numbers, we believe that efficient utilization will be better achieved if carriers pay a fee for numbering resources that is closely related to the supply and demand for numbers in a specific market.<sup>373</sup> At the present time, the costs that carriers incur are not directly related to these factors, and therefore do not effectively encourage efficient number use. Where a competitive market for numbering resources exists, carriers that obtain more numbers than they need would be incurring unnecessary expense, and carriers that hold inventories of numbers in excess of their needs would be foregoing the revenue they could gain from selling or leasing them.

163. Moreover, we believe that if markets for numbering resources are structured in a

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<sup>371</sup> 47 U.S.C. § 254. There are some inherent difficulties with this proposal. For example, this scheme would shift primary responsibility for universal service funding from IXC's and wireless carriers to ILECs. We also recognize that we would need to consult with the Universal Service Joint Board before implementing such a scheme.

<sup>372</sup> See Level 3 Comments at 13; PrimeCo Comments at 10; WorldCom Comments at 48.

<sup>373</sup> As many commenting parties point out, prices that are too low relative to the market price will not sufficiently improve numbering resource allocation and prices that are too high will discourage both efficient and inefficient telephone numbering use. See WorldCom Comments at 49; Ad Hoc Comments at 12.

manner that is competitively neutral, they will not create entry barriers to small entities or new entrants, but rather could serve to ensure a ready supply of numbering resources to such entities, in contrast with the rationing schemes they currently face in some areas. It is essential, however, that such markets be structured to avoid inequities that might occur through anti-competitive behavior, such as attempts by well-financed carriers to stockpile numbers to keep them away from their less well-financed competitors, or through unintended disparate impacts of the market mechanism, such as failure to take into account the competitive advantages associated with carriers' pre-existing number inventories. In light of these concerns, we seek comment on how to structure a numbering resources market mechanism in a manner that treats all users of numbering resources, and by implication, their existing and potential customers, in a fair, equitable and non-discriminatory manner.<sup>374</sup>

### 3. Structure of Markets

164. We believe that, where a competitively neutral primary market for numbers exists, permitting a secondary market to develop would further increase the efficiency with which numbers are used by creating economic incentives for carriers to find ways to transfer unused numbering resources in a given geographic area to others with a greater need for those resources. Under the present system, carriers sometimes receive numbers in blocks larger than their actual need. Thousands-block number pooling will substantially address this problem, but cannot eliminate it altogether. Some carriers, particularly new entrants, may need fewer than a thousand numbers in many of the rate centers they serve. Also, our current rules do not require carriers to contribute thousands-blocks to the pool if more than ten percent of the numbers in the block have been used. At present, it does not appear that existing LNP capacity can support pooling if blocks are more than 10 percent contaminated, and the industry has little incentive, other than regulatory mandate, to increase LNP capacity for pooling purposes. Creating a secondary market should introduce an opportunity cost for unused numbering resources that will encourage carriers to develop innovative ways to move these stranded resources to other carriers that may need and can use those resources. We therefore tentatively conclude that any market-based allocation system for numbering resources that we consider should include both primary and secondary markets for numbering resources.

#### a. Primary Market

165. In the *Notice* we sought comment on whether the price of numbers in the primary market, if implemented, should be established administratively or through the market using an auction.<sup>375</sup> Several commenters argued that administrative prices would be unworkable because regulators are incapable of setting the "economically correct" prices.<sup>376</sup> We agree that it is not easy to establish economically efficient prices administratively, and therefore seek comment on whether an auction would be the best and the most efficient economic means of allocating numbering resources in the primary market. The most direct approach for implementing a

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<sup>374</sup> See, e.g., California Commission Comments at 40.

<sup>375</sup> *Notice*, 14 FCC Rcd at 10419-20, paras. 231-233.

<sup>376</sup> SBC Comments at 109; WorldCom Comments at 49.

primary market for numbers may be to hold a separate auction for new numbering resources in each NPA, because the administrative costs of holding auctions in each of over 19,000 rate centers would almost certainly be excessive. We seek comment on whether the NANPA and the national Pooling Administrator would be in the best position to conduct such auctions, and we look for any other suggestions as to how an auction methodology should be designed. We also seek comment on how the supply of numbers to be auctioned in each geographic area would be determined.<sup>377</sup>

166. Several parties argue that market-based auctions might be too costly to administer.<sup>378</sup> These commenters, however, offer no support for their assertion. As we noted in the *First Report and Order*, the costs associated with expanding the NANP are estimated to be between \$50 - \$150 billion.<sup>379</sup> Similarly, the costs to consumers of repeated area code relief can be substantial. We believe that any administrative costs associated with establishing a market for numbers will be smaller than the benefit of extending the life of area codes and the NANP. We seek further comment on this issue, however.

167. One alternative for setting a price for numbering resources would be for the Commission and the states collectively to develop an agreed-upon life for the NANP. Using this timeframe as a basis, we could authorize the states to control the release of new codes. Over time, the prescribed life of the NANP could be adjusted as better information on the costs associated with NANP exhaust evolves. We seek comment on this proposal and whether it would improve the efficiency of NANP allocation.

168. We also request parties to comment on whether prices for numbers in the primary market should be structured as a one-time charge, a recurring charge, or a combination of a flat non-recurring charge and a recurring charge. In response to the *Notice*, several commenters supported a recurring charge because such a charge would be consistent with a licensing arrangement, rather than ownership.<sup>380</sup> Some parties prefer a recurring charge to be imposed frequently to accommodate situations where numbers change hands, while others argue for annual fees.<sup>381</sup> The Ohio Commission proposes a two part approach in which part of the fee would be an administrative price that is designed to recover the costs associated with number administration, and the second part of the fee would be a “retention” price that would reflect the societal cost of numbering exhaust.<sup>382</sup> We seek comment on the Ohio Commission’s proposal, and also invite other proposals that recognize the fungible nature of numbering resources.

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<sup>377</sup> The rate at which numbers are released for auction will determine the life span of a given area code and/or the NANP as a whole, and, jointly with the demand for numbers, will determine the market price.

<sup>378</sup> SBC Comments at 113; VoiceStream Comments at 17.

<sup>379</sup> See *First Report and Order*, 15 FCC Rcd at 7580, n.10.

<sup>380</sup> See, e.g., New Hampshire Commission Comments at 20.

<sup>381</sup> See California Commission Comments at 10-11; New Hampshire Commission Comments at 13-33; Texas Commission Comments at 4-6, Exhibit A.

<sup>382</sup> Ohio Commission Comments at 39-40.

169. We see benefits and problems with both approaches for collecting fees. A recurring fee would provide concrete benefits to carriers that returned numbers that they are not using to the NANPA. On the other hand, a one-time charge paid when numbering resources are obtained from the NANPA, may be less complex to administer, particularly if an auction mechanism is used to allocate numbers. We seek comment on the relative feasibility of auctions under a one-time charge and a recurring fee approach, and how auctions would be structured in either instance. We are also uncertain about the effect of a recurring charge in the primary market on the efficient operation of a secondary market, especially for stranded numbering resources. We therefore seek comment on how carriers could avoid having to pay a recurring charge on stranded numbers that cannot be used elsewhere in the network.<sup>383</sup>

170. We next turn to the question of whether carriers should be required to pay for the existing inventories of numbers that they are holding. Several parties argue that our “competitive neutrality” policy requires that carriers holding existing inventories of numbers pay for those resources if a market is created.<sup>384</sup> We tentatively conclude that it would be preferable for carriers to pay for all of the resources that they hold, regardless of when they were obtained. We seek comment on this tentative conclusion. We also seek comment on how we should apply the market prices to the embedded base of numbers. Commenters should describe the administrative process we should employ to collect the required charges. Commenters should also address whether it is feasible to have an equitable market mechanism that applies solely to new numbers.

171. An appropriately structured market should discipline carriers against hoarding numbers, because carriers will be forced to pay to acquire the numbers and face the opportunity cost of retaining more numbers than they need. We seek comment, however, on whether there will remain a continuing need to retain certain existing administrative measures for allocating numbers in conjunction with the implementation of a market-based approach. For example, carriers could continue to be required to meet the eligibility tests we have established for initial and growth numbering resources before they are permitted to acquire additional resources from the NANPA or the national Pooling Administrator in the primary market.<sup>385</sup> In that instance, the secondary markets would primarily be used to redistribute numbers that would otherwise be stranded or unavailable to other carriers.

## **b. Secondary Market**

172. Currently, NXX codes and thousands blocks are assigned to a specific rate center and cannot be ported across multiple rate centers. Thus, it is likely that each rate center would contain its own secondary market. Within each secondary market, service providers with

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<sup>383</sup> For example, we may have to require the NANPA to accept stranded individual numbers back from carriers if the carrier cannot transfer its stranded numbers directly to other carriers. Another possible approach would be to empower the NANPA to facilitate trades on the secondary market.

<sup>384</sup> Ad Hoc Comments at 10; AT&T Comments at 62; MediaOne Comments at 7; Nextlink Comments at 23. According to these parties, economic efficiency requires that carriers pay for all numbers that they control, regardless of when those numbers were obtained.

<sup>385</sup> 47 C.F.R. § 52.15(g).

available numbering resources would be permitted to sell or lease them to other service providers. We seek comment on the appropriate geographic scope of secondary markets.

173. Also, we recognize that a secondary market will not necessarily function well in rate centers where there are no, or only a single, CLEC. In these areas, the secondary market may not be sufficiently competitive to expect an incoming carrier to be able to obtain numbers at competitive prices from the small number of existing carriers. One possible method of addressing this situation is to direct the states to set aside a small quantity of NXXs to be distributed on a thousands-block basis to incoming carriers. There may be other solutions to this problem as well. We seek comment on how the Commission should address this issue.

174. We also seek comment on the extent to which we should regulate transactions in secondary markets. Specifically, we seek comment on how much structure we or the states should impose on these markets. Although we believe that government oversight should be minimal, we note that all markets are subject to some type of control, whether or not they are specifically regulated by a regulatory agency. Government oversight is designed to encourage competition and openness, while at the same time preventing private actions that disrupt the market. Our objective with respect to secondary markets for numbering resources is the same.

175. We seek comment on whether we should determine how secondary markets must be organized. Specifically, we seek comment on whether carriers should be permitted to negotiate unrestricted deals among themselves or whether all carriers should be required to deal through a clearinghouse that establishes uniform trading rules. The advantage of direct dealing is that carriers would be free to tailor their agreements to meet the specific circumstances of each transaction. On the other hand, mandating a clearinghouse might reduce aggregate transaction costs and prevent carriers from discriminating against competitors or otherwise disrupting the market. A clearinghouse might also make it easier to track the sales of numbers since such information would be housed at a single location. A third option might be to permit, but not require, carriers to create and fund a clearinghouse on their own. We seek comment on these or any other alternatives.

176. We also seek comment on the types of reporting requirements that might be necessary to ensure that secondary markets are open, competitive, and effective. Data from such reporting will permit us to evaluate the efficacy of permitting the secondary market to reallocate numbering resources. We request comments on the type of data and the frequency with which they should be reported. At a minimum, we believe that quantities of numbers involved in transactions should be reported in the numbering resource utilization and forecast (NRUF) reports which are required to be filed by our current rules twice a year. We also request comment on whether we should require carriers to file information on purchase or lease prices and the quantities involved in the transaction. Commenters should address whether such reporting requirements would impose an unreasonable burden on either carriers or the NANPA. Finally, commenters should also comment on how numbers sold in the secondary market should be reported in the NRUF report. One possible approach would be to treat sold numbers identically to ported numbers.

#### **4. Timing and Geographic Scope of Implementation**

177. Participation in markets for numbers requires that carriers be able to receive and

move numbers in precise quantities, which requires all carriers involved in the transfer of numbers to be LNP-capable. We therefore seek comment on whether implementation should be delayed until after covered CMRS carriers are required to become LNP-capable, and whether we should limit implementation to areas where LNP has been deployed.

178. We also seek comment on whether, if a market-based allocation system is implemented, we should implement both primary and secondary markets at the same time. It might be possible to implement the secondary market earlier than the primary market because the implementation of the secondary market might require nothing more than eliminating the current prohibition on carriers' exchanging numbers with each other for consideration.<sup>386</sup> If we were to implement secondary markets while numbers were still available at no charge in the primary market, however, there may be incentives for carriers to obtain more numbers than they need in the primary market in order to sell them at a profit in the secondary market. In addition, carriers that could receive all the numbers they need in the primary market at no cost would not appear to have any incentive to pay for numbers in the secondary market. We seek comment on these issues, and on other alternative approaches regarding the sequence in which the primary and secondary markets should be implemented.

#### **I. Recovery of Pooling Shared Industry and Direct Carrier-Specific Costs**

179. In the *First Report and Order*, we adopted a competitively neutral cost recovery framework for thousands-block number pooling similar to the cost recovery mechanism established for number portability.<sup>387</sup> Specifically, we concluded that the cost recovery mechanism must be competitively neutral in that the costs for thousands-block number pooling should not: (a) give one provider an appreciable, incremental cost advantage over another when competing for a specific subscriber; and (b) have a disparate effect on competing providers' abilities to earn a normal return.<sup>388</sup> Further, we adopted three cost categories for thousands-block number pooling – shared industry costs (cost incurred by the industry as a whole such as NANP administration costs), carrier-specific costs directly related to thousands-block number pooling (such as enhancements to carriers SCP, LSMS, SOA, and OSS systems), and carrier-specific costs not directly related to thousands-block number pooling.<sup>389</sup> We concluded that incremental shared industry costs become carrier-specific costs once they are allocated among carriers, and we adopted the NANPA fund formula for allocating shared industry costs for thousands-block number pooling.<sup>390</sup> The incremental shared industry costs for thousands-block number pooling will be allocated to all carriers in proportion to each carrier's interstate, intrastate, and international telecommunications end-user revenue.<sup>391</sup> We, however, did not establish a cost

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<sup>386</sup> See Central Office Code (NXX) Assignment Guidelines, INC 95-0407-008, at §7.0 (Nov. 13, 2000).

<sup>387</sup> *First Report and Order*, 15 FCC Rcd at 7662, para. 193.

<sup>388</sup> *Id.* at 7664, para. 199.

<sup>389</sup> *Id.* at 7665, para. 201.

<sup>390</sup> *Id.* at 7668, para. 207. Both shared industry costs and carrier-specific costs must be offset by any cost savings.

<sup>391</sup> We determined that carriers may not recover costs that are not directly related to thousands-block number pooling.



recovery mechanism for incremental carrier-specific costs because the record did not contain adequate information regarding the range and magnitude of incremental thousands-block number pooling costs.

180. In the *Notice*, we tentatively concluded that incumbent LECs subject to rate-of-return or price cap regulation may not recover their interstate carrier-specific costs directly related to thousands-block number pooling through a federal charge assessed on end-users, but may recover the costs through other cost recovery mechanisms.<sup>392</sup> We requested detailed estimates of the costs of thousands-block number pooling and asked that commenters separate the estimates by category of costs.<sup>393</sup> As we stated in the *First Report and Order*, the amount and detail of the data provided in response to the *Notice* was insufficient for us to determine the amount and magnitude of the costs associated with thousands-block number pooling.<sup>394</sup> We, therefore, in the *Further Notice*, requested additional cost information to help us ascertain the appropriate cost recovery mechanism for the costs of thousands-block number pooling, including cost studies that take into account cost savings associated with thousands-block number pooling in comparison to the current numbering practices.<sup>395</sup> We, nonetheless, identified the type of costs for which carriers may seek recovery and noted that costs associated with state implemented pooling trials should be excluded from the federal cost recovery mechanism.<sup>396</sup>

181. As discussed above,<sup>397</sup> we are conducting the procurement of a national Pooling Administrator in accordance with federal requirements. Once selected through a competitive bidding process, the national Pooling Administrator must develop a schedule for the implementation of new pools as well as the transition of pooling trials already underway. This schedule will significantly influence the timing and amount of costs carriers will incur for pooling. After the national pooling roll-out schedule is finalized, the timing and amount of pooling costs should be more readily ascertainable. We intend to establish an appropriate national cost recovery mechanism for pooling costs at that time.

182. In the interim, because we find that the amount and detail of the data provided in response to our request in the *Further Notice* is insufficient for us to determine the amount and/or magnitude of the costs associated with thousands-block number pooling, we seek further comment and cost studies that quantify shared industry and direct carrier-specific costs of thousands-block number pooling. We emphasize that cost studies should take into account the cost savings associated with thousands-block number pooling in comparison to the current numbering practices that result in more frequent area code changes. We further emphasize that the quality of the specific cost data that carriers provide will determine the accuracy with which

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<sup>392</sup> *Notice*, 14 FCC Rcd at 10410, para. 204.

<sup>393</sup> *Id.* at 10407-08, para. 198.

<sup>394</sup> *First Report and Order*, 15 FCC Rcd at 7687, para. 253.

<sup>395</sup> *Id.*

<sup>396</sup> *Id.* at 7671, para. 215.

<sup>397</sup> See *supra* section IV.A.

we are able to craft a cost recovery mechanism.

## J. Thousands-Block Number Pooling for Non-LNP-Capable Carriers

183. In the *First Report and Order*, we determined that thousands-block number pooling is a valuable mechanism to remedy the inefficient allocation and use of our numbering resources.<sup>398</sup> We adopted thousands-block number pooling for LNP capable carriers,<sup>399</sup> and we concluded that covered CMRS carriers must participate in thousands-block number pooling when they become LNP capable.<sup>400</sup> We also concluded that when non-LNP capable wireline carriers become LNP capable, whether voluntarily or pursuant to Commission rules, they too must participate in thousands-block number pooling.<sup>401</sup>

184. We believe that it is important for us to continue to explore possible expansion of our numbering resource optimization strategies. Thousands-block number pooling can help achieve greater number utilization both by allowing numbers to be allocated initially in smaller increments, and by providing a mechanism whereby the stranded numbering resources held by one carrier may be redistributed to other carriers. Therefore, we believe it is appropriate to consider whether extending our pooling requirements would further promote efficient use of numbering resources. Although in previous decisions we have indicated that it is necessary for carriers to achieve LNP capability before being able to participate in pooling, we seek comment on whether we should now require carriers to participate in pooling even if they are not required under our rules to implement LNP.

185. Under the Commission's current rules, certain carriers are exempted from pooling requirements, *e.g.*, carriers outside the largest 100 MSAs who have not received a request to deploy LNP from a competing carrier, and paging carriers. We seek comment about whether it would be appropriate to extend pooling requirements to these carriers. Specifically, to what degree would these carriers' participation in thousands-block number pooling help avoid premature exhaust of numbering resources at the 10,000 number block level (NXXs) and extend the life of the NANP? Conversely, to what degree would requiring these carriers to participate in pooling impose disproportionate costs on them in comparison to LNP-capable carriers operating in the 100 largest MSAs? We recognize that under such a requirement, non-LNP-capable carriers would be obligated to implement the common technological platform that is used to support both LNP and number pooling. We seek comment on the specific types of implementation costs that would be imposed, and the magnitude of these costs. We also seek

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<sup>398</sup> *First Report and Order*, 15 FCC Rcd at 7625, para. 122.

<sup>399</sup> Thousands-block number pooling relies on the LRN architecture that is used to support LNP, and therefore we have required LNP capable carriers to participate in thousands-block number pooling. Specifically, we have mandated thousands-block number pooling in the top 100 MSAs where carriers are required to be LNP capable. Outside the top 100 MSAs carriers are required to become LNP capable after receiving a request from another carrier. 47 C.F.R. § 52.23(b). The specific roll-out schedule for national thousands-block number pooling will be adopted after the Pooling Administrator is selected.

<sup>400</sup> *First Report and Order*, 15 FCC Rcd. at 7632-33, para. 134.

<sup>401</sup> *Id.*

comment on whether the incremental number optimization benefits of requiring these carriers to participate in pooling would outweigh these associated costs. For example, to what extent are these carriers such significant users of numbering resources that their participation in pooling would have significant numbering optimization benefits? We also seek comment on the benefits of thousands-block number pooling for competing carriers that need initial numbering resources in each rate center for the purpose of establishing their “footprints.” We seek comment on whether we should limit any additional pooling requirements to certain classes of carriers, and if so, on what bases any exemptions should be made. In addition, if we were to impose pooling requirements on carriers irrespective of their LNP status, we seek comment on whether rural carriers should be exempt from any such requirements.<sup>402</sup>

### **K. Waiver of Growth Numbering Resource Requirements**

186. Presently, carriers that cannot meet the requirements for receiving growth numbering resources, but can demonstrate an actual need for additional numbering resources, may seek a waiver of our rules. We have, in the past, granted waivers to carriers demonstrating a need for growth numbering resources in instances where they were unable to get them under our rules or state-established requirements.<sup>403</sup> In most instances, these carriers had received a specific customer request for a large block of numbers, or were experiencing a spike in new business that current inventories could not accommodate.

187. Some commenting parties suggest that we take further steps to create an explicit “safety valve” that will allow carriers to obtain needed numbering resources in instances where they are unable to meet the utilization threshold in a given rate center.<sup>404</sup> Some carriers contend that a rate-center based threshold sometimes cannot be met even though they need additional numbering resources because, for example, they have multiple switches within a rate center, but are unable readily to share numbering resources among those switches. Other carriers state that their utilization rate may be artificially low because the calculation does not take into account *intermediate numbers* that the carrier must make available to other carriers but which are unavailable for use by the carrier to provide service to customers.<sup>405</sup>

188. In the *Second Report and Order*, we decline to depart from our rule requiring

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<sup>402</sup> 47 U.S.C. § 251(f).

<sup>403</sup> See Letter from Yog R. Varma, Deputy Chief, Common Carrier Bureau, to Ronald Conners, Director, North American Numbering Plan Administrator, dated June 6, 2000 (DA 00-1247); Letter from Yog R. Varma, Deputy Chief, Common Carrier Bureau, to Ronald Conners, Director, North American Numbering Plan Administrator, dated April 7, 1999 (DA 99-663); Letter from Yog R. Varma, Deputy Chief, Common Carrier Bureau, to Ronald Conners, Director, North American Numbering Plan Administrator, dated March 12, 1999 (DA 99-505).

<sup>404</sup> See, e.g., AT&T Comments at 2, 5; California Commission Comments at 5; CompTel Comments at 3-4; CTIA Comments at 11; GTE Comments at 9; Maine Commission Comments at 3-4; MediaOne Comments at 6; Missouri Commission Comments at 6; Pennsylvania Consumer Advocate Comments at 16; PCIA Comments at 4; SBC Comments at 9-10; Sprint Comments at 3-4.

<sup>405</sup> See AT&T Comments at 5; PCIA Comments at 7-11; see also 47 C.F.R. § 20.12(B) (requiring CMRS carriers to permit unrestricted resale of its service).

calculation of the utilization threshold on a rate-center basis.<sup>406</sup> Similarly, we decline to reconsider the manner in which we calculate carrier utilization levels.<sup>407</sup> Notwithstanding these decisions, we recognize the possibility that certain conditions may prevent carriers from meeting the rate center-based utilization threshold when they actually need additional numbers, for example, to meet a specific customer request, although we have limited data on the extent of the problem. We therefore seek comment on the need to establish a “safety valve” apart from the general waiver process to allow carriers that do not meet the utilization threshold in a given rate center to obtain additional numbering resources.

189. Specifically, we seek data on the extent to which this problem exists (especially empirical data). We also seek comment on possible solutions, including intra-company and intra-rate center pooling or porting of unassigned numbers among switches, as well as the form a possible “safety valve” mechanism might take. For example, we seek comment on whether the NANPA or state commissions should be given the authority to decide on requests for waiver of the utilization threshold requirement in certain narrowly defined instances. Proposals to adopt a “safety valve” should include specific criteria for determining when a waiver is warranted. Further, we seek comment on how any proposed “safety valve” mechanism would be consistent with other numbering optimization measures. Any recommendation to depart from a rate center-based utilization threshold should propose strategies for optimizing the use of numbering resources assigned to switches with low utilization levels.

## VIII. PROCEDURAL MATTERS

### A. *Ex Parte* Presentations

190. This matter shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.<sup>408</sup> Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a list of the subjects discussed. More than a one or two sentence description of the views and arguments presented is generally required.<sup>409</sup>

### B. Comment Filing Procedures

191. Pursuant to applicable procedures set forth in sections 1.415 and 1.419 of the Commission’s rules, 47 C.F.R. §§1.415 and 1.419, interested parties may file comments on or before February 12, 2001, and reply comments on or before March 5, 2001. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS) or by filing paper copies.<sup>410</sup> Comments filed through the ECFS can be sent as an electronic file via the Internet to

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<sup>406</sup> See *supra* section III.F.

<sup>407</sup> See *supra* section III.E.

<sup>408</sup> See Amendment of 47 C.F.R. 1.1200 et seq. Concerning Ex Parte Presentations in Commission Proceedings, *Report and Order*, 12 FCC Rcd 7348, 7356-57 (1997) (citing 47 C.F.R. § 1.1204(b)(1)).

<sup>409</sup> See 47 C.F.R. § 1.1206(b)(2).

<sup>410</sup> See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24, 121 (1998).

<http://www.fcc.gov/e-file/ecfs.html>. Generally, only one copy of an electronic submission must be filed. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket or rulemaking number, which in this instance is CC Docket No. 99-200; 96-98. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to [ecfs@fcc.gov](mailto:ecfs@fcc.gov), and should include the following words in the body of the message, “get form <your e-mail address>.” A sample form and directions will be sent in reply.

192. Parties who choose to file by paper must file an original and four copies of each filing. All filings must be sent to the Commission’s Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, 445 Twelfth Street, S.W. Room TW A325, Washington, D.C. 20554.

193. Comments and reply comments must include a short and concise summary of the substantive arguments raised in the pleading. Comments and reply comments must also comply with section 1.49 and all other applicable sections of the Commission’s rules.<sup>411</sup> We also direct all interested parties to include the name of the filing party and the date of the filing on each page of their comments and reply comments. All parties are encouraged to utilize a table of contents, regardless of the length of their submission.

194. Parties who choose to file paper should submit their comments on diskette. These diskettes should be submitted to Carmel Weathers, Network Services Division, Common Carrier Bureau, 445 Twelfth Street, S.W., Room 6-B153, Washington, D.C. 20554. Such submissions should be on a 3.5-inch diskette formatted in an IBM compatible format using Word for Windows or compatible software. The diskette should be accompanied by a cover letter and should be submitted in “read only” mode. The diskette should be clearly labeled with the commenter’s name, proceeding (including the docket number), type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette.

195. Regardless of whether parties choose to file electronically or by paper, parties should also file one copy of any documents filed in this docket with the Commission’s copy contractor, International Transcription Services, Inc., 1231 20th Street, N.W., Washington, D.C. 20554. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center, 445 Twelfth Street, S.W. Washington, D.C. 20554.

### **C. Initial Regulatory Flexibility Analysis**

196. As required by the Regulatory Flexibility Act (RFA), 5 U.S.C. § 603, an Initial Regulatory Flexibility Analysis (IRFA) was incorporated into the *Notice* and a second IRFA was incorporated into the *Further Notice*. The Commission sought written public comment on the proposals in the *Notice* and the *Further Notice*, including the IRFAs.<sup>412</sup> Appendix B sets forth the Final Regulatory Flexibility Analysis for the *Second Report and Order*.

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<sup>411</sup> See 47 C.F.R. § 1.49.

<sup>412</sup> 5 U.S.C. § 603(a).

**D. Final Paperwork Reduction Analysis**

197. This *Second Report and Order* contains some new information collections, which will be submitted to OMB for approval, as prescribed by the Paperwork Reduction Act.

**E. Second Further Notice Initial Paperwork Reduction Act Analysis**

198. This *Second Further Notice* contains either a proposed or modified information collection. As part of its continuing effort to reduce paperwork burdens, we invite the general public and the Office of Management and Budget (OMB) to take this opportunity to comment on the information collections contained in this *Second Further Notice*, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. Public and agency comments are due at the same time as other comments on this *Second Further Notice*; OMB comments are due 60 days after publication of this *Second Further Notice* in the Federal Register. Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall enhance the quality, utility and clarity of the information collected; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

**IX. ORDERING CLAUSES**

199. Accordingly, IT IS ORDERED that pursuant to Sections 1, 3, 4, 201-205, 251 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 153, 154, 201-205, and 251, this SECOND REPORT AND ORDER is hereby ADOPTED and Part 52 of the Commission's rules ARE AMENDED AND ADOPTED as set forth in the attached Appendix A.

200. IT IS FURTHER ORDERED that section 52.15(f)(1)(vi) of the Commission's rules, 47 C.F.R. § 52.15(f)(1)(vi), is effective upon the date of release of this SECOND REPORT AND ORDER. Section 52.15(h) is effective three months from the date of publication in the Federal Register. All other amendments to sections 52.15 through 52.20 of the Commission's rules as set forth in Appendix A are effective thirty days from the date of publication of this SECOND REPORT AND ORDER in the Federal Register. The action contained herein has been analyzed with respect to the Paperwork Reduction Act of 1995 and found to impose new or modified reporting and/or recordkeeping requirements or burdens on the public. Implementation of these new or modified reporting and/or recordkeeping requirements will be subject to approval by the Office of Management and Budget (OMB) as prescribed by the Act, and will go into effect upon announcement of OMB approval in the Federal Register.

201. IT IS FURTHER ORDERED that the establishment of a five year term for the Thousands-Block Pooling Administrator is effective upon the date of adoption of this SECOND REPORT AND ORDER.

202. IT IS FURTHER ORDERED that pursuant to Sections 1, 3, 4, 201-205, 251 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 153, 154, 201-205, and 251, this SECOND FURTHER NOTICE OF PROPOSED RULEMAKING is hereby ADOPTED.

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

204. IT IS FURTHER ORDERED that the Final Regulatory Flexibility Analysis for this SECOND REPORT AND ORDER, pursuant to the Regulatory Flexibility Act, 5 U.S.C. § 604, is contained in Appendix B.

205. IT IS FURTHER ORDERED that the Initial Regulatory Flexibility Analysis for this SECOND FURTHER NOTICE OF PROPOSED RULEMAKING, pursuant to the Regulatory Flexibility Act, 5 U.S.C. § 603, is contained in Appendix C.

## Appendix A

**Final Rules**

## PART 52 – NUMBERING

## Subpart B – Administration

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

AUTHORITY: Sections 1, 2, 4, 5, 48 Stat. 1066, as amended; 47 U.S.C. § 151, 152, 154, 155 unless otherwise noted. Interpret or apply secs. 3, 4, 201-05, 207-09, 218, 225-7, 251-2, 271 and 332, 48 Stat. 1070, as amended, 1077; 47 U.S.C. 153, 154, 201-205, 207-09, 218, 225-7, 251-2, 271 and 332 unless otherwise noted.

2. Section 52.15 is revised to read as follows:

**§ 52.15 Central office code administration.**

(a) \*\*\*

(b) \*\*\*

(c) \*\*\*

(d) \*\*\*

(e) \*\*\*

(f) \*\*\*

(1) \*\*\*

(i) \*\*\*

(ii) \*\*\*

(iii) \*\*\*

(iv) \*\*\*

(v) \*\*\*

(vi) *Reserved numbers* are numbers that are held by service providers at the request of specific end users or customers for their future use. Numbers held for specific end users or customers for more than 180 days shall not be classified as reserved numbers.



(2) \*\*\*

(3) *Data Collection Procedures.*

(i) \*\*\*

(ii) Reporting shall be by separate legal entity and must include company name, company headquarters address, Operating Company Number (OCN), parent company OCN(s), and the primary type of business in which the reporting carrier is engaged. The term “parent company” refers to the highest related legal entity located within the state for which the reporting carrier is reporting data.

(iii) \*\*\*

(4) \*\*\*

(5) \*\*\*

(6) \*\*\*

(7) \*\*\*

(g) *Applications for Numbering Resources.*

(1) \*\*\*

(2) \*\*\*

(3) *Growth numbering resources.*

(i) \*\*\*

(ii) \*\*\*

(iii) \*\*\*

(iv) The NANPA shall withhold numbering resources from any U.S. carrier that fails to comply with the reporting and numbering resource application requirements established in this part. The NANPA shall not issue numbering resources to a carrier without an OCN. The NANPA must notify the carrier in writing of its decision to withhold numbering resources within ten (10) days of receiving a request for numbering resources. The carrier may challenge the NANPA’s decision to the appropriate state regulatory commission. The state commission may affirm or overturn the NANPA’s decision to withhold numbering

resources from the carrier based on its determination of compliance with the reporting and numbering resource application requirements herein.

(4) *State Access to Applications.* State commissions shall have access to service provider's applications for numbering resources. State commissions should request copies of such applications from the service providers operating within their states, and service providers must comply with state commission requests for copies of numbering resource applications. Carriers that fail to comply with a state commission request for numbering resource application materials shall be denied numbering resources.

(h) *National Utilization Threshold.* All applicants for growth numbering resources shall achieve a 60% utilization threshold, calculated in accordance with paragraph (g)(3)(ii) of this section, for the rate center in which they are requesting growth numbering resources. This 60% utilization threshold shall increase by 5% on June 30, 2002, and annually thereafter until the utilization threshold reaches 75%.

(i) \*\*\*

(j) \*\*\*

(k) *Numbering Audits.*

(1) All telecommunications service providers shall be subject to "for cause" and random audits to verify carrier compliance with Commission regulations and applicable industry guidelines relating to numbering administration.

(2) All telecommunications service providers shall be prepared to demonstrate compliance with Commission regulations and applicable industry guidelines at all times. Service providers found to be in violation of Commission regulations and applicable industry guidelines relating to numbering administration may be subject to enforcement action.

5. Section 52.17 is revised to read as follows:

The B&C Agent shall:

(a) Calculate, assess, bill and collect payments for all numbering administration functions and distribute funds to the NANPA, or other agent designated by the Common Carrier Bureau that performs functions related to numbering administration, on a monthly basis;

(b) \*\*\*;

(c) \*\*\*;

(d) \*\*\*

(e) \*\*\*

(f) \*\*\*

6. Section 52.20 is revised to read as follows:

**§ 52.20 Thousands-block number pooling.**

(a) \*\*\*

(b) \*\*\*

(c) *Donation of thousands-blocks.*

(1) All service providers required to participate in thousands-block number pooling shall donate thousands-blocks with ten percent or less contamination to the thousands-block number pool for the rate center within which the numbering resources are assigned.

(2) All service providers required to participate in thousands-block number pooling shall be allowed to retain at least one thousands-block per rate center, even if the thousands-block is ten percent or less contaminated, as an initial block or footprint block.

(3) \*\*\*

(d) \*\*\*

## Appendix B

**FINAL REGULATORY FLEXIBILITY ANALYSIS**

1. As required by the Regulatory Flexibility Act (RFA),<sup>413</sup> an Initial Regulatory Flexibility Analysis (IRFA) was incorporated into the *Notice of Proposed Rulemaking (Notice)*.<sup>414</sup> The Commission sought written public comment on the proposals in the *Notice*, including comment on the IRFA. In addition, pursuant to 5 U.S.C. § 604, a Final Regulatory Flexibility Analysis (FRFA) was incorporated in the *First Report and Order and Further Notice of Proposed Rulemaking (First Report and Order and Further Notice)*.<sup>415</sup> Also in the *First Report and Order and Further Notice*, pursuant to 5 U.S.C. § 603, was a second IRFA.<sup>416</sup> The Commission sought written public comment on the proposals in the *First Report and Order and Further Notice*, including comment on the second IRFA. No comments specifically addressing the second IRFA are relevant to the matters addressed in this *Second Report and Order*; however, comments received concerning small business issues in general are summarized below. This present FRFA conforms to the RFA.<sup>417</sup>

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

2. In the *First Report and Order and Further Notice*, we sought public comment on (a) what specific utilization threshold carriers, not participating in thousands-block number pooling, should meet in order to request growth numbering resources; (b) whether state commissions should be allowed to set rate-center based utilization thresholds based on Commission-established criteria; (c) whether covered commercial mobile radio services (CMRS) carriers should be required to participate in thousands-block number pooling immediately upon expiration of the Local Number Portability (LNP) forbearance period on November 24, 2002, or whether a transition period should be allowed; and (d) how a market-based allocation system for numbering resources could be implemented. We also sought additional information regarding: (a) cost studies that quantify the incremental costs of thousands-block number pooling; (b) cost studies that quantify shared industry and direct carrier-specific costs of thousands-block number pooling; and (c) cost studies that take into account the cost savings associated with thousands-block number pooling in comparison to the current numbering practices that result in more frequent area code changes.

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<sup>413</sup> 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).

<sup>414</sup> Numbering Resource Optimization, *Notice of Proposed Rulemaking*, 14 FCC Rcd at 10433-34 (1999) (*Notice*).

<sup>415</sup> *First Report and Order and Further Notice of Proposed Rulemaking*, 15 FCC Rcd at 7699-7706, Appendix B (2000) (*First Report and Order and Further Notice*).

<sup>416</sup> *Id.* at 7707-7710, Appendix C.

<sup>417</sup> See 5 U.S.C. § 604.

3. In doing so, we sought to (1) ensure that the limited numbering resources of the North American Numbering Plan (NANP) are used efficiently; (2) protect customers from the expense and inconvenience that result from the implementation of new area codes; (3) forestall the enormous expense that will be incurred from expanding the NANP; and (4) ensure that all carriers have the numbering resources they need to compete in the rapidly growing telecommunications marketplace.

4. In this *Second Report and Order and Second Further Notice*, we continue to develop, adopt and implement a number of strategies to ensure that the numbering resources of the NANP are used efficiently, and that all carriers have the numbering resources they need to compete in the rapidly expanding telecommunications marketplace. In particular, we finalize plans implementing thousands-block number pooling, and also seek comment on additional strategies to increase further the efficiency with which numbering resources are used.

#### **B. *Summary of Significant Issues Raised by Public Comments***

5. Commenters expressed support and opposition to several issues addressed in this *Second Report and Order* that concern small entities. Their opinions are summarized below and, where applicable, discussed in Section E. Other comments filed by small entities which are not addressed in this *Second Report and Order*, such as those relating to carriers' cost recovery mechanisms for thousands-block number pooling and developing markets for numbering resources, will be addressed at a later date.

6. *Geographic Splits and All-Services Area Code Overlays.* One commenter described geographic splits as harmful for small businesses because the phone number plays a critical role in the identity of the business.<sup>418</sup> Geographic splits may cause small businesses to lose customers who are unaware of the phone number change. In addition, small businesses may incur additional costs on advertising materials as a result of an area code change.<sup>419</sup> Thus, all-services area code overlays are strongly preferred by commenters because small businesses would not be exposed to such costs.

7. *Audits.* Commenters generally support "for cause" and random audits.<sup>420</sup> The Small Business Alliance strongly supports "for cause", scheduled and random audits given the rapid depletion of numbering resources.<sup>421</sup> Another commenter supports "for cause" audits, but not random audits.<sup>422</sup>

8. *Mandatory Nationwide Ten-Digit Dialing.* Commenters representing small

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<sup>418</sup> Small Business Alliance for Fair Utility Regulation (Small Business Alliance) Comments at 2.

<sup>419</sup> *Id.* at 2.

<sup>420</sup> Liberty Telecom Comments at 5; PrimeCo Personal Communications, L.P. (PrimeCo) Comments at 16.

<sup>421</sup> Small Business Alliance Comments at 6.

<sup>422</sup> PrimeCo Comments at 16.

businesses support mandatory ten-digit dialing.<sup>423</sup> For example, OPASTCO believes that ten-digit dialing would be less disruptive for customers, and technical modifications would be less expensive.

**C. *Description and Estimate of the Number of Small Entities To Which 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.<sup>424</sup> The RFA defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”<sup>425</sup> The term “small business” has the same meaning as the term “small business concern” under the Small Business Act, unless the Commission has developed one or more definitions that are appropriate for its activities.<sup>426</sup> Under the Small Business Act, a “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).<sup>427</sup>

10. The most reliable source of information regarding the total numbers of certain common carrier and related providers nationwide, as well as the number of commercial wireless entities, appears to be data the Commission publishes in its *Trends in Telephone Service* report<sup>428</sup> and the data in its *Carrier Locator: Interstate Service Providers Report*.<sup>429</sup> These carriers include, *inter alia*, local exchange carriers, wireline carriers and service providers, interexchange carriers, competitive access providers, operator service providers, pay telephone operators, providers of telephone service, providers of telephone exchange service, and resellers.

11. The SBA has defined establishments engaged in providing "Radiotelephone Communications" and "Telephone Communications, Except Radiotelephone" to be small

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<sup>423</sup> See Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO) Comments at 6; Small Business Alliance Comments at 9.

<sup>424</sup> 5 U.S.C. § 603(b)(3).

<sup>425</sup> 5 U.S.C. § 601(6).

<sup>426</sup> 5 U.S.C. § 601(3) (incorporating by reference the definition of “small business concern” in 15 U.S.C. § 632). Pursuant to the RFA, 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 definitions in the Federal Register.” 5 U.S.C. § 601(3).

<sup>427</sup> 15 U.S.C. § 632.

<sup>428</sup> FCC, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 19.3 (March 2000).

<sup>429</sup> See FCC, Carrier Locator: Interstate Service Providers (October 2000) (*Locator*). This report lists 4,822 companies that provided interstate telecommunications service as of December 31, 1999 and was compiled using information from FCC Form 499-A Telecommunications Reporting Worksheets filed by carriers. *Id.* at 1.

businesses when they have no more than 1,500 employees.<sup>430</sup> Below, we discuss the total estimated number of telephone companies falling within those two categories and the number of small businesses in each, and attempt to refine further those estimates to correspond with the categories of telephone companies that are commonly used under our rules.

12. We have included small incumbent local exchange carriers (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."<sup>431</sup> 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.<sup>432</sup> We have therefore included small incumbent LECs in this RFA analysis, although we emphasize that this RFA action has no effect on FCC analyses and determinations in other, non-RFA contexts.

13. *Total Number of Telephone Companies Affected.* The U.S. Bureau of the Census (Census Bureau) reports that, at the end of 1992, there were 3,497 firms engaged in providing telephone services, as defined therein, for at least one year.<sup>433</sup> This number contains a variety of different categories of carriers, including local exchange carriers, interexchange carriers, competitive access providers, cellular carriers, mobile service carriers, operator service providers, pay telephone operators, covered specialized mobile radio providers, and resellers. It seems certain that some of these 3,497 telephone service firms may not qualify as small entities or small incumbent LECs because they are not "independently owned and operated."<sup>434</sup> For example, a personal communications services (PCS) provider that is affiliated with an interexchange carrier having more than 1,500 employees would not meet the definition of a small business. It is reasonable to conclude that fewer than 3,497 telephone service firms are small entity telephone service firms or small incumbent LECs that may be affected by the proposed regulations, herein adopted.

14. *Wireline Carriers and Service Providers.* The SBA has developed a definition of

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<sup>430</sup> 13 CFR § 121.201, Standard Industrial Classification (SIC) codes 4812 and 4813. *See also* Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual* (1987).

<sup>431</sup> 5 U.S.C. § 601(3).

<sup>432</sup> 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) (Small Business Act); 5 U.S.C. § 601(3) (RFA). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. 13 CFR § 121.102(b). Since 1996, out of an abundance of caution, the Commission has included small incumbent LECs in its regulatory flexibility analyses. *See, e.g., Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket, 96-98, First Report and Order, 11 FCC Rcd 15499, 16144-45 (1996), 61 FR 45476 (Aug. 29, 1996).

<sup>433</sup> U.S. Department of Commerce, Bureau of the Census, *1992 Census of Transportation, Communications, and Utilities: Establishment and Firm Size*, at Firm Size 1-123 (1995) (Census Bureau).

<sup>434</sup> *See generally* 15 U.S.C. § 632(a)(1).

small entities for telephone communications companies except radiotelephone (wireless) companies. The Census Bureau reports that there were 2,321 such telephone companies in operation for at least one year at the end of 1992.<sup>435</sup> According to the SBA's definition, a small business telephone company other than a radiotelephone company is one employing no more than 1,500 persons.<sup>436</sup> All but 26 of the 2,321 non-radiotelephone companies listed by the Census Bureau were reported to have fewer than 1,000 employees. Thus, even if all 26 of those companies had more than 1,500 employees, there would still be 2,295 non-radiotelephone companies that might qualify as small entities or small incumbent LECs. We do not have data specifying the number of these carriers that are not independently owned and operated, and thus are unable at this time to estimate with greater precision the number of wireline carriers and service providers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that fewer than 2,295 small telephone communications companies other than radiotelephone companies are small entities or small incumbent LECs that may be affected by the proposed regulations, herein adopted.

15. *Local Exchange Carriers.* Neither the Commission nor the SBA has developed a definition for small LECs. The closest applicable definition under the SBA rules is for telephone communications companies other than radiotelephone (wireless) companies.<sup>437</sup> According to the most recent *Telecommunications Industry Revenue* data, 1,348 incumbent carriers reported that they were engaged in the provision of local exchange services.<sup>438</sup> We do not have data specifying the number of these carriers that are either dominant in their field of operations, are not independently owned and operated, or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of LECs that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that fewer than 1,348 providers of local exchange service are small entities or small incumbent LECs that may be affected by the proposed regulations, herein adopted.

16. *Interexchange Carriers.* Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to providers of interexchange services (IXCs). The closest applicable definition under the SBA rules is for telephone communications companies other than radiotelephone (wireless) companies.<sup>439</sup> According to the most recent *Trends in Telephone Service* data, 171 carriers reported that they were engaged in the provision of interexchange services.<sup>440</sup> We do not have data specifying the number of these carriers that

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<sup>435</sup> Census Bureau, *supra*, at Firm Size 1-123.

<sup>436</sup> 13 CFR § 121.201, SIC code 4813.

<sup>437</sup> *Id.*

<sup>438</sup> FCC, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 19.3 (March 2000).

<sup>439</sup> 13 CFR § 121.201, SIC code 4813.

<sup>440</sup> FCC, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 19.3 (March 2000).



are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of IXC's that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are less than 171 small entity IXC's that may be affected by the proposed regulations, herein adopted.

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17. *Competitive Access Providers.* Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to competitive access service providers (CAPs). The closest applicable definition under the SBA rules is for telephone communications companies other than radiotelephone (wireless) companies.<sup>441</sup> According to the most recent *Trends in Telephone Service* data, 212 CAP/CLECs carriers and 10 other LECs reported that they were engaged in the provision of competitive local exchange services.<sup>442</sup> We do not have data specifying the number of these carriers that are not independently owned and operated, or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of CAPs that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are less than 212 small entity CAPs and 10 other LECs that may be affected by the proposed regulations, herein adopted.

18. *Pay Telephone Operators.* Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to pay telephone operators. The closest applicable definition under SBA rules is for telephone communications companies other than radiotelephone (wireless) companies.<sup>443</sup> According to the most recent *Trends in Telephone Service* data, 615 carriers reported that they were engaged in the provision of pay telephone services.<sup>444</sup> We do not have data specifying the number of these carriers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of pay telephone operators that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are less than 615 small entity pay telephone operators that may be affected by the proposed regulations, herein adopted.

19. *Resellers (including debit card providers).* Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to resellers. The closest applicable SBA definition for a reseller is a telephone communications company other than radiotelephone (wireless) companies.<sup>445</sup> According to the most recent *Trends in Telephone Service* data, 388 toll and 54 local entities reported that they were engaged in the resale of

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<sup>441</sup> 13 CFR § 121.201, SIC code 4813.

<sup>442</sup> FCC, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 19.3 (March 2000).

<sup>443</sup> 13 CFR § 121.201, SIC code 4813.

<sup>444</sup> FCC, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 19.3 (March 2000).

<sup>445</sup> 13 CFR § 121.201, SIC code 4813.

telephone service.<sup>446</sup> We do not have data specifying the number of these carriers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of resellers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are fewer than 388 small toll entity resellers and 54 small local entity resellers that may be affected by the proposed regulations, herein adopted.

20. *Wireless Telephony and Paging and Messaging.* Wireless telephony includes cellular, PCS or specialized mobile radio (SMR) service providers. Neither the Commission nor the SBA has developed a definition of small entities applicable to cellular licensees, or to providers of paging and messaging services. The closest applicable SBA definition for a reseller is a telephone communications company other than radiotelephone (wireless) companies.<sup>447</sup> According to the most recent *Locator* data, 806 carriers reported that they were engaged in the provision of wireless telephony and 427 companies reported that they were engaged in the provision of paging and messaging service.<sup>448</sup> We do not have data specifying the number of these carriers that are not independently owned or operated, and thus are unable at this time to estimate with greater precision the number that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are fewer than 732 small carriers providing wireless telephony services and fewer than 137 small companies providing paging and messaging services that may be affected by the proposed regulations, herein adopted.

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

21. *Audit Program.* In the *Notice*, we identified auditing as the only legitimate method for verifying the validity and accuracy of utilization data submitted by users of numbering resources.<sup>449</sup> The *Second Report and Order* approves the Commission's proposal to supplement the need verification measures and data collection requirements, adopted in the *First Report and Order*, with a comprehensive audit program. The audits, which include "for cause" and random audits, will be used to verify carrier compliance with federal rules and orders and industry guidelines. In addition, the Commission declines to provide a specific cost recovery mechanism for carrier-specific auditing costs, including costs related to providing documentation to the auditor.<sup>450</sup> We believe that such costs are minimal and do not significantly affect a carrier's ability to compete. Nevertheless, even if such costs impose a burden on small carriers, the benefits of monitoring numbering resource use, thereby enabling us to predict accurately exhaustion of numbering resources, would far outweigh those costs.

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<sup>446</sup> FCC, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 19.3 (March 2000).

<sup>447</sup> 13 C.F.R. § 121.201, SIC code 4813.

<sup>448</sup> *Locator* at 1-2.

<sup>449</sup> *See supra* para. 85 (citing *Notice*, 14 FCC Rcd 10358, para. 83).

<sup>450</sup> *See supra* para. 99.

22. *“For Cause” Auditing Requests.* To request a “for cause” audit, the North America Numbering Plan Administrator (NANPA), the Pooling Administrator or a state commission must draft a written request to the Auditor stating the reason for the request, such as misleading or inaccurate data, as well as supporting documentation evidencing such grounds for the audit. The audits will be performed by the Commission’s auditors in the Audits Branch of the Accounting Safeguards Division in the Common Carrier Bureau, or other designated agents.

23. *Numbering Resource Application Materials.* State commissions should request copies of carriers’ applications for initial and growth numbering resources directly from the carriers, instead of NANPA or the Pooling Administrator. Such an approach avoids a costly burden on the national numbering administrator while placing only a minimal burden on carriers because small and large carriers merely need to duplicate applications previously submitted to the NANPA. Carriers receiving numbering resources must comply with state requests and will be denied numbering resources for noncompliance.

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

24. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.<sup>451</sup>

25. *Utilization Threshold.* We require carriers to utilize 60% of their existing inventory of numbers before receiving additional resources within a particular rate center. We find that 60% is an appropriate threshold level because, for example, according to the data reported to NANPA, average industry utilization levels range from approximately 45%-65%. We considered adopting a 50% threshold as an alternative, however, we believe that a 60% utilization threshold will more successfully encourage carriers to use numbers from existing inventories while making such utilization achievable for carriers that need additional numbering resources. The threshold will increase by 5% each year starting June 30, 2002, to a maximum threshold of 75%. We establish these small yearly percentage increases in order to allow carriers, especially small carriers, sufficient time to maximize their utilization levels.

26. *Thousands-Block Number Pooling for Covered CMRS Carriers.* CMRS carriers will be required to participate in thousands-block number pooling once the LNP forbearance period expires on November 24, 2002. No transition period between the CMRS carriers’ LNP implementation and participation in mandatory number pooling will be granted because such carriers have almost two years’ advance notice of the pooling requirement, and technical

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<sup>451</sup> 5 U.S.C. § 603(c).

modifications for pooling and LNP are largely similar. We believe that given the deadline date for compliance, carriers, including small businesses, should have ample time to prepare for these changes without the need for a transition period.

27. *Geographic Splits and All-Services Area Code Overlays.* We considered whether to impose additional rules on state commissions or to leave the development of any rules to the states. We have decided that additional rules or guidelines will not be enumerated at the federal level with regard to geographic splits or all-services overlays. We believe that state commissions should be allowed to choose an appropriate measure, including geographic splits or overlays, for area code relief. However, state commissions must ensure that, in implementing area code relief, carriers receive numbers on an equitable basis and that such numbers are available in a timely and efficient manner. Such an approach allows state commissions to consider the surrounding local circumstances, including the needs of small, local businesses, in deciding whether or how to provide area code relief.

28. In the alternative, we could have mandated state commissions to impose all-services area code overlays as the primary method for area code relief. As discussed in Section B, small businesses that incur additional costs related to geographic splits may have benefited from this alternative proposal. However, the Commission believes that states should have the flexibility to determine the best method for area code relief given their unique knowledge of their geographic region.

29. In addition, we will continue to require ten-digit dialing within and throughout the geographic area covered by an all-services overlay. Such a requirement ensures that no dialing disparity exists to disadvantage competitors, including small businesses.

30. *Audits.* A comprehensive audit program will be established to verify carriers' actual need for numbering resources, in accordance with federal rules and industry guidelines. As discussed in Section B, small entity commenters generally support audits. This audit program, which will consist of "for cause" and random audits, should help to determine whether carriers accurately record data or inconspicuously stockpile numbers. Failure to comply with auditor requests will result in penalties. For small carriers, audits will help to ensure that large businesses are not hoarding numbers or otherwise preventing small carriers from gaining access to numbering resources. In addition, costs should not impose a significant burden on small or large carriers. However, the benefits of being able to rely on carrier data in order to monitor numbering resource use and to predict accurately exhaustion of numbering resources would far outweigh any significant costs incurred by small carriers.

31. *Mandatory Nationwide Ten-Digit Dialing.* At the present time, we decline to adopt nationwide mandatory ten-digit dialing as a method of area code relief. Although commenters, including small entities,<sup>452</sup> supported the adoption of this measure, the burdens of implementation at this time outweigh the benefits. Such a transition would require technical modifications by both large and small carriers, at a potentially expensive cost. In addition, ten-digit dialing adds to consumer inconvenience and confusion. At this time, the need for area code

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<sup>452</sup> See, e.g., OPASTCO Comments at 6; Small Business Alliance Comments at 8-9.

relief does not outweigh these burdens on carriers.

32. *Reconsideration of Reserved Number Period.* In the *First Report and Order*, we decided to allow numbers to remain in reserved status for a maximum of 45 days.<sup>453</sup> In this *Second Report and Order*, we extend the period for reserving numbers to a maximum of 180 days.<sup>454</sup> We considered extending the period to 12 months, but we believe that, at the present time, 180 days is a sufficient time period to allow small and large carriers to address their customers' needs while mitigating the effects of such reservations on the depletion of numbering resources. It also allows small and large business customers to plan for implementation and/or expansion of telephone service. For carriers requesting more time to reserve numbers, we are considering a proposal by the NANC to charge a fee for extending the reservation period and are seeking comment on this proposal in the *Second Further Notice*.

33. *Report to Congress:* The Commission will send a copy of this *Second Report and Order*, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act.<sup>455</sup> In addition, the Commission will send a copy of this *Second Report and Order*, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of this *Second Report and Order* and FRFA (or summaries thereof) will also be published in the Federal Register.<sup>456</sup>

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<sup>453</sup> *First Report and Order*, 15 FCC Rcd at 7587, 7588, paras. 22-23.

<sup>454</sup> *See supra* para. 114.

<sup>455</sup> *See* 5 U.S.C. § 801(a)(1)(A).

<sup>456</sup> *See* 5 U.S.C. § 604(b).

## Appendix C

**INITIAL REGULATORY FLEXIBILITY ANALYSIS**

1. As required by the Regulatory Flexibility Act (RFA),<sup>457</sup> the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in this *Second Report and Order, Order on Reconsideration in CC Docket 96-98 and CC Docket 99-200, and Second Further Notice in CC Docket No. 99-200 (Second Further Notice)*. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the *Second Further Notice* provided above in Section VII. The Commission will send a copy of the *Second Further Notice*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).<sup>458</sup> In addition, the *Second Further Notice* and the IRFA (or summaries thereof) will be published in the Federal Register.<sup>459</sup>

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

2. In the Communications Act of 1934, as amended by the Telecommunications Act of 1996, Congress gave the Commission plenary jurisdiction over the North American Numbering Plan (NANP) within the United States.<sup>460</sup> In discharging our authority over numbering resources, we seek to balance two competing goals. First, we must ensure that carriers have the numbering resources that they need to compete and bring new and innovative services to the consumer marketplace. Second, 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.

3. The Commission is issuing this *Second Further Notice* to seek public comment on (a) the relative advantages of service-specific and technology-specific overlays as opposed to all-services overlays, and the conditions under which service-specific and technology-specific overlays, if adopted, should be implemented in order to promote competitive equity, maximize efficient use of numbering resources, and minimize customer inconvenience; (b) 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; (c) whether carriers should be held accountable when related carriers fail to comply with reporting requirements; (d) whether state commissions should be granted direct, password-protected access to the mandatory reporting data received by the North American Numbering Plan Administrator (NANPA); (e) whether we

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<sup>457</sup> 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).

<sup>458</sup> See 5 U.S.C. § 603(a).

<sup>459</sup> See *id.*

<sup>460</sup> 47 U.S.C. § 251(e)(1).

should allow extensions (for a fee or otherwise) on the 180-day reservation period for numbers; (f) what enforcement mechanisms should be applied when a carrier either fails to cooperate with an audit, or fails to resolve identified areas of noncompliance; (g) whether state commissions should be allowed to conduct audits; (h) the development of a market-based allocation system for numbering resources; (i) the costs associated with thousands-block number pooling; (j) whether the Commission should require carriers to acquire Local Number Portability (LNP) capabilities for the purpose of participating in thousands-block number pooling; and (k) whether a “safety valve” should be established for carriers that need additional numbering resources, but fail to meet the utilization threshold in a given rate center.

4. Receiving comments on such matters will help us to examine and consider ways to achieve our objectives to use numbering resources more efficiently in order to mitigate potential customer cost and inconvenience of implementing new area codes and delaying costly expansion of the NANP. For carriers, more numbering resources should encourage competition in a growing telecommunications market.

### **B. *Legal Basis***

5. The proposed action is authorized under Sections 1, 3, 4, 201-205, 251 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 153, 154, 201-205, and 251.<sup>461</sup>

### **C. *Description and Estimate of the Number of Small Entities To Which the Proposed Rules Will Apply***

6. The RFA directs agencies to provide a description of, and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.<sup>462</sup> The RFA defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”<sup>463</sup> The term “small business” has the same meaning as the term “small business concern” under the Small Business Act, unless the Commission has developed one or more definitions that are appropriate for its activities.<sup>464</sup> Under the Small Business Act, a “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.<sup>465</sup>

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<sup>461</sup> 47 U.S.C. §§ 151, 153, 154, 201-205, and 251.

<sup>462</sup> 5 U.S.C. § 603(b)(3).

<sup>463</sup> 5 U.S.C. § 601(6).

<sup>464</sup> 5 U.S.C. § 601(3) (incorporating by reference the definition of “small business concern” in 15 U.S.C. § 632). Pursuant to the RFA, 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 definitions in the Federal Register.” 5 U.S.C. § 601(3).

<sup>465</sup> 15 U.S.C. § 632.

7. The most reliable source of information regarding the total numbers of certain common carrier and related providers nationwide, as well as the number of commercial wireless entities, appears to be data the Commission publishes in its *Trends in Telephone Service* report<sup>466</sup> and the data in its *Carrier Locator: Interstate Service Providers Report*.<sup>467</sup> However, in a recent news release, the Commission indicated that there are 4,144 interstate carriers.<sup>468</sup> These carriers include, *inter alia*, local exchange carriers, wireline carriers and service providers, interexchange carriers, competitive access providers, operator service providers, pay telephone operators, providers of telephone service, providers of telephone exchange service, and resellers.

8. The SBA has defined establishments engaged in providing "Radiotelephone Communications" and "Telephone Communications, Except Radiotelephone" to be small businesses when they have no more than 1,500 employees.<sup>469</sup> Below, we discuss the total estimated number of telephone companies falling within the two categories and the number of small businesses in each, and we then attempt to refine further those estimates to correspond with the categories of telephone companies that are commonly used under our rules.

9. We have included small incumbent local exchange carriers (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."<sup>470</sup> 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.<sup>471</sup> 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.

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<sup>466</sup> FCC, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 19.3 (March 2000).

<sup>467</sup> See FCC, *Carrier Locator: Interstate Service Providers* (October 2000) (*Locator*). This report lists 4,822 companies that provided interstate telecommunications service as of December 31, 1999 and was compiled using information from FCC Form 499-A Telecommunications Reporting Worksheets filed by carriers. *Id.* at 1.

<sup>468</sup> FCC, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 19.3 (March 2000).

<sup>469</sup> 13 CFR § 121.201, Standard Industrial Classification (SIC) codes 4812 and 4813. See also Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual* (1987).

<sup>470</sup> 5 U.S.C. § 601(3).

<sup>471</sup> 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) (Small Business Act); 5 U.S.C. § 601(3) (RFA). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. 13 CFR 121.102(b). Since 1996, out of an abundance of caution, the Commission has included small incumbent LECs in its regulatory flexibility analyses. See, *e.g.*, *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket, 96-98, First Report and Order, 11 FCC Rcd 15499, 16144-45 (1996), 61 FR 45476 (Aug. 29, 1996).



10. *Total Number of Telephone Companies Affected.* The U.S. Bureau of the Census (Census Bureau) reports that, at the end of 1992, there were 3,497 firms engaged in providing telephone services, as defined therein, for at least one year.<sup>472</sup> This number contains a variety of different categories of carriers, including local exchange carriers, interexchange carriers, competitive access providers, cellular carriers, mobile service carriers, operator service providers, pay telephone operators, covered specialized mobile radio providers, and resellers. It seems certain that some of these 3,497 telephone service firms may not qualify as small entities or small incumbent LECs because they are not "independently owned and operated."<sup>473</sup> For example, a personal communications system provider that is affiliated with an interexchange carrier having more than 1,500 employees would not meet the definition of a small business. It is reasonable to conclude that fewer than 3,497 telephone service firms are small entity telephone service firms or small incumbent LECs that may be affected by the proposed regulations.

11. *Wireline Carriers and Service Providers.* The SBA has developed a definition of small entities for telephone communications companies except radiotelephone (wireless) companies. The Census Bureau reports that there were 2,321 such telephone companies in operation for at least one year at the end of 1992.<sup>474</sup> According to the SBA's definition, a small business telephone company other than a radiotelephone company is one employing no more than 1,500 persons.<sup>475</sup> All but 26 of the 2,321 non-radiotelephone companies listed by the Census Bureau were reported to have fewer than 1,000 employees. Thus, even if all 26 of those companies had more than 1,500 employees, there would still be 2,295 non-radiotelephone companies that might qualify as small entities or small incumbent LECs. We do not have data specifying the number of these carriers that are not independently owned and operated, and thus are unable at this time to estimate with greater precision the number of wireline carriers and service providers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that fewer than 2,295 small telephone communications companies other than radiotelephone companies are small entities or small incumbent LECs that may be affected by the proposed regulations.

12. *Local Exchange Carriers.* Neither the Commission nor the SBA has developed a definition for small LECs. The closest applicable definition under the SBA rules is for telephone communications companies other than radiotelephone (wireless) companies.<sup>476</sup> According to the most recent *Telecommunications Industry Revenue* data, 1,348 incumbent carriers reported that they were engaged in the provision of local exchange services.<sup>477</sup> We do not have data

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<sup>472</sup> U.S. Department of Commerce, Bureau of the Census, *1992 Census of Transportation, Communications, and Utilities: Establishment and Firm Size*, at Firm Size 1-123 (1995) (Census Bureau).

<sup>473</sup> See generally 15 U.S.C. § 632(a)(1).

<sup>474</sup> Census Bureau, *supra*, at Firm Size 1-123.

<sup>475</sup> 13 CFR § 121.201, SIC code 4813.

<sup>476</sup> *Id.*

<sup>477</sup> FCC, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 19.3 (March 2000).

specifying the number of these carriers that are either dominant in their field of operations, are not independently owned and operated, or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of LECs that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that fewer than 1,348 providers of local exchange service are small entities or small incumbent LECs that may be affected by the proposed regulations.

13. *Interexchange Carriers.* Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to providers of interexchange services (IXCs). The closest applicable definition under the SBA rules is for telephone communications companies other than radiotelephone (wireless) companies.<sup>478</sup> According to the most recent *Trends in Telephone Service* data, 171 carriers reported that they were engaged in the provision of interexchange services.<sup>479</sup> We do not have data specifying the number of these carriers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of IXCs that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are less than 171 small entity IXCs that may be affected by the proposed regulations.

14. *Competitive Access Providers.* Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to competitive access services providers (CAPs). The closest applicable definition under the SBA rules is for telephone communications companies other than radiotelephone (wireless) companies.<sup>480</sup> According to the most recent *Trends in Telephone Service* data, 212 CAP carriers and Competitive Local Exchange Carriers (CLEC) and 10 other LECs reported that they were engaged in the provision of competitive local exchange services.<sup>481</sup> We do not have data specifying the number of these carriers that are not independently owned and operated, or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of CAPs that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are less than 212 small entity CAPs and 10 other LECs that may be affected by the proposed regulations.

15. *Pay Telephone Operators.* Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to pay telephone operators. The closest applicable definition under SBA rules is for telephone communications companies other than radiotelephone (wireless) companies.<sup>482</sup> According to the most recent *Trends in Telephone*

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<sup>478</sup> 13 CFR § 121.201, SIC code 4813.

<sup>479</sup> FCC, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 19.3 (March 2000).

<sup>480</sup> 13 CFR § 121.201, SIC code 4813.

<sup>481</sup> FCC, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 19.3 (March 2000).

<sup>482</sup> 13 CFR § 121.201, SIC code 4813.

*Service* data, 615 carriers reported that they were engaged in the provision of pay telephone services.<sup>483</sup> We do not have data specifying the number of these carriers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of pay telephone operators that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are less than 615 small entity pay telephone operators that may be affected by the proposed regulations.

16. *Resellers (including debit card providers).* Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to resellers. The closest applicable SBA definition for a reseller is a telephone communications company other than radiotelephone (wireless) companies.<sup>484</sup> According to the most recent *Trends in Telephone Service* data, 388 toll and 54 local entities reported that they were engaged in the resale of telephone service.<sup>485</sup> We do not have data specifying the number of these carriers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of resellers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are fewer than 388 small toll entity resellers and 54 small local entity resellers that may be affected by the proposed regulations.

17. *Wireless Telephony and Paging and Messaging.* Wireless telephony includes cellular, personal communications service (PCS) or specialized mobile radio (SMR) service providers. Neither the Commission nor the SBA has developed a definition of small entities applicable to cellular licensees, or to providers of paging and messaging services. The closest applicable SBA definition for a reseller is a telephone communications company other than radiotelephone (wireless) companies.<sup>486</sup> According to the most recent *Locator* data, 806 carriers reported that they were engaged in the provision of wireless telephony and 427 companies reported that they were engaged in the provision of paging and messaging service.<sup>487</sup> We do not have data specifying the number of these carriers that are not independently owned or operated, and thus are unable at this time to estimate with greater precision the number that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are fewer than 732 small carriers providing wireless telephony services and fewer than 137 small companies providing paging and messaging services that may be affected by the proposed regulations.

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<sup>483</sup> FCC, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 19.3 (March 2000).

<sup>484</sup> 13 CFR § 121.201, SIC code 4813.

<sup>485</sup> FCC, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 19.3 (March 2000).

<sup>486</sup> 13 C.F.R. § 121.201, SIC code 4813.

<sup>487</sup> *Locator* at 1-2.

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

18. In this *Second Further Notice* we seek comment on whether to implement a market-based allocation system for numbering resources, and on the types of reporting requirements needed to ensure that secondary markets, if implemented, remain open, competitive and effective. Data from such reports should allow us to determine the success of reallocating numbering resources in secondary markets. We also seek comment on whether carriers should be required to file information on purchase or lease prices as well as the quantities involved in the transaction. Commenters should discuss whether such reporting requirements would pose an unreasonable burden on carriers or NANPA.

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

19. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.<sup>488</sup>

20. *Service-Specific and Technology-Specific Overlays.* Due to the numbering crisis, we are reconsidering our prohibition against using service-specific and technology-specific overlays as methods for area code relief. The prohibition stems from our belief that these overlays could pose a distinct competitive disadvantage on, for example, carriers with customers who would suffer the cost and inconvenience of surrendering existing numbers, changing over to new numbers, and informing callers of the new numbers. Some commenters to the *Notice* advocated that these overlays would address the demand for numbers as well as receive substantial public support, especially as a means for providing area code relief. We seek comment, especially from small entities, on when and if these overlays should occur and if so, the conditions under which service-specific and technology-specific overlays should be implemented in order to promote competitive equity, maximize the efficient use of numbering resources, and minimize customer inconvenience. In determining appropriate conditions for implementing these overlays, we will examine how such conditions would impact small businesses.

21. *The Rate Center Problem.* In this *Second Further Notice* we seek comment on rate center consolidation. We find that rate center consolidation would be a potential solution for relieving number exhaust because the existence of multiple rate centers in each Numbering Plan Area (NPA), as well as demand by most carriers to have numbering resources in each rate center

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<sup>488</sup> 5 U.S.C. § 603(c).

in which they operate, greatly contribute to number exhaust. However, because of the connection between rate centers and the rating and routing of calls, such consolidation may be difficult for carriers, particularly incumbent LECs. Thus, we seek comment on ways to separate the connection between rate centers, call rating and routing. We also seek comment from industry and state commissions regarding the effects of past and present rate center consolidation efforts on carriers as well as the benefits and costs of such consolidation in the top 100 metropolitan statistical areas (MSAs). Such consolidation efforts should significantly impact numbering resources by providing small and large businesses with access to more numbers. In responding to this issue, commenters should also consider alternatives to rate center consolidation, such as extending local calling areas.

22. *Liability of Related Carriers.* In the *First Report and Order* the Commission established new semiannual reporting requirements to obtain more consistent, accurate and complete reporting of number resource utilization and forecast data. We tentatively conclude in this *Second Further Notice* that carriers should, in certain instances, have numbering resources withheld when related carriers fail to comply with our mandatory reporting requirements and, as a result, are denied numbers resources. We seek comment on how to identify the relationships (*i.e.*, the existence of parent and sister companies) among reporting carriers, and what geographic limitations should be placed on those relationships in determining liability.

23. *Fee for Number Reservations.* In this *Second Further Notice*, we seek further comment on the NANC's proposal to allow unlimited reservations of numbers on a month-to-month basis. We seek comment on whether unlimited reservations of numbers are necessary, or, in the alternative, whether there should be a constraint on the time period that numbers can be reserved. Commenters should also discuss the viability and reasonableness of assessing a fee for reserved numbers on carriers and permitting carriers to recover such costs from end users for whom numbers may be reserved. Such a fee could provide appropriate incentives in this context. We encourage comments regarding any unique small business needs related to these alternatives for number reservations, and the disproportionate impact, if any, of fees on small businesses.

24. *Audit Compliance and Enforcement.* In the *Second Report and Order*, we established a comprehensive audit program to verify carrier compliance with federal rules and orders and industry guidelines. In this *Second Further Notice*, we seek comment on what appropriate enforcement mechanisms should be employed to address instances in which a carrier either fails to cooperate with an audit, or fails to rectify identified areas of noncompliance. We tentatively conclude that, at a minimum, carriers that fail to cooperate with the auditor should be denied numbering resources. The imposition of penalties would encourage both large and small carriers to comply with auditors' requests.

25. *State Authority to Perform Audits.* In addition to maintaining a national audit program, we seek comment on whether state commissions, given their extensive involvement in numbering issues, should be permitted to conduct independently "for cause" and random audits of carrier data. Small businesses should comment, in particular, on whether the potential existence of differing state audit standards would be a significant cost burden for them.

26. *Market for Numbering Resources.* In this *Second Further Notice* we seek comment on whether and how a market-based number allocation system should be implemented.

Proper implementation of this system should encourage the efficient use of numbering resources by carriers as well as be competitively neutral, especially towards small businesses. The system's benefits (*i.e.*, more efficient use of numbers) should outweigh carriers' concerns over costs. We believe that alternatives to this system (*i.e.*, allocating numbers for free) would not promote the efficient use of numbers as effectively. Commenters are encouraged to propose ways to implement such a system so as to minimize any unfavorable impact on small entities.

27. *Recovery of Pooling Shared Industry and Direct Carrier Specific Costs.* We determined in this *Second Further Notice* that we still do not possess sufficient cost data to establish a cost recovery mechanism at this time. We intend to establish a national cost recovery mechanism after the national pooling roll-out schedule is finalized, because the timing and amount of pooling costs should be more readily ascertainable at that time. In the interim, we seek further comment and cost studies quantifying shared industry and direct carrier-specific costs of thousands-block number pooling. Such cost data should assist us in ascertaining an appropriate cost recovery mechanism for small carriers.

28. *Mandating LNP Capability for Thousands-Block Number Pooling.* In the *First Report and Order*, we adopted thousands-block number pooling for local number portability (LNP) capable carriers, concluding that commercial mobile radio services carriers as well as non-LNP capable wireline carriers must participate in pooling once they become LNP capable. We seek comment on whether we should require carriers to become LNP capable for the purpose of participating in thousands-block number pooling. In the alternative, we seek comment on whether carriers can utilize other network architecture to increase participation in thousands-block number pooling, or at least central office code sharing, without having fully deployed LNP. In examining alternatives to improve the efficient use of numbering resources, we request comments from all carriers, but especially small businesses that may become disadvantaged by a requirement to become LNP-capable.

29. *Waiver of Growth Numbering Resource Requirement.* Currently, carriers may obtain a waiver of growth numbering resource requirements by demonstrating their need for additional numbering resources. We seek comment in this *Second Further Notice* on whether a "safety valve" should be established for carriers that need additional numbering resources, even though they fail to meet the utilization threshold in a given rate center. In particular, we request data (especially empirical data) indicating the extent to which this problem exists. In addition, we seek comment on, among other things, the form of a "safety valve" mechanism and specific criteria that would warrant a waiver. Commenters are encouraged to provide data demonstrating small business' need for a "safety valve" mechanism as well as specific criteria for granting a waiver that would impose a minimal burden on small entities.

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

30. None.

## Appendix D

**List of Parties****I. Numbering Resource Optimization Notice of Proposed Rulemaking**

**Comments** - In addition to the parties listed below, the Commission also considered the comments, including e-mails, postcards and other correspondence, from over 3,000 citizens in this matter.

1. Adamson, Grier
2. Ad Hoc Telecommunications Users Committee (Ad Hoc)
3. AirTouch Communications, Inc. (AirTouch)
4. Ameritech
5. Arsinow, Richard A.
6. Arvanitas, Ms. Peggy
7. Association for Local Telecommunications Services (ALTS)
8. AT&T Corporation (AT&T)
9. Bartel, Richard C., and Communications Venture Services, Inc. (Venture Services)
10. Bell Atlantic
11. BellSouth Corporation (BellSouth)
12. Burrows Resource Group Inc. (BRG)
13. Cablevision Lightpath, Inc. (Cablevision)
14. California Public Utilities Commission and the People of the State of California (California Commission)
15. Campbell, Bill - California Assemblyman 71<sup>st</sup> District, letter to Congressman James E. Rogan
16. Carlson, Douglas F.
17. Cellular Telecommunications Industry Association (CTIA)
18. Chambers, Rose A.
19. Cincinnati Bell Telephone Company (CinBell)
20. Citizens Utility Board, People of the State of Illinois, Cook County State's Attorney's Office, and the City of Chicago (Citizens Util. Bd., et al.)
21. Cohen, Marsha N.
22. Colpitts, Robert M., Jr.
23. Colorado Public Utilities Commission (Colorado Commission)
24. Connect Communications Corporation (Connect)
25. Connecticut Department of Public Utility Control (Connecticut Commission)
26. Cox Communications, Inc. (Cox)
27. Eyre, Richard
28. Florida Public Service Commission (Florida Commission)
29. Gethard, Elaine Meitus
30. GTE Service Corporation (GTE)
31. Illinois Chapter of National Emergency Number Association (INENA)
32. Joint Comments of Choice One Communications, Inc., and GST Telecommunications, Inc. (Choice One and GST)
33. Joint Comments of Centennial Cellular Corporation; CenturyTel Wireless, Inc.;

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- Thumb Cellular, Limited Partnership; and Trillium Cellular Corp. (Centennial, et al.)
  34. Joint Comments of Texas Office of Public Utility Counsel and National Association of State Utility Consumer Advocates (Texas Public Util. Counsel and NASUCA)
  35. Level 3 Communications, Inc. (Level3)
  36. Liberty Telecom LLC (Liberty)
  37. Maine Public Utilities Commission (Maine Commission)
  38. Maydak, Keith
  39. Massachusetts Department of Telecommunications and Energy (Massachusetts Commission)
  40. MCI WorldCom, Inc. (WorldCom)
  41. MediaOne Group, Inc. (MediaOne)
  42. Minnesota Department of Public Service (Minnesota Commission)
  43. Missouri Public Service Commission (Missouri Commission)
  44. Mitretek Systems, Inc.
  45. Mobility Canada
  46. Mohlenbrok, Gerald
  47. National Association of Regulatory Utility Commissioners (NARUC)
  48. National Emergency Number Association (NENA)
  49. National Exchange Carriers Association (NECA)
  50. National Telephone Cooperative Association (NTCA)
  51. Neill, Professor Bill
  52. New Hampshire Public Utilities Commission (New Hampshire Commission)
  53. New Jersey Board of Public Utilities (New Jersey Commission)
  54. Newman, Vicky
  55. New York State Department of Public Service (New York Commission)
  56. Nextel Communications, Inc. (Nextel)
  57. Nextlink Communications, Inc. (Nextlink)
  58. Nilsen, Beate
  59. North American Numbering Plan Administrator (NANPA)
  60. North American Numbering Council (NANC)
  61. North Carolina Utilities Commission (North Carolina Commission)
  62. Omnipoint Communications, Inc. (Omnipoint)
  63. Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO)
  64. Paging Network, Inc.
  65. Pennsylvania Office of Consumer Advocate and NASUCA (Pennsylvania Consumer Advocate and NASUCA)
  66. Pennsylvania Public Utility Commission (Pennsylvania Commission)
  67. Personal Communications Industry Association (PCIA)
  68. Prichard, Douglas R. City of Rolling Hills Estates City Manager
  69. PrimeCo Personal Communications, L.P. (PrimeCo)
  70. Public Service Commission of Wisconsin (Wisconsin Commission)
  71. Public Utilities Commission of Ohio (Ohio Commission)
  72. Public Utility Commission of Texas (Texas Commission)
  73. Qwest Communications Corporation (Qwest)
  74. Ravizza, Norman
  75. RCN Telecom Services, Inc. (RCN)



76. REC Networks
77. Rogers Cantel, Inc.
78. Saco River Telegraph & Telephone Co.
79. Salva, Carol
80. SBC Communications, Inc. (SBC)
81. Small Business Alliance for Fair Utility Regulation (Small Business Alliance)
82. Solnit, Kenneth T.
83. Sprint Corporation (Sprint)
84. Sullivan, Mr. Michael A.
85. Texas Advisory Commission on State Emergency Communications, et al.
86. Texas Office of Public Utility Counsel
87. Time Warner
88. Thro, Dennis
89. United States Telephone Association (USTA)
90. U S West Communications, Inc. (U S West)
91. Virginia State Corporation Commission, Division of Communications
92. VoiceStream Wireless Corp. (VoiceStream)
93. WinStar Communications, Inc. (WinStar)
94. Yablon, Gilbert (Smart Dialing Systems)
95. Zamzow, Norma

### Reply Comments

96. Ad Hoc
97. AirTouch
98. Allegiance Telecom, Inc. (Allegiance)
99. Ameritech
100. ALTS
101. Association of Public-Safety Communications Officials-International, Inc.  
and the National Emergency Number Association (APCO and NENA)
102. AT&T
103. Bell Atlantic
104. BellSouth
105. California Commission
106. CTIA
107. CenturyTel, Inc.
108. CinBell
109. Colorado Numbering Task Force
110. Competitive Telecommunications Association (CompTel)
111. Connect Communications Corporation (Connect)
112. Cook County State's Attorney's Office
113. Cox
114. Florida Commission
115. GTE
116. INENA
117. Choice One and GST
118. Level 3

119. Levine, Richard
120. Maine Commission
121. WorldCom
122. MediaOne
123. NENA
124. NECA
125. NTCA
126. Neill, Professor Bill
127. New York Commission
128. Nextel
129. Nextlink
130. Omnipoint  
Pennsylvania Consumer Advocate and NASUCA
131. Pennsylvania Commission
132. PCIA
133. RCN
134. SBC
135. Small Business Alliance
136. Sprint
137. Telcordia
138. Teligent, Inc. (Teligent)
139. USTA
140. WinStar
141. Wisconsin Commission

## **II. Numbering Resource Optimization First Report and Order and First Further Notice of Proposed Rulemaking**

### **A. Further Notice Comments**

1. Ad Hoc
2. AT&T
3. ALTS
4. BellSouth
5. Bell Atlantic
6. California Commission
7. CTIA
8. 2<sup>nd</sup> Century Communications, Inc. (2<sup>nd</sup> Century)
9. CompTel
10. Cox
11. GTE
12. General Services Administration (GSA)
13. State of Illinois, Department of Central Management Services
14. Maine Commission
15. MediaOne
16. Joint Comments of Midvale Telephone Exchange, Inc., Northeast Louisiana Telephone

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- Company, Inc., Interstate Telecommunications Cooperative, Inc., and Radio Paging Service
17. Missouri Commission
  18. Joint Comments of the National Exchange Carrier Association and National Telephone Cooperative Association (Joint Comments of NECA and NTCA)
  19. New Hampshire Commission
  20. New York Commission
  21. Nextel
  22. Nextlink
  23. Oregon Commission
  24. Pennsylvania Commission
  25. Joint Comments of Pennsylvania Office of Consumer Advocate, Texas Office of Public Utility Counsel, Missouri Office of Public Counsel, Florida Office of Public Counsel, District of Columbia Office of People's Counsel, California Office of Rate Payer Advocates, The Utility Reform Network, Maryland Office of people's Counsel, Maine Public Advocate, Indiana Office of Utility Consumer Counsel (Consumer Commenters)
  26. PCIA
  27. RCN
  28. Rural Independent Competitive Alliance
  29. SBC
  30. Sprint
  31. Telcordia
  32. Texas Commission
  33. Time Warner
  34. USTA
  35. U S WEST
  36. Verizon Wireless
  37. VoiceStream
  38. WinStar
  39. WorldCom

**B. Further Notice Reply Comments**

40. Allegiance
41. Arch Communications
42. Arvanitas, Peggy
43. AT&T
44. BellSouth
45. California Commission
46. CTIA
47. General Services Administration (GSA)
48. Illuminet, Inc.
49. Maine Commission
50. NARUC
51. NeuStar, Inc. (NeuStar)
52. Nextel
53. RCN

54. SBC
55. Sprint
56. Telcordia
57. USTA
58. U S West
59. Verizon Wireless
60. VoiceStream
61. WorldCom

**C. Petitions for Reconsideration, Clarification, Waivers and Motions for Clarification and Extension of Time**

62. ACUTA
63. Ad Hoc
64. Arkansas, Department of Information Services
65. ALTS
66. AT&T
67. Autopage & Radio Paging Services
68. BellSouth
69. Blackfoot Telephone Coop.
70. California Commission
71. Cal-Ore Telephone Co.
72. CTIA
73. CenturyTel, Inc.
74. CinBell
75. Electric Lightwave, Inc.
76. Florida Commission
77. General Communication Inc. (GCI)
78. Intermedia Communications Inc.
79. Iowa Telecom
80. Kassem, Ahmed (U. of Illinois – Chicago)
81. KMC Telecom
82. Maine Commission
83. Metropolitan Government of Nashville & Davidson County
84. NASNA
85. NENA
86. NTCA
87. Nextlink
88. OPASTCO
89. Ohio Commission
90. PCIA
91. Puerto Rico Telephone Co., & Celulares Telefonica
92. Qwest
93. RCA
94. RCN
95. SBC
96. Sprint

97. Telcordia
98. Tennessee Telecommunications Authority (TTA)
99. USTA
100. Verizon
101. Verizon Wireless
102. VoiceStream
103. Washington Department of Information Services
104. Whitmer, Glenn (U. of Illinois – Urbana-Champaign)
105. WinStar
106. WorldCom

**D. Oppositions to and Support for Petitions, Waivers and Motions**

107. AT&T
108. BellSouth
109. CinBell
110. Ohio Commission
111. PCIA
112. Texas Commission
113. Qwest
114. SBC
115. Sprint
116. USTA
117. Verizon
118. Verizon Wireless
119. VoiceStream
120. WorldCom

**III. Pennsylvania Numbering Order**

**A. Petition for Reconsideration**

1. California Cable Television Association
2. California Commission
3. Connecticut Commission
4. Maine Commission
5. Massachusetts Commission
6. MediaOne
7. NARUC
8. New Hampshire Commission
9. Pennsylvania Commission
10. SBC
11. Texas Commission

**B. Petitions for Clarification**

1. NARUC

2. SBC

**C. Comments**

1. Bell Atlantic
2. SBC
3. Vanguard

**D. Reply Comments**

1. California Cable Television Association
2. Maine Commission
3. Vanguard

**E. Opposition to Petition for Reconsideration or Clarification**

1. Bell Atlantic Mobile, Inc.
2. MCI
3. Nextel Communications

**F. Reply to Opposition to Petition for Reconsideration**

1. Pennsylvania Commission