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

In the Matter of	)	
	)	
Numbering Resource Optimization	)	CC Docket No. 99-200
	)	
Implementation of the Local Competition Provisions of the Telecommunications Act of 1996	)	CC Docket No. 96-98
	)	
Telephone Number Portability	)	CC Docket No. 95-116

THIRD REPORT AND ORDER AND SECOND ORDER ON RECONSIDERATION IN CC DOCKET NO. 96-98 AND CC DOCKET NO. 99-200

Adopted: December 12, 2001 **Released: December 28, 2001**

By the Commission: Commissioner Martin issuing a separate statement.

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I. INTRODUCTION

1. In this *Third Report and Order* and *Second Order on Reconsideration* in CC Docket No. 99-200, we continue efforts to maximize the efficiency with which numbering resources in the North American Numbering Plan (NANP) are utilized.[1] By working with state commissions and the telecommunications industry, the Commission has been able to refine its numbering administration policies and processes, resulting in a substantial increase in the estimated life of the NANP as projected just two years ago.[2] Our efforts have also contributed to the dramatic reduction in central office code assignments and area code relief efforts over the last year.[3] With this Order, we aim to build upon this success to ensure that the limited numbering resources of the NANP continue to be used efficiently so that the NANP does not exhaust prematurely, and to

[1] The NANP was established over 50 years ago by AT&T to facilitate the expansion of long distance calling. It is the basic numbering scheme for the United States, Canada, and most Caribbean countries. The NANP is based on a 10-digit dialing pattern in the format NXX-NXX-XXXX where "N" represents any digit 2-9 and "X" represents any digit 0-9. The first three digits represent the numbering plan area (NPA), commonly known as the area code. The second three digits represent the central office, or NXX code, commonly referred to as an exchange. The last four digits represent the subscriber line number.

[2] In 1999, the North American Numbering Plan Administrator (NANPA) estimated that NANP exhaust was likely to occur in 2006 – 2012, and the North American Numbering Council (NANC) estimated that NANP exhaust was likely to occur in 2005 – 2016. In its recent study, the NANPA estimates that NANP exhaust is likely to occur well beyond 2020. *See* NANPA Report to the NANC, October 16-17, 2001, p. 8. The NANPA estimates that with the introduction of thousands-block number pooling NANP exhaust is not likely to occur before 2025 – 2034. *Id.* at p. 9.

[3] The NANPA reported that the net central office code assignments from January through October 2001 averaged 413 per month as compared to 2172 codes per month for the same period in 2000. *See* NANPA Report to the NANC, November 27-28, 2001, p 2.

ensure that all carriers have the numbering resources they need to compete in the telecommunications marketplace. Specifically, we address issues raised in the *Second Further Notice*[4] and several petitions for reconsideration and/or clarification of the *First* or *Second Report and Orders*. We also clarify, on our own motion, certain aspects of our numbering resources optimization rules and local number portability requirements.

2. *Overview*. In Section III, we make several decisions to address national thousands-block number pooling administration. Specifically, we decline to extend the pooling requirement to paging carriers; decline to extend pooling requirements to non-local number portability (LNP) capable carriers outside of the largest 100 Metropolitan Statistical Areas (MSAs) that have not received a request to deploy LNP from a competing carrier; and decline to alter the implementation date for covered Commercial Mobile Radio Service (CMRS) carriers to participate in pooling.

3. We also address the federal cost recovery for national thousands-block number pooling. For price cap local exchange carriers (LECs), we conclude that many of the costs associated with thousands-block number pooling are ordinary costs for which no additional special recovery is appropriate. To the extent that price cap carriers can demonstrate they have incurred extraordinary costs resulting from the implementation of the federally mandated thousands-block number pooling program, these extraordinary costs will be recovered through an exogenous adjustment to interstate access charges. We will allow, but not require, incumbent LECs (ILECs) subject to rate-of-return regulation to recover their carrier-specific costs directly related to thousands-block number pooling implementation through interstate access charges. Carriers not subject to rate regulation, such as competitive LECs (CLECs) and CMRS providers, may recover their carrier-specific costs directly related to implementation of thousands-block number pooling in any lawful manner consistent with their obligations under the Communications Act of 1934, as amended (the Act). Finally, we reaffirm that states that have conducted pooling trials should establish cost recovery mechanisms for costs incurred by carriers participating in such trials, and we encourage those states that have not yet established a mechanism to use the model established by the Commission for national pooling cost recovery.

4. In Section IV, we reaffirm that the Months-to-Exhaust (MTE) requirement for carriers is an important element in ensuring that numbering resources are used efficiently and that carriers have an adequate supply of resources to serve customers. Furthermore, we find that the utilization threshold established in the *Second Report and Order* is reasonable. We also decline to exempt pooling carriers from the utilization threshold. Finally, we establish a safety valve mechanism to allow carriers that do not meet the utilization threshold in a given rate center to obtain additional numbering resources, and delegate authority to state commissions to hear claims that the safety valve should be applied when the NANPA or the Pooling Administrator denies a specific numbering resource request.

5. In Section V, we revisit the prohibition of service-specific and technology-specific

[4] Numbering Resouce Optimization, *Second Report and Order, Order on Reconsideration in CC Docket No. 96-98 and in CC Docket No. 99-200, and Second Further Notice of Proposed Rulemaking in CC Docket No. 99-200*, 16 FCC Rcd 306 (2000) (*Second Report and Order*).

overlays. We conclude that we should lift the ban on such overlays, as several states have requested, and that authority to implement this area code relief option will be granted on a case-by-case basis.

6. In Section VI, we address other numbering resource optimization measures. First, we find that carriers that are found, through an audit, to violate our numbering requirements, or that fail to cooperate with the Commission staff to conduct either a "for cause" or random audit, should be denied numbering resources in certain instances. We reaffirm state commissions' authority to conduct independent audits that are not duplicative of the national audit program. We also reaffirm our conclusion that the 180-day reservation period is sufficient and find that fees to extend the reservation period are not appropriate at this time. We also clarify, on our own motion, that the Commission intended to require all carriers in the top 100 MSAs to become LNP capable, not just those who receive a request. We further clarify that LNP is required in the top 100 MSAs identified at the time of this mandate, as well as new MSAs identified in all subsequent top 100 MSA lists.[5] Finally, we find that state commissions should be allowed password-protected access to the NANPA database for data pertaining to NPAs located within their state.

II. BACKGROUND[6]

7. The proliferation of area codes in the United States between 1997 and 1999,[7] coupled with the staggering estimated cost of expanding the current NANP,[8] led the Commission, in 1999, to initiate the Numbering Resource Optimization proceeding.[9] Since that time, new area code implementation has declined.[10] This is due in part to the Commission's efforts to address two of the major factors that contribute to numbering resource exhaust: (1) the absence of regulatory, industry, or economic control over requests for numbering resources; and (2) and the allocation of numbering resources in blocks of 10,000, irrespective of the carrier's actual need for new numbering resources.[11] By implementing a system of mandatory numbering resource

[5] *See* List from the 1990 U.S. Census reports.

[6] For a more complete summary of the history of this proceeding *see* Numbering Resource Optimization, *Report and Order and Further Notice of Proposed Rulemaking*, 15 FCC Rcd 7574, 7577-82, paras.1-9 (2000) (*First Report and Order*) and *Second Report and Order*, 16 FCC Rcd at 310-14, paras. 4-17 .

[7] In the ten year period, 1984 to 1994, nine new area codes were implemented. Commencing in 1997, new area code activations increased to 32 new area codes activated in 1997, 24 activated in 1998, and 22 activated in 1999.

[8] In 1999, some industry members suggested that the cost to expanding the NANP by adding one or more digits could be between $50 to $150 billion. *See* NANC Meeting Minutes, February 18-19, 1999 at 13.

[9] Numbering Resource Optimization, *Notice of Proposed Rulemaking*, 14 FCC Rcd 10322 (1999) (*Notice*).

[10] In 2000, 14 new area codes were activated, and approximately 20 new area codes are expected to be activated by December 2001. In contrast, 46 new area codes were activated during 1998-1999.

[11] In the *Notice*, the Commission recognized that other factors driving premature NANP and area code exhaust include: (1) multiple rate centers in an NPA and the demand by most carriers to have at least one NXX code per rate center; and (2) the increased demand for numbering resources by new entrants and new technologies. *Notice* at 10328-29, para. 15.

utilization and forecast reporting, and thousands-block number pooling, we have directly, and successfully, attacked these major drivers of numbering exhaust.

8. In past orders in this docket, the Commission has adopted the following measures: a mandatory utilization and forecast data reporting requirement; a uniform set of categories of numbers for which carriers must report their utilization; a utilization threshold to increase carrier accountability and incentives to use numbers efficiently; a single system for allocating numbers in blocks of 1,000, rather than 10,000 (thousands-block number pooling); a plan for national rollout of thousands-block number pooling; cost recovery principles for thousands-block number pooling that are similar to those adopted for LNP; reclamation requirements to ensure that unused numbers are returned to the NANP inventory for assignment to other carriers; sequential numbering, where carriers are required, to the extent possible, to first assign numbering resources within thousands-blocks; and an auditing program to verify carrier compliance with the Commission's rules.[12]

9. Also, the Commission has mandated that CMRS providers begin participating in thousands-block number pooling by November 24, 2002.[13] The allocation of numbers in blocks of 10,000 has been a significant driver of premature NPA and NANP exhaust, primarily because many telephone numbers become stranded and, thus, unusable. Thousands-block number pooling allows resources to be allocated in smaller blocks, and thus frees up stranded numbers. Once CMRS providers are capable of participating in pooling, even greater efficiencies will be achieved. Carriers will have greater flexibility to port numbers between switches and even outside of rate centers.[14]

10. Although the 1996 Act gave the Commission plenary jurisdiction over numbering resources, numbering resource management has been a cooperative effort involving the Commission, the North American Numbering Council (NANC), which is the Commission's federal advisory committee on numbering issues, state commissions, and industry. The NANC has made recommendations to the Commission on several numbering resource optimization measures.[15] States, for example, have been delegated authority to make area code relief decisions, establish utilization thresholds different from the national threshold, order sequential number assignments, reclaim unused NXX codes, and implement code sharing trials. Additionally, the Commission and the Common Carrier Bureau have granted over 30 state petitions for delegated authority to institute thousands-block pooling trials, establish rationing procedures for six months following area code relief, and address requests for numbering

[12] *See generally, First Report and Order* and *Second Report and Order*.

[13] This coincides with an earlier mandate that CMRS become LNP capable by that date. Cellular Telecommunications Industry Association's Petition for Forebearance from Commercial Mobile Radio Services Numbering Portability Officiations, *Memorandum Opinion and Order*, 14 FCC Rcd 3092 (1999) (*CMRS LNP Forebearance Order*).

[14] *See* LNPA Working Group Status Report to NANC, October 16, 2001, PIM 11.

[15] *See* Common Carrier Bureau Seeks Comment on North American Numbering Report Concerning Telephone Number Pooling and Optimization Measures, *Public Notice*, DA 98-2265, NSD File No. L-98-134 (rel. No. 6, 1998).

resources outside of the rationing process. The industry has played an active role as well by developing guidelines through industry consensus, which provide technical guidance to the industry on implementing numbering policies adopted by the Commission.[16] The NANC also continues to analyze the benefits of various numbering resource optimization measures, including rate center consolidation, individual number pooling, and unassigned number porting.[17] As stewards of the NANP for the United States, we expect to continue to work closely with state commissions, the NANC, the industry, as well as with other NANP countries, to monitor the progress that has been made in optimizing the use of NANP resources.

III. NATIONAL THOUSANDS-BLOCK NUMBER POOLING

A. Pooling Administration

11. On June 18, 2001, the Commission announced the selection of NeuStar, Inc. (NeuStar) as the national thousands-block number Pooling Administrator.[18] As national Pooling Administrator, NeuStar is responsible for administering thousands-block number pools by assigning, managing, forecasting, reporting, and processing data that will allow service providers in areas designated for thousands-block number pooling to receive telephone numbers in blocks of 1,000. NeuStar, which also currently serves as the NANPA, has been awarded a one-year contract with four one-year options (for a potential term of five years) to be exercised at the discretion of the Commission. National thousands-block number pooling is scheduled to begin in March 2002. Currently, 107 pools in 26 states are up and running.[19]

12. *National Pooling Rollout Schedule.* As directed by the Commission, NeuStar developed and proposed a national thousands-block number pooling schedule using the criteria established by the Commission in the *First Report and Order*. Specifically, NeuStar gave primary consideration to the following: NPAs that are located in the largest 100 MSAs;[20] NPAs in jeopardy; and NPAs with a projected life of at least one-year.[21] In deciding when a pool for each qualifying NPA would be established, NeuStar also followed the Commission's directive to implement national pooling by quarter; for each three-month period, three pools in each of the 7 Number Portability Administration Center (NPAC) regions (for a total of 21 pools) would be

[16] Numbering guidelines are developed by the Industry Numbering Committee (INC) and can be found at www.ATIS.org.

[17] *See* NANP Expansion Optimization Issues Management Group Status Report to NANC, October 16, 2001.

[18] Federal Communications Commission's Common Carrier Bureau Selects NeuStar, Inc. as National Thousands-Block Number Pooling Administrator, *Press Release*, CC Docket 99-200 (June 18, 2001). NeuStar was named the Pooling Administrator effective June 15, 2001.

[19] *See* www.nanpa.com. Mandatory pooling trials that have commenced before March 15, 2002 are being transitioned into the national pooling administration program prior to national pooling rollout.

[20] We clarify, on our own motion, in this Order that for the purpose of the rollout schedule, the top 100 MSAs are those listed at the end of this Order. *See infra* at Section VI.C and Appendix D.

[21] *First Report and Order*, 15 FCC Rcd at 7647-48, paras. 161-162.

initiated.[22]

13. On October 17, 2001, the Commission issued a Public Notice seeking comment on the proposed national thousands-block number pooling rollout schedule. State commissions seeking to opt into, or out of, the rollout schedule, or wishing to substitute an alternative NPA for the NPA listed in the rollout schedule, must make such requests in response to the Public Notice within the established initial comment cycle.[23] Upon review of the comments and requests submitted, the Commission will publish the final rollout schedule.[24] States seeking to opt out of the rollout schedule on a temporary basis should inform NeuStar of their decision three months prior to the scheduled rollout date for the applicable NPA.[25] In addition, to serve the needs of states that believe that pooling would be beneficial in an NPA that is not located in one of the largest 100 MSAs, the Common Carrier Bureau will consider petitions from state commissions to opt into the rollout schedule on a case-by-case basis. Finally, state commissions may petition to substitute an alternative NPA for an NPA listed in the rollout schedule, if the substitute NPA meets the eligibility criteria as set forth above.[26]

B. Thousands-Block Number Pooling for Non-LNP Capable Carriers

14. Under the Commission's current rules, certain carriers are exempted from pooling requirements, e.g., paging carriers, and carriers outside of the largest 100 MSAs that have not received a request to deploy LNP from a competing carrier. In the *Second Further Notice*, the Commission sought comment about whether it would be appropriate to extend pooling requirements to these carriers to further promote the efficient use of numbering resources. The Commission sought comment on whether the incremental number optimization benefits of requiring these carriers to participate in pooling would outweigh the associated costs.

15. Several state commissions support expanding pooling requirements, arguing that requiring all carriers to participate in pooling – regardless of their LNP status – would greatly enhance the effectiveness of pooling.[27] Several suggest that the Commission should delegate authority to states to determine for themselves, based on their own individual circumstances, whether to require non-LNP capable carriers to pool.[28] Paging carriers, carriers outside of the

[22] *Id.* at 7645-46, para. 159.

[23] The Common Carrier Bureau Seeks Comment on the National Thousands-Block Number Pooling Rollout Schedule, *Public Notice*, CC Docket 99-200, DA 01-2419 (rel. October 17, 2001) (*Thousands-Block Number Pooling Public Notice*).

[24] The schedule will include all NPAs in the top 100 MSAs.

[25] *First Report and Order*, 15 FCC Rcd at 7648, para. 163.

[26] *See id.* at 7649, para. 165. Such requests should also be made not less than three months prior to the scheduled rollout date, to ensure that the Pooling Administrator has sufficient time to prepare for implementation.

[27] Iowa Utilities Board Comments at 4; Maine PUC Comments at 7; New York State Department of Public Service Comments at 7; Ohio PUC Comments at 27; Pennsylvania PUC Comments at 11.

[28] State Coordination Group Comments at 8.

largest 100 MSAs, and other industry commenters, on the other hand, oppose extending pooling requirements and assert that the costs of implementing pooling would far outweigh any potential number optimization benefits.[29]

1. Paging Carriers

16. Based on the record before us, we decline to extend pooling requirements to paging carriers.[30] We are persuaded by paging carriers' assertions that the costs of implementing pooling would outweigh the potential numbering resource savings. In the *Second Further Notice,* we recognized that if the Commission were to expand pooling requirements, non-LNP capable carriers would be obligated to implement the common technological platform that is used to support both LNP and number pooling. Paging carriers assert that they would face certain unique technical challenges to establish pooling capability. Specifically, paging carriers would have to convert to signaling system 7 (SS7) signaling to be able to properly route calls.[31] Currently, paging carriers use signaling systems such as multi-frequency or dual-tone multi-frequency signaling.[32] Evidence from the record suggests that paging carriers have used these less sophisticated systems because paging switches do not originate traffic and because many of the enhanced features of SS7 signaling are unnecessary for the provision of messaging services.[33] To be able to participate in pooling, paging carriers would need to interconnect to other carriers using SS7 signaling.[34] We agree with paging carriers that the costs of converting to SS7 signaling would be significant.[35]

17. There is insufficient evidence to conclude that the incremental number optimization benefits of requiring these carriers' participation in pooling would outweigh the associated costs. Evidence from the record indicates that the paging market is mature, and that paging carriers'

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[29] BellSouth Comments at 30; Cingular Reply Comments at 13-16; Metrocall Comments at 3-7; NTCA Comments at 2-4; OPASTCO Comments at 6-7; PCIA Comments at 10-11; USTA Comments at 4-5; Verizon Wireless Comment at 16-17.

[30] We also decline to extend pooling requirements to other messaging services and CMRS providers who are specifically excluded from LNP requirements. See Telephone Number Portability, *First Report and Order and Further Notice of Proposed Rulemaking,* 11 FCC Rcd 8352, 8433-34 para. 156 (1996) (*LNP First Report and Order*).

[31] Metrocall Comments at 3-4; Verizon Comments at 16.

[32] Verizon Comments at 16.

[33] Metrocall Comments at 4; Verizon Comments at 16.

[34] Metrocall Comments at 3-4; Verizon Comments at 16.

[35] Metrocall Comments at 4; Verizon Comments at 16. Metrocall states that the cost of converting to SS7 signaling necessary for both porting and pooling would be enormous and requiring implementation could threaten carriers' economic well being. Specifically, Metrocall indicates that cost for the first year of installing and paying subscription fees for SS7 signaling would be approximately three million dollars, excluding usage fees. After the first year, Metrocall indicates that the recurring annual costs would be one and a half million dollars plus usage fees. *See* Metrocall Comments at 4-5.

demand for numbering resources has leveled off and is unlikely to increase significantly in the future.[36] Instead, it appears more likely that paging carriers will serve customers through existing numbers made available to them through churn rather than requesting significant amounts of additional numbers.[37] Moreover, recent data shows that paging carriers, as a whole, use relatively few numbering resources. The June 30, 2001 Numbering Resource Utilization data shows that of the over 115,000 NXX codes reported by all carriers only 5,813 of those codes, or slightly over 5%, were held by paging carriers.[38] In light of these conditions, we conclude that paging carriers' participation in pooling would not result in significant savings of numbers.

18. Although we do not extend pooling requirements to paging carriers at this time, we expect paging carriers to contribute to other numbering resource conservation efforts. Specifically, we expect paging carriers to return unused NXX codes and to comply with the sequential number assignment rules discussed in the *First Report and Order*.[39] If we find that paging carriers are not contributing to these numbering resource conservation efforts, we may consider extending pooling requirements to these carriers in the future.

2. Non-LNP Capable Carriers Outside of the Largest 100 MSAs

19. For similar reasons, we also decline to extend pooling requirements to non-LNP capable carriers outside of the largest 100 MSAs that have not received a request to deploy LNP from a competing carrier. There is insufficient evidence in the record to conclude that requiring these carriers to participate in pooling would result in significant numbering resource savings. Many of the carriers outside of the largest 100 MSAs operate in rate centers where there are few, if any, competing carriers. Specifically, data from the LERG shows that in the approximately 2,012 rate centers in the 180 MSAs beyond the largest 100, approximately 1,320 are rate centers where there are no competing service providers and approximately 300 are rate centers where there is only one competing service provider.[40] We agree with commenters who argue that it would be unreasonable to require non-LNP capable carriers in these areas to establish pooling

[36] Metrocall Comments at 5; PCIA Comments at 10; Verizon Comments at 17. We note that the June 30, 2001, Numbering Resource Utilization data shows an increase in the total number of NXX codes held by paging carriers as compared with the number of NXX codes held by paging carriers as of December 2000. This increase, however, is most likely attributable to the increased number of paging carriers reporting numbering resources in the most recent survey. For example, TSR Wireless, one of the largest paging carriers, did not report any NXX code holdings in December but reported in June that it held 544 NXX codes. *See* FCC, Common Carrier Bureau, Industry Analysis Division, *Numbering Resource Utilization in the United States as of June 30, 2001*, Table 1 (November 2001) (*November 2001 Numbering Resource Utilization Report*). This report may be downloaded (filename: utilizationjune2001.pdf) from the FCC-State Link Internet site at <http://www.fcc.gov/ccb/stats>.

[37] PCIA Comments at 10; Verizon Comments at 17.

[38] *See November 2001 Numbering Resource Utilization Report* at Table 1.

[39] *First Report and Order*, 15 FCC Rcd at 7684, para. 244.

[40] The data on the number of CLECs in the 180 MSAs outside of the 100 largest MSAs was taken from the October 2001 LERG, which is published by Telcordia Technologies, Inc. Information on obtaining a copy of the LERG can be found at <http://www.trainfo.com>.

capability because they would have few, if any, carriers with which to pool.[41] In addition, there is insufficient evidence in the record for us to conclude that the non-LNP capable carriers operating outside of the largest 100 MSAs, viewed as a whole, hold significant amounts of numbering resources compared to carriers in larger metropolitan areas. Because these carriers hold relatively small amounts of numbering resources, there would be little benefit, at least from a nationwide perspective, to requiring them to participate in pooling. For example, LERG data shows that ILECs outside of the largest 100 MSAs use approximately 4.5 percent of all of the NXX codes and CLECs outside of the largest 100 MSAs only use approximately 2.3 percent of all NXX codes.[42] For these reasons, we find that requiring these carriers to participate in pooling would not result in significant number optimization benefits.

20. We also find that requiring non-LNP capable carriers outside of the largest 100 MSAs to participate in pooling would impose disproportionate costs on them in comparison to LNP capable carriers operating in the 100 largest MSAs. Evidence from the record suggests that the per line cost to establish pooling capability would be significantly higher for small and rural carriers operating outside of the largest 100 MSAs than for carriers operating inside urban and metropolitan areas because of these carriers' limited customer bases.[43] Additionally, some commenters predict that imposing these costs on smaller and rural carriers may delay efforts to bring advanced services to rural subscribers.[44] Weighed against the limited number optimization benefits of requiring these carriers' participation in pooling, these costs appear to be unreasonably high.

3. State Authority to Require Pooling Capability

21. Finally, we reject the State Coordination Group's request to delegate authority to states to determine on a case-by-case basis whether to extend pooling requirements.[45] As we stated in the *First Report and Order*,[46] uniform national standards for pooling are necessary to minimize confusion and additional expense related to compliance with inconsistent regulatory requirements. We will, however, entertain requests from state commissions to opt into the rollout schedule for pooling in MSAs outside of the largest 100.[47]

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[41] OPASTCO Comments at 7; USTA Reply Comments at 6.

[42] In contrast, in the largest 100 MSAs, CLECs hold approximately 26.4 percent of all NXX codes.

[43] NTCA Comments at 2-3.

[44] OPASTCO Comments at 7.

[45] State Coordination Group Comments at 8.

[46] *See First Report and Order*, 15 FCC Rcd at 1761, para. 169.

[47] *See Thousands-Block Number Pooling Public Notice* at 2. States outside of the largest 100 MSAs who wish to establish pooling may opt into the national pooling rollout schedule if they can demonstrate that: 1) an NPA in the state is in jeopardy, 2) the NPA in question has a remaining life span of at least one year, and 3) the majority of wireline carriers in the NPA are LNP-capable. *See First Report and Order*, 15 FCC Rcd at 7648-49, para. 164.

C. Thousands-Block Number Pooling for Covered CMRS Carriers

22. In the *Second Report and Order*, we declined to adopt a transition period between the time that covered CMRS carriers must implement LNP and the time they must participate in mandatory pooling. Qwest, Cingular Wireless, BellSouth, Cellular Telecommunications & Internet Association (CTIA), and Sprint sought reconsideration of this issue.[48] These commenters assert that additional time is needed to make changes to their systems to implement pooling.[49] Sprint states that the Commission's decision not to establish a separate and phased-in implementation plan for CMRS pooling is unexplained and contrary to precedent.[50]

23. We decline to address in this Order whether the LNP implementation date for covered CMRS carriers should be delayed or eliminated, as some carriers suggest.[51] We find, however, that it is in the public interest to require covered CMRS carriers to participate in thousands-block number pooling as soon as possible to maximize number utilization efficiency.[52] We therefore again decline to alter the implementation date for covered CMRS carriers to participate in pooling. The record in this proceeding does not demonstrate that covered CMRS carriers need additional time to participate in pooling, as some assert.[53] As we stated in the *First Report and Order*, implementation of thousands-block number pooling in major markets is essential to extending the life of the NANP.[54] Because the effectiveness of pooling increases as the number of participants increase, we remain convinced that covered CMRS carriers should participate in pooling as soon as possible.

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[48] BellSouth Petition at 12-15; Cingular Wireless Petition at 3-13; CTIA Petition at 5-14; Qwest Petition at 2-5; Sprint Petition at 5-12. *But see* Opposition of the Maine Public Utilities Commission to Petitions for Reconsideration (April 12,2001).

[49] Cingular Wireless Petition at 3-6 and Qwest Petition at 5. Both Qwest and Cingular cite numerous factors delineating why additional time is needed to implement pooling. These factors will be more fully addressed in the current proceeding in the Wireless Bureau addressing the Verizon Wireless Petition. *See infra* at n. 51.

[50] *See* Sprint Petition at 5-12.

[51] *See* Verizon Wireless Petition Pursuant to 47 U.S.C. Sec. 160 for Partial Forbearance from the Commercial Mobile Radio Services Number Portability Obligation, WT Docket 01-184 (filed July 26, 2001) (*Verizon Wireless Petition*). Verizon Wireless seeks forbearance of the requirement that covered CMRS carriers become LNP capable by November 24, 2002. The petition indicates that Verizon Wireless will, however, comply with the corresponding deadline for participation in pooling. The Commission intends to address issues raised by Verizon Wireless's petition in a separate order.

[52] We note that CMRS service providers are not exempt from numbering resource optimization measures, and that they are significant users of numbering resources.

[53] Indeed, some carriers have asserted that pooling capability is more readily achievable than LNP capability. We also note that the NANC Local Number Portability Administration (LNPA) Working Group, has followed a timeline tracking LNP progress. *See* LNPA Working Group, *Wireless Number Portability Operations Status Report to NANC*, June 15, 2001.

[54] *First Report and Order*, 15 FCC Rcd at 7625, para. 122.

D. Federal Cost Recovery Mechanism

24. Section 251(e)(2) of the Act requires that "[t]he cost of establishing telecommunications numbering administration arrangements and number portability shall be borne by all telecommunications carriers on a competitively neutral basis as determined by the Commission."[55] This statutory provision applies both to the costs of numbering administration and to the costs of LNP. In the *First Report and Order*, the Commission established a competitively neutral federal cost recovery framework for thousands-block number pooling modeled on the LNP cost recovery framework.[56] The Commission concluded that requiring carriers to bear and recover their own carrier-specific thousands-block number pooling costs is consistent with section 251(e)(2)'s competitive neutrality requirement.[57] The Commission also concluded that shared industry costs, along with carrier-specific costs directly related to thousands-block number pooling, would be subject to an exclusively federal carrier-specific cost recovery mechanism to be established in a subsequent order.[58] Finally, the Commission concluded that costs incurred by carriers to meet state-mandated thousands-block number pooling are intrastate costs and should be recovered under state cost recovery mechanisms.[59]

25. In this *Third Report and Order*, we direct states implementing thousands-block number pooling under delegated authority to commence cost recovery actions for state-mandated thousands-block number pooling trials. We applaud the efforts that state commissions have made in implementing pooling trials within their respective jurisdictions, and we believe that the costs should be covered within those jurisdictions that have enjoyed the benefits of such trials. On the other hand, we believe that national cost recovery is appropriate when thousands-block number pooling is extended nationwide. We also conclude that many of the costs associated with thousands-block number pooling are ordinary costs for which no additional or special recovery is appropriate. We, therefore, establish a federal cost recovery mechanism under which price cap LECs may recover their extraordinary carrier-specific costs directly related to thousands-block number pooling through an exogenous adjustment to access charges. Rate of return carriers will recover their costs in their interstate access charges in the ordinary course. We permit carriers not subject to rate regulation to recover these costs in any lawful manner. Further, because thousands-block number pooling may actually reduce network costs, in order for carriers to qualify for the exogenous adjustment to access charges that we establish here, we require them to demonstrate that pooling results in a net cost increase rather than a cost

[55] 47 U.S.C. § 251(e)(2).

[56] *First Report and Order*, 15 FCC Rcd at 7662-63, 7665-67, paras. 193-94, 201-03.

[57] *Id.* at 7669, para. 209. The Commission also concluded that because carrier-specific costs not directly related to thousands-block number pooling are not costs of thousands-block number pooling implementation, they are not subject to the competitively neutral requirement of Section 251. Accordingly, carriers are not allowed to recover such costs. *First Report and Order*, 15 FCC Rcd at 7670, para. 211 (citing Telephone Number Portability *Third Report and Order*, 13 FCC Rcd 11701, 11724 (1998) (*LNP Third Report and Order*)).

[58] *See First Report and Order*, 15 FCC Rcd at 7663, 7668-69, paras. 196, 207.

[59] *Id.* at 7664, para. 197.

reduction. Finally, we provide additional guidance as to how we will identify recoverable costs incurred "for the provision of" thousands-block number pooling.

1. Federal/State Jurisdiction

26. To enable consumers to benefit from thousands-block number pooling as soon as feasible, the Commission granted states authority to implement thousands-block number pooling on an individual basis in advance of national implementation.[60] In the *First Report and Order*, the Commission determined, however, that national thousands-block number pooling cost recovery could not begin until national implementation occurs.[61] Accordingly, the Commission determined that states exercising delegated authority over number pooling must develop their own cost recovery mechanisms.[62] Development and implementation of state cost recovery is necessary to ensure that carriers recover the costs of advance implementation of thousands-block number pooling attributable to the state jurisdiction.[63] These individual cost recovery schemes will transition to the national cost recovery plan, on a forward-looking basis, when the latter becomes effective.[64] Some commenters complain that no states have established cost recovery mechanisms at the state level and that states generally have been reluctant to do so.[65] Some argue that state costs should be folded into national costs and all thousands-block number pooling costs should be recovered in the federal jurisdiction.[66]

27. We decline to revisit the Commission's prior determination on this issue.[67] We

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[60] *See, e.g.*, California Public Utilities Commission Petition for Delegation of Additional Authority Pertaining to Area Code Relief and NXX Code Conservation Measures, 14 FCC Rcd 17486, 17492, para. 14 (1999); Florida Public Service Commission Petition to FCC for Expedited Decision for Grant of Authority to Implement Number Conservation Measures, 14 FCC Rcd 17506, 17511, para. 13 (1999); Massachusetts Department of Telecommunications and Energy's Petition For Waiver of Section 52.19 to Implement Various Area Code Conservation Methods in the 508, 617, 781, and 978 Area Codes, 14 FCC Rcd 17447, 17452, para. 14 (1999); New York State Department of Public Service Petition for Additional Delegated Authority to Implement Number Conservation Measures, 14 FCC Rcd 17467, 17472, para. 13 (1999).

[61] *First Report and Order*, 15 FCC Rcd at 7652, para. 171.

[62] *Id.* at 7664, para. 197.

[63] *See id.* at 7652-53, 7664, paras. 171, 197. Costs associated with state pooling trials are excluded from the federal cost recovery mechanism. *Id.* at 7664, para. 197.

[64] *Id.* at 7652, para 171.

[65] *See* SBC Comments to *First Report and Order* at 3 n.8; USTA Comments to *First Report and Order* at 9. *But see* California PUC Reply Comments to *First Report and Order* at 5-6; Maine PUC Reply Comments to *First Report and Order* at 6-7.

[66] *See* Attachment to Letter from Pete Sywenki, Director Federal Regulatory Affairs, Sprint, to Magalie Roman Salas, Secretary, Federal Communications Commission, CC Docket No. 99-200 at 2 (filed July 25, 2001); Florida Public Service Commission Comments at 9-10; USTA Comments to *First Report and Order* at 9; US West Comments to *First Report and Order* at 3-4; Verizon Wireless Comments to *First Report and Order* at 27.

[67] *See First Report and Order*, 15 FCC Rcd at 7664, para. 197.

expressly reject SBC's proposal to include its state pooling costs in the federal recovery mechanism;[68] we believe that the entire nation should not be required to bear costs incurred for the benefit of a particular state. In the past, the Commission has urged state commissions to follow the "road map" provided in the *First Report and Order* regarding cost recovery for thousands-block number pooling.[69] To the extent that states were awaiting additional guidance on a specific cost recovery mechanism, they may now follow the blueprint for cost recovery that we lay out here and in our prior orders, should they so choose.

28. We now direct states that have exercised delegated authority and implemented thousands-block number pooling to likewise commence cost recovery procedures for these state-specific costs. We agree with BellSouth that any state that has ordered implementation of pooling in advance of the national rollout is required to implement a cost recovery scheme.[70] In our orders delegating authority to the state commissions to institute thousands-block number pooling trials, we have reminded the states to ensure that the shared costs of thousands-block number pooling are borne and that the carrier-specific costs of thousands-block number pooling are recovered on a competitively neutral basis in accordance with Section 251(e)(2) of the Act.[71] If, after reviewing carrier cost submissions, states determine in accordance with Section 251(e)(2) and the Commission's analysis here and in the *First Report and Order* that carriers have incurred little or no recoverable carrier-specific costs directly related to state thousands-block number pooling trials (i.e., incremental costs directly attributable to thousands-block number pooling), they should make affirmative findings to that effect.

29. Carriers maintain that the bulk of their costs attributable to thousands-block number pooling are incurred on a regional, rather than a state-specific, level and thus they are uncertain how to allocate costs between the federal and the state jurisdiction.[72] When carriers have incurred costs directly related to thousands-block number pooling at the state level prior to the implementation of national thousands-block pooling, the advancement costs of state-specific deployment should be attributed to the state jurisdiction.[73] In other words, carrier-specific costs directly related to number pooling that are incurred for national implementation of thousands-block number pooling should be recoverable through the federal mechanism, but any costs

[68] *See* SBC Comments at 25 n.71, SBC Comments to *First Report and Order* at 3 n.8.

[69] See, e.g., Petitions of Indiana Utility Regulatory Commission et al. for Delegated Authority to Implement Number Optimization Measures, 16 FCC Rcd 5474, 5484, para. 22 (2001) (*Indiana Delegation Order*); Petitions of the Arizona Corporation Commission, et al. for Delegated Authority to Implement Number Conservation Measures, 15 FCC Rcd 23371, 23382, para. 22 (2000) (*Arizona Delegation Order*).

[70] *See* BellSouth Reply Comments at 6-7.

[71] *See Indiana Delegation Order*, 16 FCC Rcd at 5483-84, para. 21; *Arizona Delegation Order*, 15 FCC Rcd at 23381-82, para. 22; *First Report and Order*, 15 FCC Rcd at 7652-53, para.171 and n.410.

[72] *See, e.g.,* Letter from Kathleen B. Levitz, Vice President – Federal Regulatory, BellSouth, to Magalie Roman Salas, Secretary, Federal Communications Commission, CC Docket Nos. 96-98, 99-200 (filed June 20, 2001) (*BellSouth Cost Study*).

[73] *See* Bell Atlantic Reply Comments to *First Report and Order* at 3-4.

attributable to advance deployment at the state level will be subject to state recovery mechanisms. Advancement costs should be allocated among study areas according to normal accounting procedures and assigned directly to the state jurisdiction.

2. Recovery of Shared Industry and Direct Carrier-Specific Costs

a. Background

30. In the *Notice*, the Commission tentatively concluded that ILECs 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 their costs through other cost recovery mechanisms.[74] The Commission sought comment on how price cap carriers should be permitted to recover the costs of thousands-block number pooling implementation, particularly whether price cap carriers should be permitted to treat exogenously any of the thousands-block number pooling implementation cost categories.[75] The Commission also sought comment on whether these costs should be placed in a new price cap basket or, alternatively, in an existing basket.[76] The Commission tentatively concluded that carriers not subject to rate-of-return or price cap regulation should recover their carrier-specific costs directly related to thousands-block number pooling implementation in any lawful manner consistent with their obligations under the Act.[77] The Commission sought comment on these tentative conclusions and asked whether they meet section 251(e)(2)'s requirement that numbering administration costs must be borne on a competitively neutral basis.[78] To facilitate its determination, in the *First Report and Order*, the Commission requested additional cost information, including comment and cost studies quantifying the shared industry and direct carrier-specific cost of thousands-block number pooling.[79] The Commission also sought information on the cost savings that would be achieved through thousands-block number as opposed to the frequent area code changes that result from current numbering practices.[80] In the *Second Report and Order,* the Commission renewed this request for further comment and data.[81]

31. Some parties argue that we should not establish an explicit cost recovery mechanism because numbering costs are an ongoing cost of doing business for which recovery is

[74] *Notice*, 14 FCC Rcd at 10410, para. 204.

[75] *Id.* at para. 205.

[76] *Id.*

[77] *Id.* at para. 204.

[78] *Id.*

[79] *First Report and Order*, 15 FCC Rcd at 7671, 7687-88, paras. 214, 253.

[80] *Id.*

[81] *Second Report and Order*, 16 FCC Rcd at 379, para. 182.

inappropriate.[82] Some commenters support the tentative decision to permit thousands-block number pooling cost recovery through access charges.[83] Others argue that, like LNP, thousands-block number pooling is not an access-related service, and therefore it would not be competitively neutral to permit recovery of thousands-block number pooling costs through access charges.[84] They argue that ILEC recovery through access charges would distort the market for interstate access services, disadvantage purchasers of access services, and cause implicit subsidies, which is contrary to the statutory mandate that subsidies be explicit.[85] Some parties urge us to model our thousands-block number pooling cost recovery mechanism on the LNP cost recovery model by increasing the LNP end-user charge or extending it for a limited period of time.[86] US West argues that federal cost recovery should be divided into two parts: (a) nonrecurring costs for developing and implementing pooling should be recovered through an end-user surcharge and (b) recurring costs should be recovered through a charge added to the existing subscriber line charge (SLC) that results from price caps.[87] Other parties, however, oppose any charge.[88]

b. Discussion

32. For the reasons discussed in the following paragraphs, we will allow but not require ILECs subject to rate-of-return or price cap regulation to recover their carrier-specific costs directly related to thousands-block number pooling implementation through existing cost recovery mechanisms of rate-of-return or price cap adjustments. We also conclude, as with LNP, that carriers not subject to rate regulation, such as CLECs and CMRS providers, may recover their carrier-specific costs directly related to implementation of thousands-block number pooling in any lawful manner consistent with their obligations under the Act.[89]

33. *Characterization of Number Pooling Costs.* Despite the urging of many commenters, we resist imposing another direct charge on end-users. In the *LNP Third Report and Order*, the Commission chose not to include LNP costs in access charges because LNP is not

[82] *See* Ad Hoc Comments at 33-34; NASUCA at 32; *see also* AT&T Reply Comments at 17-18.

[83] *See* NECA and NTCA Comments to *First Report and Order* at 2-3; Bell Atlantic Reply Comments to *First Report and Order* at 6.

[84] *See* Sprint Comments to *First Report and Order* at 18; WorldCom Comments to *First Report and Order* at 20.

[85] *See* AT&T Reply Comments at 18 n.58; Sprint Reply Comments at 19; CTIA Comments to *First Report and Order* at 8-9; WorldCom Comments to *First Report and Order* at 20; AT&T Reply Comments to *First Report and Order* at 13; VoiceStream Reply Comments to *First Report and Order* at 13.

[86] *See* BellSouth Comments at 29; SBC Comments at 27; Sprint Comments at 19; Verizon Comments at 6; AT&T Comments to *First Report and Order* at 16 n.38; WorldCom Comments to *First Report and Order* at 20.

[87] *See* US West Comments to *First Report and Order* at 2.

[88] *See* NASUCA Comments at 30; General Services Administration Comments to *First Report and Order* at 10-11.

[89] *See LNP Third Report and Order*, 13 FCC Rcd at 11774, para. 136.

an access-related service, and instead imposed a direct end-user charge.[90] The Commission therefore found that recovering LNP costs through access charges would be inappropriate and would not be competitively neutral.[91] With respect to thousands-block number pooling, however, we find the opposite to be true. Although thousands-block number pooling and LNP utilize the same LRN architecture,[92] we find that because they are very different types of services, different types of recovery are appropriate.

34. We are led to the view that numbering administration is inherently access-related by the same reasoning that led us to conclude that LNP was *not* access-related. LNP was an entirely new service and performed no telephone network function that would benefit ILECs. It was implemented for the sole purpose of making it easier for subscribers to change carriers. Numbering administration, on the other hand, is a basic telephone network function. IXCs would not be able to route calls from their subscribers without a numbering system.[93] Thousands-block number pooling is thus different from LNP because it is, essentially, an enhancement of existing numbering administration procedures designed to extend the life of the existing numbering system.[94] Treating pooling as an access-related service is thus entirely appropriate. Access charges are the means by which access customers share in the costs of the telephone network,[95] and all carriers and subscribers will benefit from national thousands-block number pooling to the extent that it postpones or avoids area code relief and ultimately the replacement of the existing NANP.[96]

35. Characterizing pooling costs as access-related and permitting recovery of the extraordinary costs of thousands-block number pooling accordingly is consistent with the statutory mandate of competitive neutrality. In the *LNP Third Report and Order*, the Commission noted that, in evaluating the costs and rates of telecommunications services, the Commission ordinarily applies principles of cost causation under which the purchaser of a service pays at least the incremental cost of providing that service.[97] The Commission found that

[90] *See id.*, 13 FCC Rcd at 11773, para. 135.

[91] *See id.*

[92] *See First Report and Order*, 15 FCC Rcd at 7622, para. 117 and n.238. The Location Routing Number (LRN) database structure, which supports LNP, is used to route calls to customers who have been assigned telephone numbers from a pool because, as with a ported number, the NPA-NXX of a pooled number no longer necessarily identifies the switch or service provider associated with the service. The LRN is a unique ten-digit number assigned to each central office switch to identify each switch in the network for call routing purposes. *Id.*

[93] Carriers use telephone numbers for many other access-related services such as billing, maintenance, administration, and various forms of record keeping.

[94] *See Notice*, 14 FCC Rcd at 10384, para. 138.

[95] *See generally*, 47 C.F.R. § 69.1 *et seq.*

[96] *See First Report and Order*, 15 FCC Rcd at 7625, para. 122.

[97] *See LNP Third Report and Order*, 13 FCC Rcd at 11726-27, para. 41 (citing *LNP First Report and Order*, 11 FCC Rcd at 8419-20).

following ordinary cost causation principles for assigning the costs of LNP would affect the ability of carriers to compete because LNP costs arise only when subscribers change carriers.[98] At least initially, the vast bulk of such changes would occur as entrants win incumbents' customers. Imposing the bulk of the costs of LNP on new entrants would have contradicted the purpose of the statutory requirement for LNP, which was to make telephone markets more competitive.[99] For this reason, in the case of LNP, departure from ordinary cost causation principles was necessary.[100]

36. In the case of thousands-block number pooling, it is not clear who is the "cost causer." The need for pooling results from extraordinary growth of subscribership and the provision of new services in recent years, as well as the entry of new carriers that require blocks of numbers in each rate center.[101] These factors have combined to make space in the number spectrum scarce. All carriers that provide numbers to subscribers have contributed to the number exhaust problem, regardless of whether they began using the numbers long ago or recently. All carriers can contribute to resolving the exhaust problem by using numbers more efficiently, in part through number conservation measures such as thousands-block number pooling. In this context, thousands-block number pooling is simply an enhancement to the previous numbering administration plan that facilitates more efficient coordination among all carriers, and thus there is no "cost causer" in the traditional sense.

37. *Recoverable Costs*. This same reasoning informs our analysis of the kind of costs for which carriers may seek recovery. We agree with those commenters that maintain that the costs of numbering administration are generally and appropriately treated as an ordinary cost of doing business.[102] The recent growth in demand for number resources have required that ILECs and other carriers implement number conservation and numbering management practices, for example, reusing numbers assigned to former subscribers, area code splits, and overlays. We have considered the costs of these numbering administration measures to be ordinary LEC administrative functions that are recovered in LEC rates generally.[103] Under price caps, they are usually considered normal network upgrades that do not qualify for extraordinary recovery (*i.e.*, through an exogenous adjustment to the price cap formula). Under rate-of-return, an adjustment was granted only through the normal review process, that is, upon a showing by the carrier that it would not otherwise earn its authorized rate-of-return. This means that, in principle, recovery of the costs of numbering administration is already provided for in LEC compensation.

38. Thus, the rationale that supported extraordinary cost recovery for LNP

[98] *See id.*

[99] *See id.* at 11727, para. 43 (citing *LNP First Report and Order*, 11 FCC Rcd at 8420-21).

[100] *See id.* at 11726-28, 11731-32, paras. 41-44, 52-53.

[101] *See First Report and Order* 15 FCC Rcd at 7577, 7578-79, paras. 2, 5.

[102] *See* Ad Hoc Comments at 33-34; NASUCA Comments at 32.

[103] *See* Telephone Number Portability Cost Classification Proceeding, *Memorandum Opinion and Order*, 13 FCC Rcd 24495, 24499, para. 7 (1998) (*LNP Cost Classification Order*).

implementation does not support such recovery for thousands-block number pooling. That is, LNP was a new service that did not benefit local exchange operations, but instead made it easier for subscribers to change carriers. In contrast, thousands-block number pooling is, in principle, an enhancement of existing numbering administration procedures, the costs of which are already being recovered through existing mechanisms.[104] However, because the Commission has mandated thousands-block number pooling as a national numbering resource optimization strategy, increased costs, if any, associated with thousands-block number pooling are distinguishable from those associated with NPA relief. Therefore, we conclude that a very narrow approach to thousands-block number pooling recovery is appropriate, and that extraordinary recovery should be granted only for extraordinary implementation costs. Because access charges are intended to recover a portion of telephone network costs, including the extraordinary costs of number pooling and permitting recovery of these extraordinary costs in access charges as we would any other cost of administration does not constitute a subsidy, implicit or explicit. More specific guidance as to how these extraordinary costs are to be identified is provided in section 3 below.

39. *Recovery Methodology*. Price cap carriers may recover extraordinary costs as follows. Under the price cap rules, extraordinary cost increases that result from mandates of this Commission may result in an exogenous increase in price cap ceilings that apply to access charges.[105] Thus, any appropriate adjustment for price cap carriers should be made in this manner.[106] The extraordinary costs of thousands-block number pooling will be assigned to the common line basket because they are most closely associated with lines. Because recovery for numbering administration expenses is already included in basic LEC compensation, however, LECs seeking extraordinary recovery of thousands-block number pooling costs in the form of an exogenous adjustment to their price cap formula must overcome a rebuttable presumption that no additional recovery is justified.

40. Moreover, in order to qualify for an exogenous upward adjustment, carriers must also demonstrate that thousands-block number pooling results in a net cost increase rather than a cost reduction. Unlike other mandates of the Commission, thousands-block number pooling may reduce network costs. Some commenters argued that savings associated with thousands-block number pooling are speculative or *de minimus*.[107] Others argue that implementation of thousands-block number pooling will save substantial costs over current area code relief practices and could result in a cost savings.[108] In the absence of carrier-specific evidence, we do

[104] Moreover, implementation of thousands-block number pooling will enable continued growth of carriers' subscriber base. This, and the revenue from the additional services sold as a result, will provide some substantial recovery for numbering administration costs, including the costs of implementing thousands-block number pooling.

[105] *See* 47 C.F.R. § 61.45(d).

[106] For rate-of-return carriers, of course, costs arising from thousands-block number pooling would be treated in the same manner as other costs in each carrier's biennial rate adjustments. *See* 47 C.F.R. § 61.39.

[107] *See* NECA Comments at 3; SBC Comments at 25; Verizon Comments at 5.

[108] *See* Ad Hoc Comments at 31-33; Joint Consumer Comments to *First Report and Order* at 42; General Services Administration Reply Comments to *First Report and Order* at 16-17.

not endorse either line of argument. However, as the Commission has already observed, to the extent that thousands-block number pooling postpones or avoids area code relief and ultimately the replacement of the existing NANP, all carriers and subscribers will benefit.[109] To qualify for an exogenous adjustment, carriers must show that costs for which extraordinary treatment is sought exceed the costs that would have been incurred had the carrier engaged in an area code split, overlay or other numbering relief that would otherwise have been required in the absence of pooling. Only extraordinary upward costs will be subject to direct assignment to interstate access for separations purposes under the federal cost recovery mechanism we have established in this Order.[110] That is, consistent with historical treatment, ordinary costs will flow though jurisdictional separations in the normal manner.[111]

41. Because the extraordinary federal recovery mechanism is intended to recover only the initial implementation costs of thousands-block number pooling and, as in the case of LNP, pooling will ultimately become a normal network feature recovered through existing means,[112] any exogenous increase in an ILEC's permitted price cap revenues should be reversed after those initial extraordinary costs have been recovered. Based upon our review of the carriers' filings, the cost of thousand-block number pooling implementation is anticipated to be substantially lower than LNP implementation. Thus, we believe the five-year recovery period for LNP costs represents the longest reasonable period for recovering the cost of thousands-block number pooling. On the other hand, a one-time charge would create an inordinate financial hardship on access customers. We are thus required to establish some reasonable period of time, shorter than five years, over which these costs may be recovered. Given that an ILEC's unrecovered capital investment will be subject to an 11.25 percent after-tax return, however, a longer recovery period greatly increases the total cost, while a shorter recovery period would decrease total cost by decreasing the interest expense. Accordingly, we conclude that recovery should be spread over a two-year period. This is appropriate given the two-year national rollout period recently proposed.[113] After this implementation period, thousands-block number pooling will have become a normal network function and recovery of ongoing costs will be through existing means. Price cap carriers should file tariffs reflecting recovery through an exogenous recovery adjustment for a two-year period beginning April 2, 2002. Setting the effective date at the beginning of the month following scheduled implementation will be administratively convenient both for carrier billing systems and for the Commission's tariff review. Capital costs should be amortized over the recovery period. Non-price cap carriers subject to rate regulation may include

[109] *See supra* at n.96 and accompanying text (citing *First Report and Order*, 15 FCC Rcd at 7625, para. 122).

[110] In the *First Report and Order*, the Commission concluded that ILECs will be able to recover qualifying costs of thousands-block number pooling through an exclusively federal cost recovery mechanism and that qualifying costs are assigned directly to the interstate jurisdiction for separations purposes. *See First Report and Order*, 15 FCC Rcd at 7663-64, paras. 196-197.

[111] *See generally*, 47 C.F.R. § 36.

[112] *See LNP Third Report and Order*, 13 FCC Rcd at 11777, para. 144.

[113] *See* Thousands-Block Number Pooling Public Notice.

these costs in the common line category in their biennial rate adjustment.[114]

3. Identification of Costs

42. In the *First Report and Order*, the Commission determined that shared industry costs, along with other carrier-specific costs directly related to thousands-block number pooling, will be subject to a federal carrier-specific cost recovery mechanism,[115] which we have now established as discussed above. The amount and detail of the data provided in response to the Commission's request for estimates of the costs of thousands-block number pooling, however, did not adequately reveal the amount and/or magnitude of such costs. This made selection of the appropriate cost recovery mechanism difficult.[116] Accordingly, the Commission again requested cost information.[117] Ultimately, several carriers filed cost studies.[118] Our preliminary review of these initial cost studies indicates that some carriers may have included costs that are inappropriate under the test for extraordinary recovery that we established in the *First Report and Order*. Some of the cost items included are very similar to cost claims rejected in the *LNP Tariff Investigation Orders*.[119] Accordingly, we briefly explain how we will identify recoverable costs incurred "for the provision of" thousands-block number pooling.

43. In the *First Report and Order*, the Commission concluded that the same strict standards applied to evaluate claimed costs of implementing LNP will also apply to thousands-block number pooling.[120] Thus, under these standards, to be eligible for the extraordinary

[114] Some commenters have argued that a cost recovery mechanism should be established for nonpooling carriers. *See, e.g.*, NECA Comments at 4-5; USTA Reply Comments to *First Report and Order* at 5-6. In the LNP context, some non-LNP capable carriers have incurred costs associated with LNP database queries. Because these carriers are not LNP-capable, they are ineligible to recover these costs under current Commission rules. *See* 47 C.F.R. § 52.33. Commenters in the instant proceeding seek to avoid being subject to similar rules that might preclude recovery for thousands-block number pooling query charges. In areas in which thousands-block number pooling has been implemented, one database query will retrieve both LNP and thousands-block number pooling routing information. A petition for reconsideration of the *LNP Third Report and Order*, which raises the issue of cost recovery for database query charges incurred by non-LNP capable carriers, is currently pending before the Commission. *See* NECA Expedited Petition for Reconsideration, CC Docket No. 95-116 (filed July 29, 1998). Because number pooling can be implemented only where LRN LNP has been deployed, *see First Report and Order*, 15 FCC Rcd at 7622, para. 117, and because only one database query will occur for both the LNP and pooling inquiries, this issue is appropriately resolved in the LNP proceeding rather than in this matter.

[115] *First Report and Order*, 15 FCC Rcd at 7669, para. 207.

[116] *Id.* at 7671, 7687, paras. 214, 253.

[117] *See Second Report and Order*, 16 FCC Rcd at 379, para. 182; *First Report and Order*, 15 FCC Rcd at 7671, 7687, paras. 214, 253.

[118] *See* BellSouth Cost Study; Qwest Comments at Appendix A; SBC Comments (Cost Support Data); Sprint Reply Comments (Cost Study); *see also* US West Comments to *First Report and Order* at Workpapers 1-3.

[119] *See* Long-Term Number Portability Tariff Filings, Ameritech Operating Companies, et al., 14 FCC Rcd 11883 (1999); Long-Term Number Portability Tariff Filings, 14 FCC Rcd 11983 (1999) (collectively *LNP Tariff Investigation Orders).*

[120] *See First Report and Order*, 15 FCC Rcd at 7673, paras. 218-19.

recovery we establish above, thousands-block number pooling costs must satisfy each of three criteria identified in the LNP proceedings. First, only costs that would not have been incurred "but for" thousands-block number pooling are eligible for recovery.[121] Second, only costs incurred "for the provision of" thousands-block number pooling are eligible for recovery.[122] Finally, only "new" costs are eligible for recovery.[123] To be eligible for extraordinary recovery, carriers' thousands-block number pooling shared industry and carrier-specific costs directly related to thousands-block number pooling must satisfy all three of these criteria.[124] Through the adoption of the LNP three-pronged test, the Commission sought both to prevent the overrecovery of thousands-block number pooling and number portability costs[125] and to prevent the recovery of costs not directly related to thousands-block number pooling.[126]

44. The first two criteria shall be interpreted as follows. Only costs that were incurred "for the provision of" thousands-block number pooling are eligible for recovery through this extraordinary mechanism, but these must also be costs that would not have been incurred "but for" thousands-block number pooling.[127] This means that only the demonstrably incremental costs of thousands-block number pooling may be recovered.[128] The Commission adopted a narrow definition of the phrase "for the provision of" in the LNP proceedings. The only eligible LNP costs were the "costs carriers incur specifically in the provision of number portability services, such as for the querying of calls and the porting of telephone numbers from one carrier to another."[129] Similarly, we conclude here that costs specifically incurred in the narrowly defined thousands-block pooling functions are those incurred specifically to identify, donate and receive blocks of pooled numbers, to create and populate the regional databases and carriers' local copies of these databases, and to adapt the procedures for querying these databases and for routing calls so as to accommodate a number pooling environment. These findings are based on

[121] *See id.* at 7673, para. 218.

[122] *See id.*

[123] *See id.* at 7673, para. 219.

[124] Carrier-specific costs not directly related to thousands-block number pooling implementation are not eligible for recovery. *See id.* at 7670, para. 211.

[125] Because changes to the network for both thousands-block number pooling and number portability are similar, and because carriers are currently recovering the costs of number portability through a separate end-user charge, carriers were directed to distinguish the costs of providing number portability from the costs of implementing thousands-block number pooling. *See id.* at 7672, para. 216.

[126] *See id.* at 7672-73, paras. 216-17.

[127] *See id.* at 7673, para. 218.

[128] *See id.* at 7672-75, paras. 217-24.

[129] *See LNP Cost Classification Order*, 13 FCC Rcd at 24501, para. 12 (citing *LNP Third Report and Order*, 13 FCC Rcd at 11740, para. 72).

our review of the filed cost studies.[130]

45. As with LNP, costs that carriers incur as an "incidental consequence" of thousands-block number pooling implementation are not incurred specifically in the provision of narrowly defined thousands-block pooling functions. Thus, costs incurred to adapt other systems to the presence of thousands-block number pooling are not incurred for the provision of thousands-block number pooling and are ineligible for recovery.[131] Examples of such systems include those for maintenance, repair, billing and other functions not directly involved in the provision of thousands-block number pooling. These systems are not part of the provisioning of thousands-block number pooling. Similarly, costs incurred to facilitate the continued provision of other services in the presence of number pooling are an "incidental consequence" and are not eligible for recovery. For example, database-related costs such as those involving service control points (SCPs) that support services such as third-party billing or calling card calls are not eligible even though these costs would not have been incurred but for number pooling.

46. The third part of our test requires that thousands-block number pooling costs must also be "new" costs in order to qualify for recovery though the extraordinary mechanism. Costs incurred prior to the implementation of thousands-block number pooling are ineligible for recovery because they are embedded investments already subject to recovery through standard mechanisms. Thus, permitting recovery of these costs again through this extraordinary mechanism would amount to double recovery.[132] Costs are not "new," and thus are ineligible for extraordinary treatment as thousands-block number pooling charges, if they previously were incurred, are already being recovered under ordinary recovery mechanisms, or are already being recovered thorough the number portability end-user charge or query charge.

IV. WAIVER OF GROWTH NUMBERING RESOURCE REQUIREMENTS

A. Reconsideration of Months-to-Exhaust Criteria

47. In the *First Report and Order*, the Commission mandated that carriers demonstrate that their inventory of numbering resources will exhaust within six months before obtaining additional numbering resources by completing a Months-to-Exhaust (MTE) Worksheet.[133] Several carriers seek reconsideration of the MTE requirement.[134] SBC recommends eliminating it, but maintaining the utilization requirement.[135] Similarly, USTA argues that carriers should not

[130] *See generally*, BellSouth Cost Study; Qwest Comments at Appendix A; SBC Comments (Cost Support Data); Sprint Reply Comments (Cost Study).

[131] *See LNP Cost Classification Order*, 13 FCC Rcd at 24501, para. 12 (citing *LNP Third Report and Order*, 13 FCC Rcd at 11740, para. 72).

[132] *See First Report and Order*, 15 FCC Rcd at 7673, para. 219; *see also LNP Cost Classification Order*, 13 FCC Rcd at 24503, para. 18.

[133] *First Report and Order*, 15 FCC Rcd at 7615-16, para. 101-102.

[134] BellSouth Petition at 1; SBC Petition at 1-2; USTA Petition at 2.

[135] SBC Comments at 2.

be required to meet both the MTE and utilization requirements.[136] USTA also suggests that if both the MTE and utilization requirements are retained, distinctions should be adopted between wireline and wireless carriers and pooling and non-pooling areas.[137]

48. We reaffirm that the MTE requirement is an important tool to ensure that numbering resources are used efficiently and that carriers have an adequate supply of resources to serve customers.[138] This requirement seeks to prevent carriers from carrying excessive inventories of numbering resources.[139] To ensure that carriers request and receive numbering resources only when and where needed, carriers must continue to be required to demonstrate in the MTE calculation that they need numbering resources to provide services. The MTE requirement coupled with the utilization threshold requirement deters carriers from stockpiling excessive inventories.[140] It also helps maintain a level playing field among carriers. We therefore reject USTA's suggestions to exempt certain carriers in certain areas from the MTE requirement.[141] We also reject the argument that the MTE should be calculated on a per-switch basis. We continue to believe that the rate center-based projection is appropriate because it encourages carriers to use number efficiently within a local calling area and because the utilization threshold is calculated on a rate-center basis.

49. In addition, we are not persuaded by the comments that suggest a MTE requirement is not necessary in light of the utilization threshold requirement. Both requirements serve important, but different, functions in promoting the Commission's numbering optimization policies: the MTE requirement deters stockpiling, and the utilization requirement helps ensure that carriers optimize the use of existing resources. None of the comments in this proceeding have persuasively demonstrated that the utilization requirement alone will also deter stockpiling. Accordingly, we decline to eliminate the MTE requirement.

B. Reconsideration of Utilization Threshold and Formula

50. In addition to meeting the MTE requirement, carriers must meet a 60% minimum utilization threshold in order to obtain growth numbering resources.[142] The threshold will

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[136] USTA Comments at 2.

[137] *Id.* at 3. USTA suggests that the MTE and utilization criteria should be calculated at the switch level in a non-pooling environment and at the rate center level in a pooling environment.

[138] In response to several petitions for reconsideration that opposed adoption of the MTE criteria, and a utilization threshold, the Commission affirmed both requirements. *Second Report and Order*, 16 FCC Rcd at 320, para. 29.

[139] *See Notice*, 14 FCC Rcd at 10348.

[140] Both requirements are necessary to optimize the use of numbering resources. They serve as objective needs-based criteria to allow carriers access to numbering resources in a competitively neutral manner.

[141] As noted in the *First Report and Order*, we decline to require different criteria for different market segments in order to maintain competitive neutrality. *See First Report and Order*, 15 FCC Rcd at 7618, para. 106.

[142] *Second Report and Order*, 16 FCC Rcd at 316, para. 22. See also *Second Report and Order*, 16 FCC Rcd at 319-20, para. 29, wherein the Commission addresssed petitions for reconsideration of the utilization requirement.

increase by 5% annually commencing June 30, 2002, until it reaches 75% on June 30, 2004.[143] The utilization level is calculated by dividing all numbers assigned to end-users (numerator) by the total numbering resources assigned to that carrier (denominator) and multiplying the result by 100.[144] Several carriers seek reconsideration of the utilization requirements and the method for calculating utilization. Specifically, some carriers request reconsideration of the Commission's decision to exclude intermediate numbers from the numerator.[145] Cingular and BellSouth would also include reserved, aging, and administrative numbers in the numerator. Cingular also contends that if the utilization calculation is not modified, the Commission should significantly reduce the utilization threshold.

51. SBC and Verizon object to the Commission's decision to allow state commissions that had established higher utilization levels to retain the higher threshold.[146] USTA and Verizon contend that the states that have authority to use higher utilization thresholds should either be allowed to continue to use their own formula for calculating those levels or be required to adjust the utilization threshold down to the federal 60% level.[147] Verizon requests reconsideration of the utilization calculation or, alternatively, confirmation that resellers are subject to the utilization level.[148] WorldCom requests reconsideration of the decision that pooling carriers must achieve the same utilization level as non-pooling carriers.[149]

1. Utilization Threshold

52. We decline to lower the utilization threshold established in the *Second Report and Order*. No carrier has demonstrated in the record that the utilization threshold is not readily achievable, or that the ability in most instances to serve customers is hampered because the threshold level is too high. To the contrary, utilization studies show that many carriers can meet or exceed the 60% utilization threshold.[150] A lower utilization threshold, or no utilization threshold as some commenters suggest, provides little incentive for carriers to optimize the use

[143] *Id.* at 318, paras. 25-26.

[144] *First Report and Order*, 15 FCC Rcd at 7619, para. 109.

[145] SBC Petition at 3; CTIA Petition at 3; USTA Petition at 4. Intermediate numbers are numbers that are made available for use by another telecommunications carrier or non-carrier entity for the purpose of providing telecommunications service to an end user or customer. Numbers ported for the purpose of transferring an established customer's service to another service provider shall not be classified as intermediate numbers. *See* 47 C.F.R. § 52.15(f)(v).

[146] SBC Petition at 5-7; Verizon Wireless Petition at 8-10.

[147] USTA Petition at 6; Verizon Petition at 8-9.

[148] Verizon Wireless Petition at 4-7.

[149] WorldCom Petition at 1-6.

[150] *See November 2001 Numbering Utilization Report* at Figures 1-4. The data shows that where carriers have ten to twenty NXXs in a rate center LECs report over 65% utilization, CLECs report approximately 40% utilization, and wireless carriers report over 60% utilization.

of their existing inventories. The utilization threshold is thus an important tool in achieving our numbering resource optimization goals, and petitioners have made no convincing arguments for eliminating or lowering it.[151]

53. We will allow state commission that have established utilization thresholds higher than 60% to continue to use higher thresholds. In deference to state commissions and to encourage their progress in dealing with numbering exhaust, we support these stricter requirements. Grandfathered utilization thresholds cannot exceed the national 75% ceiling and must be calculated in the manner established in the *First Report and Order*.[152] We clarify, however, that states may lower grandfathered utilization levels to compensate for having to use the federal utilization methodology. We are satisfied that carriers that need additional numbering resources to serve their customers before they are able to meet the required utilization threshold have sufficient redress at both the state and federal level.[153] Accordingly, we decline to eliminate the grandfathered utilization levels.

2. Utilization Formula

54. Previously, the Commission denied requests to reconsider the manner in which the utilization level is calculated.[154] The petitioners present no arguments in support of their renewed request to change the calculation that have not already been rejected. The Commission previously found unpersuasive, and therefore rejected, arguments that administrative, aging, intermediate, and reserved numbers should be included in the numerator or that the utilization threshold should otherwise be reduced.[155] The Commission explained that basing the utilization calculation on assigned numbers is the appropriate measure, because it provides a more accurate representation of the percentage of numbers being used to serve customers. We continue to believe that this is the proper approach for furthering our numbering optimization goals.[156] We reaffirm that the utilization threshold should be calculated by dividing assigned numbers by the total numbering resources assigned to the carrier multiplied by 100.

3. Applicability of Utilization Threshold to Pooling Carriers

55. In the *Second Report and Order*, the Commission determined that the utilization threshold should be applied to pooling carriers.[157] Encouraged by the results of pooling trials

[151] We also note that the utilization threshold applies to all carriers, including resellers, that receive numbering resources from the NANPA or the pooling administrator.

[152] *Second Report and Order*, 16 FCC Rcd at 317, para 23.

[153] *See infra* at Section IV.C.

[154] *Second Report and Order*, 16 FCC Rcd at 320, para. 30.

[155] *Id.*

[156] *First Report and Order*, 15 FCC Rcd at 7618, para. 107 and *Second Report and Order*, 16 FCC Rcd at 320, para. 30.

[157] *Second Report and Order*, 16 FCC Rcd at 319, para. 27-28.

with utilization thresholds, the Commission concluded that the rationale for applying the utilization threshold in a non-pooling environment applies equally in a pooling environment.[158] WorldCom seeks reconsideration of the Commission's extension of the utilization threshold to pooling carriers, arguing that there is a no record basis for establishing a utilization threshold for pooling carriers.[159]

56. Requiring all carriers to meet the utilization threshold helps ensure that requests for additional numbering resources are needs-based. It furthers our numbering resource optimization policies by ensuring that all carriers retain only the numbers that they need in their inventories. We conclude that exempting pooling carriers from the utilization requirement will undermine the efficiencies that we have achieved by requiring non-pooling carriers to meet a utilization threshold. The need for a utilization threshold is especially present in large metropolitan areas where the demand for numbering resources is the greatest. Utilization thresholds provide an objective measure of determining when carriers are in need of additional numbering resources, and they provide a competitively neutral means for assigning numbering resources when and where needed. Accordingly, we affirm that the utilization threshold is appropriate for pooling carriers.

C. Safety Valve

1. Background

57. In the *Second Further Notice of Proposed Rulemaking*, the Commission sought 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. Specifically, the Commission sought empirical data on the extent to which this problem exists, possible solutions (e.g., intra-company and intra-rate center pooling or porting of unassigned numbers among switches), and comment on whether the NANPA or state commissions should be given the authority to decide requests for waiver in certain narrowly defined instances.

58. The Commission noted that certain conditions might prevent carriers from meeting the rate center-based utilization threshold when they actually need additional numbers.[160] These conditions might include situations where a carrier has multiple switches within a rate center but it is unable to readily share numbering resources among those switches.[161] In addition, some commenters suggested that a safety valve may be warranted where a carrier is unable to meet the utilization threshold because it has a large block of intermediate numbers that must be made available to other carriers and are unavailable for use by the carrier to provide service to its

[158] *Id.*

[159] WorldCom Petition at 1.

[160] *Second Report and Order*, 16 FCC Rcd at 381, para. 188.

[161] *Id.* at 380-81, para. 187.

customers.[162]

59. Most carriers support the use of a safety valve mechanism, particularly where a new switch is put into service to increase capacity in a given rate center.[163] Other carriers support use of a safety valve when the growth requirements cannot be met and numbering resources are needed to meet a specific customer request.[164] In contrast, Cox opposes an explicit safety valve for utilization waivers.[165] It argues that a safety valve runs counter to the Commission's number usage and assignment goals and may become the rule rather than the exception.[166] None of the commenters provided empirical data on the extent to which carriers are unable to comply with the growth numbering resource requirements and yet need numbering resources in order to serve customers.[167]

60. The state commissions urge caution in creating a safety valve mechanism, and note that it should be applied only in exceptional circumstances.[168] The Pennsylvania PUC suggests that state commissions should have the flexibility to grant waivers within the context of a nationally mandated utilization threshold.[169]

2. Discussion

61. We agree with the commenting parties that a safety valve mechanism should be established, and we delegate authority to state commissions to hear claims that a safety valve should be applied when the NANPA or Pooling Administrator denies a specific request for numbering resources.[170] State commissions should only apply a safety valve mechanism as a last resort and, to the extent possible, use it as a stop gap measure to enable carriers in need of additional numbering resources to continue to serve their customers. We adopt one specific safety valve to address the numbering resource requirements of carriers experiencing rapid growth in a given rate area. We also clarify that states may grant requests by carriers that receive a specific customer request for numbering resources that exceeds their available inventory. Finally, we give states some flexibility to direct the NANPA or Pooling Administrator to assign additional numbering resources to carriers that have demonstrated a verifiable need for additional

[162] *Id.*

[163] Verizon Comments at 2; Warner Telecom Comments at 7-9.

[164] ALTS Comments at 18; Focal Communications Comments at 7.

[165] Cox Comments at 16.

[166] *Id.*

[167] Since the growth requirements became effective on May 8, 2001, the Common Carrier Bureau has received five waiver requests.

[168] Texas PUC Comments at 19; Ohio PUC Comments at 28-29; New Hampshire PUC Comments at 7.

[169] Pennsylvania PUC Comments at 9.

[170] See Ad Hoc Telecommunications Users Comments at 36-37; BellSouth Comments at 31.

numbering resources outside of these specifically enumerated instances.

62. We share Cox's concern that the safety valve mechanism not be used to circumvent our growth resources requirements. When applying the safety valve, state commissions must take into consideration the extent to which the carrier has used available numbering resource optimization strategies, including intra-company porting. Carriers should pursue all available measures before applying for a "safety valve" waiver. The burden is on the carrier requesting application of the safety valve to demonstrate that deviation from the growth requirements is warranted. We reject Qwest's suggestion that carriers need only certify that they have met the safety valve parameters. As discussed in the prior orders, self-certification defeats the purpose of establishing needs-based tests.[171]

63. We establish a safety valve to ensure that carriers experiencing rapid growth in a given market will be able to meet customer demand. States may use this safety valve to grant requests from carriers that demonstrate the following: 1) the carrier will exhaust its numbering resources in a market or rate area within three months (in lieu of the 6 months-to-exhaust requirement); and 2) projected growth is based on the carrier's actual growth in the market or rate area, or on the carrier's actual growth in a reasonably comparable market, but only if that projected growth varies no more than 15 percent from historical growth in the relevant market.

64. We also agree with WinStar that a carrier should be able to get additional numbering resources when there is a verifiable need due to the carrier's inability to satisfy a specific customer request.[172] We therefore clarify that states may also grant relief if a carrier demonstrates that it has received a customer request for numbering resources in a given rate center that it cannot meet with its current inventory. Carriers may demonstrate such a need by providing the state with documentation of the customer request and current proof of utilization in the rate center. States may not accommodate requests for specific numbers (i.e., vanity numbers), but may grant requests for customers seeking contiguous blocks of numbers. Any numbering resources granted for this reason may be initially activated only to serve the requesting customer for whom the application was made. If the customer request is withdrawn or declined, the requesting carrier must return the numbering resources to the NANPA or Pooling Administrator, and may not retain the numbering resources to serve other customers without first meeting our growth numbering resource requirements.

65. Additionally, we do not wish to foster practices that encourage carriers to use numbering resources in a manner that segments service offerings or customer classes (e.g., using separate switches and blocks of numbering resources for specific services or customer classes). We find that such practices are inconsistent with our numbering resource optimization goals. Although new numbering resources are used by carriers to activate new switches, we encourage carriers to pursue other alternatives, such as pooling, to activate those switches and to prevent numbering resources from becoming stranded as the result of installing multiple switches in the same rate center. The safety valve mechanism should be narrowly applied to meet specific

[171] *See First Report and Order*, 15 FCC Rcd at 7610-13, paras. 86-92.

[172] WinStar Comments at 9.

customer requests or to meet a carrier's immediate numbering needs. We nevertheless will allow states to consider requests from carriers with multiple switches in a given rate center to determine whether relief is warranted on a case-by-case basis.

66. Finally, we recognize that in many instances, the failure to address a request for additional numbering resources can impair a carrier's ability to stay in or expand business. We therefore direct states to act on carrier requests for a safety valve as expeditiously as possible. Although we do not establish a specific time limit for states to act on these requests, we believe that, in most instances, 10 business days from receipt of a request that the state determines to be sufficiently detailed and complete will be sufficient time to review and act upon safety valve requests. If a state does not reach a decision on a safety valve request within a reasonable timeframe, carriers may submit such requests to the Commission for resolution. In addition, carriers may appeal to the Commission safety valve decisions made by states, and we delegate authority to the Common Carrier Bureau to review such petitions as expeditiously a possible.

V. SERVICE-SPECIFIC AND TECHNOLOGY-SPECIFIC AREA CODE OVERLAYS

67. In the *Second Report and Order*, the Commission decided to revisit the prohibition against service-specific and technology-specific overlays (collectively specialized overlays or SOs).[173] In this Order, we grant, in part, the petitions of California, Connecticut, Indiana, Massachusetts, Ohio, and Pennsylvania by lifting the ban on SOs, and will allow state commissions seeking to implement SOs to request delegated authority to do so on a case-by-case basis.[174] We decline, at this time, to address the merits of the state petitions seeking specific authority to implement SOs, but invite these states and others to supplement their petitions or seek delegated authority to implement SOs in accordance with the criteria outlined below.[175]

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[173] *See Second Report and Order*, 16 FCC Rcd at 306, 359-66, paras. 124-143. In a service-specific overlay, numbering resources are assigned to carriers that provide a particular type of service or services, such as unified messaging and/or vehicle response (e.g., OnStar) services. In contrast, numbering resources in a technology-specific overlay are assigned to carriers that use a particular type of technology or technologies, such as wireless. For convenience, we will refer to both service-specific and technology-specific overlays collectively as SOs.

[174] *See* 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); Connecticut Department of Public Utility Control Files Petition for Rulemaking, Public Comment Invited, *Public Notice*, 13 FCC Rcd 7416 (1998); *Petition of the Connecticut Department of Public Utility Control for Authority to Conduct a Transitional Service/Technology Specific Overlay Trial*, filed Mar. 12, 2001 (Connecticut Petition); *Petition of the Indiana Utility Regulatory Commission for Waiver of 47 C.F.R. § 52.19(c)(3)*, filed Apr. 17, 2001; 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*, 14 FCC Rcd 5083 (1999); Common Carrier Bureau Seeks Comments on the Ohio Public Utilities Commission's Petition for Delegation of Additional Authority to Implement Number Conservation Measures, *Public Notice*, DA 99-2016 (1999). Common Carrier Bureau Seeks Comment on the Pennsylvania Public Utility Commission's Petition for Delegation of Additional Authority to Implement Number Conservation Measures, *Public Notice*, 15 FCC Rcd 2904 (2000).

[175] *See, e.g.*, California Commission Comments at 2-3; Connecticut Commission Comments at 7-10; Florida Commission Comments at 5; Illinois Commission Comments at 4-7; Michigan Commission Comments at 1-2; New (continued....)

68. *Background.* In 1996, the Commission rejected a wireless-only overlay plan for the 708 NPA proposed by Ameritech after determining that the plan was unreasonably discriminatory and was an unjust and unreasonable practice in violation of sections 202(a) and 201(b) of the Act.[176] In the *Local Competition Second Report and Order*, the Commission applied principles set forth in the *Ameritech Order*[177] to prohibit SOs, reiterating that such plans would be unreasonably discriminatory and unduly inhibit competition.[178] In 1999, however, the Commission decided to reconsider whether to modify or lift the prohibition on SOs, based on the increased urgency of the numbering crisis and the broader issues raised in the *Numbering Resource Optimization* proceeding.[179] In the *Notice*, the Commission sought comment on whether to consider exceptions to the prohibition on a case-by-case basis or to adopt general guidelines, and whether requests for SOs should be addressed at the federal level or whether state commissions should have authority to implement SOs applying federal guidelines.[180] The issue was revisited in the *Second Report and Order*, which noted that commenters in response to the *Notice* argued that changes in the use of numbering resources warranted reconsideration of this ban.[181] The Commission also sought comment on a proposal by the Joint Wireless Commenters (JWC) to adopt a framework for allowing transitional SOs subject to certain conditions.[182]

69. Although most commenters appear to presume that any SO approved by the Commission would be applicable only to wireless and paging providers, we do not limit our discussion of SOs to those carriers. SOs may also include technologies and services other than

(Continued from previous page)
Hampshire Commission Comments at 5-6; New York State Department of Public Services Comments at 1-2; Ohio Commission Comments at 5; and Texas Commission Comments at 7-8.

[176] *See Proposed 708 Relief Plan and 630 Numbering Plan Area Code by Ameritech – Illinois*, Declaratory Ruling and Order, 10 FCC Rcd 4596, 4607-12, paras. 25-29, 33-35 (1996) (*Ameritech Order*); *see also* 47 U.S.C. §§ 201(b), 202(a).

[177] Administration of the NANP should (1) seek to facilitate entry into the communications marketplace by making numbering resources available on an efficient and timely basis; (2) not unduly favor or disadvantage a particular industry segment or group of consumers; and (3) not unduly favor one technology over another. 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, 19516-17, para. 281 (1996) (citing *Ameritech Order*, 10 FCC Rcd at 4604, para. 18) (*Local Competition Second Report and Order*), *vacated in part*, California v. FCC, 124 F.3d 934 (8th Cir. 1997), *rev'd* AT&T v. Iowa Utils. Bd., 199 S. Ct. 721 (1999).

[178] See *Local Competition Second Report and Order*, 11 FCC Rcd at 19518, para. 285 (1996).

[179] *Notice*, 14 FCC Rcd at 10431, para. 257.

[180] *Id.* at 10432, para. 261.

[181] *Second Report and Order*, 16 FCC Rcd at 361, para. 128.

[182] *See Second Report and Order*, 16 FCC Rcd at 361-63, 364-66, paras. 127, 130, 135-141 (citing 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 Messaging Services and VoiceStream Wireless) and letter from Celia Nogales, SBC, to Magalie Roman Salas, Secretary, FCC, dated November 19, 1999). In the transitional SO, the SO would convert into an all-services overlay at a designated time or when certain events occurred, such as the exhaust of the underlying area code.

or in addition to wireless services. For example, a service-specific overlay could include services that generally do not require numbers from a specific geographic area (e.g., some data services, automatic teller machines (ATMs), and unified messaging services), or a technology-specific overlay could include broader groups of technologies (e.g., non-pooling carriers). We therefore address SOs in this broader context.

70. *Discussion.* A number of commenters favor lifting the ban on SOs,[183] arguing, among other things, that the life of existing area codes used by pooling carriers could be prolonged by creating SOs for exclusive assignment to non-pooling service providers.[184] Other commenters oppose such a measure, because they believe that SOs are discriminatory.[185] Moreover, they contend that SOs would not improve number efficiency and would accelerate exhaust of the NANP by dividing demand for numbers by service or technology.[186] Most commenters that oppose lifting the ban, however, seem more amenable to SOs that are transitional in nature.[187] For example, some wireless carriers state that in areas where an area code is in jeopardy, a technology-specific overlay could be created for use by non-pooling carriers and then converted to an all-services overlay when such carriers become pooling-capable. Thus, at least in the context of transitional SOs, earlier concerns raised over the potential discriminatory effects of SOs have been tempered by carriers' concerns over the availability of numbering resources in certain areas, particularly where state commissions have postponed needed area code relief.

71. Despite an apparent shift in views on the potential discriminatory effects of SOs, we continue to be concerned that placing specific services and technologies in SOs could have an adverse impact on the affected customers and service providers.[188] For example, consumers may be dissuaded from signing up for wireless service if they do not have access to numbers in the

[183] Ad Hoc Comments at 3, 6 (imminent exhaust of the NANP justifies the use of SOs); Cox Comments at 2 (expanded SOs should ensure that numbering resources are not being underutilized within that SO); Illinois Commerce Commission Comments at 7 (expanded SOs were not included in the proposal rejected by the FCC in the *Ameritech Order*); Michigan PSC Reply Comments at 3 (lifting the prohibition on SOs would provide state commissions with more options for providing area code relief); NASUCA Comments at 5-6; Ohio PUC Comments at 5 (state commissions should be allowed to determine whether a SO should be transitional).

[184] *See, e.g.*, Ad Hoc Comments at 3.

[185] *See, e.g.*, BellSouth Comments at 3, 10; Cingular Comments at 8; PCIA Comments at 7 (wireless carriers often compete with wireline carriers); Sprint Reply Comments at 8, 10 (SOs would not improve number conservation or the efficient use of numbering resources, even if the Commission required take-backs because the wireless carriers' level of number utilization would be the same in the SO); USTA Reply Comments at 2; Verizon Wireless Reply Comments at 3; VoiceStream Comments at 3-4; WinStar Comments at 1-2.

[186] *See, e.g.*, Sprint Reply Comments at 10; WorldCom Reply Comments at 2.

[187] *See, e.g.*, BellSouth Comments at 3, 10; Cingular Comments at 6-8; PCIA Comments at 7, 8; Verizon Wireless Reply Comments at 3; VoiceStream Comments at 3-5.

[188] Particularly, we question NASUCA's argument that discrimination does not exist for wireless providers because they serve a separate market. *See* NASUCA Comments at 6. *See also Wireless Order*, 16 FCC Rcd at 13381, 13382 (acknowledging that, for some consumers, wireless service has replaced wireline service, and that some wireless carriers have been competing directly with local wireline providers).

"incumbent" area code. In the *Ameritech Order*, we considered whether, in light of such discriminatory effects, the different terms or conditions as applied to a specific group of service providers were "just and reasonable under the circumstances."[189] At that time, we found that they were not.

72. We now believe, however, that circumstances have changed since the *Ameritech Order* that justify lifting the blanket prohibition on SOs and, instead, we will consider SO proposals on a case-by-case basis. First, carriers in 1996 were not faced with the exigent numbering shortages that exist today. Thus, the benefits of making more numbering resources available through SOs may, in some circumstances, outweigh their potential discriminatory effect. Second, in recent years, there has been a proliferation of new telecommunications services that use vast amounts of numbering resources but do not necessarily need numbering resources from a particular geographic area.[190] If, through the use of service-specific overlays for such services, geographic identity for some areas can be preserved, that too might outweigh any potential discrimination.

73. We disagree with Sprint that re-examination of the ban on SOs is not justified by changes in the use of numbering resources.[191] We find that, given the potential for premature NANP exhaust, we should examine all options, including SOs, which may be able to provide some form of relief to the numbering resource shortage. Thus, we can no longer fully embrace the notion that placing certain technologies and services in a separate overlay is necessarily *unreasonably* discriminatory, particularly if numbering resource optimization benefits are realized. We continue to focus on our goals of numbering use efficiency, nevertheless, and agree with commenters that in some cases, SOs may not promote number efficiency. We therefore set forth criteria below to provide some guidance to states on what types of proposals would likely merit our approval, and to help ensure that the numbering resource optimization benefits of any proposed SO are realized.

74. We have not pre-determined how the optimal SO would be structured, but believe that some SOs would be more likely to achieve our optimization goals than others. For example, as a general matter, we are extremely reluctant to consider permanent technology-specific overlays, because of the likelihood that numbering resources in the technology-specific overlay would lie fallow. Therefore, a technology-specific overlay that includes, for example, wireless and paging carriers, that is transitional in nature, that avoids take-backs, and that covers a sufficiently large geographic area such that the demand for numbers is substantial, would likely pass muster. We would also likely favor service-specific overlays that would include non-geographically sensitive services (such as data lines like those used for automatic teller machines or credit card approval, unified messaging services, or vehicle response systems such as OnStar) and that would require take-backs of such numbers from established area codes. Such service-specific overlays could even be permanent, to the extent that the demand for use of such numbers was sufficient to

[189] *See Ameritech Order*, 10 FCC Rcd at 4607, para. 25 (citing *MCI Telecommunications Corp. v. FCC*, 842 F.2d 1296 (D.C. Cir. 1988).

[190] Examples of these services include atms, On-Star, and unified messaging services.

[191] Sprint Reply Comments at 8.

adequately utilize the service-specific overlay area code, which could be achieved if the geographic area covered by the service-specific overlay was sufficiently large. We emphasize that these examples are illustrative and not dispositive of any pending petition, since each area must be examined and evaluated on a case-by-case basis. Carriers should continue to work with the NANPA and state commissions to develop creative solutions to prevent premature exhaust of the NANP, including the possible use of service-specific overlays across multiple jurisdictions. We believe the NANC would be an appropriate forum for discussing such creative solutions.

A. Benefits and Costs of SOs

75. The only actual data we have on the potential benefits of SOs, from a numbering resource optimization perspective, come from the technology-specific overlay implemented in New York City by the New York Public Service Commission (New York Commission). The New York Commission implemented the 917 overlay in 1992, prior to the Commission's prohibition of SOs.[192] Expecting exhaust of the 212 NPA by 1993, the New York Commission adopted a plan to implement the 917 overlay, under which new wireless and paging customers would receive numbers in the 917 NPA. Under that plan, existing paging customers were transitioned to the 917 NPA over a four-year period, and existing Bronx and Manhattan wireless customers were relocated to the 917 NPA over a six-year period. The plan also moved Bronx landline customers from the 212 NPA to the 718 NPA, and called for the inclusion of certain designated wireline services in the 917 overlay at an unspecified point in time.[193] By 1999, wireline customers were also receiving numbers from the 917 overlay.[194]

76. As a result of this overlay plan, the 212 and 718 NPAs did not need relief again until 1999.[195] The life of the 212 NPA was thus prolonged for six years beyond projected exhaust in part due to the implementation of the 917 technology-specific overlay. In addition, although the 917 NPA has now reached exhaust, it is currently estimated that the other area codes in New York City (646, 718, and 347) will last until the first quarter of 2006.[196] Wireless customers in New York reportedly supported having wireless phones and pagers in their own code, which suggests that under some circumstances, the benefits of a specialized overlay may outweigh the

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[192] Proceeding on Motion of the Commission Pursuant to Section 97(2) of the Public Service Law Concerning the Supply of Telephone Numbers Available to New York Telephone Company in New York City, *Order Approving Stipulation*, Case 90-C-0347 (Issued and effective Jan. 7, 1991) (*New York Order*).

[193] At that time, Bellcore stated that, under national guidelines, all area codes had to be associated with landline services that had a geographic identity. *See generally, New York Order.*

[194] *See* Gersh Kuntzman and Emily Lambert, *Looking for 212? Your Number's Up*, N.Y. Post, June 28, 1999.

[195] At that time, the New York Commission adopted a plan to implement the 646 and 347 NPAs as all-services overlays. This information is available at <http://www.nanpa.com>. In addition, voluntary thousands-block number pooling in the 212 and 718 NPAs did not commence until July 1, 1998 and March 1, 1999, respectively, and mandatory pools commenced on August 31, 2001. This information is available at <http://www.numberpool.com>.

[196] *Id.* Thus, over a ten-year period, from 1996 to 2006, only two new area codes will have been implemented in New York City.

potential discriminatory effects from a wireless consumer perspective.[197] Furthermore, in New York City, the potentially discriminatory effects of take-backs[198] on paging and wireless providers and customers were likely mitigated by the phased-in schedule, which allowed a gradual transfer of previously existing wireless and paging subscribers to the 917 SO.

77. The New York experience suggests that there may be circumstances in which SOs are beneficial because they prolong the life of the underlying area code by placing certain technologies and service providers into a separate area code,[199] thereby easing the cost and inconvenience of frequent area code relief. SOs may also benefit consumers by facilitating the preservation of geographic identity for wireline customers in a particular area. Finally, and perhaps most significantly, SOs can make available additional resources to certain service providers that would otherwise be subject to rationing or other limitations on access to numbering resources because they operate in an area with thousands-block number pooling, but are not capable of participating in pooling.

78. On the other hand, SOs can also have significant costs associated with them. In the *Ameritech Order* and the *Local Competition Second Report and Order*, we recognized that Ameritech's proposed technology-specific overlay placed wireless and paging providers at a competitive disadvantage because it (1) excluded these providers from the underlying area code; (2) segregated these providers into a separate area code; and (3) required these providers and their customers to incur the cost and inconvenience of changing their numbers (*i.e.*, surrendering their numbers in the underlying area code and obtaining numbers from the new area code, also referred to as "take-backs"). We therefore must weigh the costs of allowing state commissions to implement SOs against the benefits to be realized.

79. We believe that, in some areas, SOs may offer a viable alternative to traditional forms of area code relief. We recognize the frustration experienced by state commissions that must choose the best form of area code relief, the frustration of carriers unable to obtain numbers due to delays in area code relief, and the frustration of consumers who must bear the cost and inconvenience of area code relief. We thus will review on a case-by-case basis, at least initially, each scenario to determine whether a proposed SO would likely result in numbering resource optimization in a given area.[200] Accordingly, we lift the prohibition on SOs and will allow states

[197] *See, e.g.*, Eric Malnic, *New Area Code Coming to Some in North O.C.*, Los Angeles Times, Mar. 23, 1994 (noting that the customers of NYNEX, a telephone company serving New York state, reacted positively to the 917 SO).

[198] Take-backs in New York City required existing paging and wireless subscribers with numbers in the 212 and 718 NPAs to change their numbers to the 917 SO.

[199] SOs may be particularly beneficial for non-pooling service providers that significantly drain numbering resources because they must take 10,000 instead of 1,000 numbers at a time.

[200] We agree that public opinion and the use of expanded overlays are factors in support of SOs. However, commenters fail to provide evidence, establishing that the public supports SOs, and in particular, that wireless subscribers support giving up their number in favor of implementing a SO (with take-backs). Commenters also fail to provide empirical data establishing that an expanded SO within a particular region would ensure that numbers would be used efficiently. Also, commenters fail to explain how state commissions would handle the exhaust of one of the underlying area codes encompassed by an expanded SO.

to seek specific authority to implement SOs on a case-by-case basis.

B. Criteria for SOs

80. As an initial matter, we emphasize that SOs are another form of area code relief available to state commissions in addition to all-services overlays, area code splits, and area code boundary realignments. As such, any delegated authority granted to state commissions to implement SOs will be limited to areas in which a state has properly determined that area code relief is needed. The effect of allowing SOs to be implemented in areas that are not nearing exhaust could be staggering, because of the potential for multiple requests for area codes over a short period of time. In direct contravention of our numbering resource optimization goals, this would lead to an acceleration of NANP exhaust. We also emphasize that SOs are numbering resource optimization measures; thus, states seeking to implement a SO must also demonstrate that the benefits will outweigh the costs of implementing the SO.

81. To provide further guidance to state commissions, we set forth the criteria that each request for delegated authority to implement a SO should address. This will enable us to examine the feasibility of SOs in a particular area, and determine whether the Commission's stated goals are likely to be met if the SO is implemented. As an initial matter, a state commission seeking to implement a SO should discuss why the numbering resource optimization benefits of the proposed SO would be superior to implementation of an all-services overlay. State commissions should also specifically address the following: (1) the technologies or services to be included in the SO; (2) the geographic area to be covered; (3) whether the SO will be transitional; (4) when the SO will be implemented and, if a transitional SO is proposed, when the SO will become an all-services overlay; (5) whether the SO will include take-backs; (6) whether there will be 10-digit dialing in the SO and the underlying area code(s); (7) whether the SO and underlying area code(s) will be subject to rationing; and (8) whether the SO will cover an area in which pooling is taking place.

1. Technologies and Services

82. To provide any meaningful benefits, a SO should divert significant demand from the underlying area code to extend the life of that area code. We believe, for example, that in areas subject to thousands-block number pooling, non-pooling carriers could receive numbering resources from a SO to relieve demand on the underlying code. Moreover, we agree with commenters that SOs should initially include non-pooling providers, such as wireless and paging providers, as well as non-geographic-based service providers,[201] who are also unable to participate in thousands-block number pooling. We specifically favor service-specific overlays that would include and retain non-geographic based services as a means to further reduce the demand in the underlying area code. State commissions seeking delegated authority to implement a SO should therefore provide specific information on which technologies and services will be placed in any proposed SO.

[201] *See, e.g.*, Ad Hoc Comments at 3; Connecticut Department of Public Utility Control Comments at 8; Illinois Commerce Commission Comments at 5. Non-geographic-based services include unified messaging services and automobile-based services such as OnStar. Consumers of such services are likely unaware of, or have no preference for, where their number comes from.

2. Geographic Area

83. A number of commenters support expanded SOs, *i.e.*, SOs that cover multiple existing area codes.[202] The Ohio Commission suggests that the SO could cover entire regions within a state. Other commenters believe, on the other hand, that SOs should conform to existing area code boundaries.[203] The Connecticut Commission raises concerns about how expanded SOs would affect transition into an all-services overlay.[204] We find that SOs that cover more than one area code are superior from a numbering resource optimization perspective because they would reduce the demand for numbers in multiple area codes, and the increased number of subscribers included in the SO would lead to better utilization of numbering resources in the SO NPA. We also believe that service-specific overlays that include non-geographic based services may be ideal, from a numbering resource optimization perspective, if implemented across a wide geographic area, including multiple states and encourage states to work together to explore this option. Because we agree with concerns raised regarding routing and rating issues, however, state commissions proposing expanded SOs should address specifically how they will resolve such issues, especially the rating and routing of calls placed between the underlying area codes and the SO NPA.

3. Transitional SOs

84. As discussed in the *Second Report and Order*, the JWC provided a proposal to implement a framework for allowing SOs that would require a "transition" into an all-services overlay at a designated time. Recognizing the need for additional relief tools, we find that transitional overlays may provide some of the relief that proponents of SOs are seeking but limit the potentially discriminatory effects of creating a permanent SO. Moreover, because transitional SOs eventually include all providers, there is less danger of not being able eventually to utilize all of the numbers in a given SO NPA. We favor technology-specific overlays that are transitional primarily for this reason, and because they offer more flexibility, and thus more benefit. On the other hand, we favor service-specific overlays, particularly those that include non-geographic-based services, that are permanent in nature because they tend to preserve geographic identity. In addition, we note that there is significant support for transitional technology-specific overlays that are based on specific technologies, such as the ability to participate in thousands-block number pooling.[205]

4. When to Implement and Transition SOs

85. Some commenters submit that states should not be allowed to implement SOs when

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[202] *See, e.g.*, Cingular Comments at 7; Illinois Commerce Commission Comments at 7; Ohio PUC Comments at 9, 10; WorldCom Comments at 4.

[203] *See, e.g.*, Connecticut Department of Public Utility Control Comments at 7; CTIA Comments at 7.

[204] Connecticut Department of Public Utility Control Comments at 7.

[205] *See, e.g.*, AT&T Corp. Comments at 5-8; BellSouth Comments at 3, 10; Cingular Comments at 6-8; PCIA Comments at 7, 8; Verizon Wireless Reply Comments at 3; VoiceStream Comments at 3-5.

the underlying NPA is near jeopardy.[206] BellSouth, for example, argues that the underlying NPA should have a life span of more than one year.[207] Verizon supports prohibiting the use of SOs when to do so would postpone full area code relief; when they would be utilized in areas outside of the top 100 MSAs; and if they would be implemented after November 24, 2002.[208] We believe that, to optimize their value, SOs should not be implemented when the underlying NPA has a projected life span of less than one year.[209] For transitional SOs, this time frame should allow consumers to experience the benefits of the transitional overlay before it converts into an all-services overlay. At the same time, we do not want to encourage states to open new NPAs prematurely. If this occurred, SOs could accelerate NANP exhaust rather than alleviate it. Therefore, we will generally not grant authority to create SOs until the state commissions have determined, in accordance with our rules and orders, that area code relief is needed. This will enable states to take advantage of pooling and other numbering resource optimization measures, in addition to the SO, to extend the life of the underlying NPA.

86. In the case of transitional SOs, generally most commenters support transition to an all-services overlay when the underlying area code nears exhaust or when wireless carriers are able to participate in thousands-block number pooling.[210] Regarding transitional SOs in which criteria other than pooling capability is used to determine which carriers are placed in the SO (e.g., a wireless only overlay), the exhaust trigger can conserve NPAs because, by making additional numbering resources available to those served by the underlying area code, additional area code relief can be delayed. It is likely that states would gain additional time to implement other numbering resource optimization measures, thereby potentially increasing the life of the underlying area code even further. If the pooling trigger is used, all transitional overlays would be scheduled to transition by November 24, 2002, the deadline for wireless carriers to pool. This deadline would, unlike the exhaust trigger, diminish the benefits of the transitional SOs, by, in effect, providing relief for the underlying area code prematurely. We therefore favor the exhaust trigger in cases where criteria other than pooling capability is used to determine which carriers are placed in the SO.

87. In the case of transitional SOs for non-pooling capable carriers, we find that there are arguments in favor of transitioning into an all-services overlay when carriers currently unable to participate in thousands-block number pooling become pooling capable. The benefits of number pooling are enhanced when a larger number of carriers are able to participate in pooling within

[206] *See, e.g.*, ALTS Comments at 5; BellSouth Comments at 5; Cingular Comments at 7.

[207] BellSouth Comments at 5-6.

[208] Verizon Comments at 7.

[209] We acknowledge that in some instances, such as when a state already scheduled area code relief and can demonstrate the benefits of implementing a transitional SO in lieu of an all-services overlay, a SO may be appropriate. *See generally*, Connecticut Petition .

[210] *See, e.g.*, ALTS Comments at 6 (supporting transition on November 24, 2002); BellSouth Comments at 7; Connecticut Department of Public Utility Control Comments at 8 (transition should occur when underlying NPA nears exhaust); PCIA Comments at 9; Verizon Wireless Comments at 11; VoiceStream Comments at 7.

an NPA, which diminishes the need to restrict access to the SO to a subset of users of numbering resources. At the same time, we recognize that because of the significant demand for wireless services in some areas, there are arguments that the effectiveness of some SOs can be increased if wireless carriers continue to be included in SOs even after they are able to participate in thousands-block number pooling.[211] Therefore, if state commissions propose a transitional SO that segregates non-pooling carriers into the SO NPA, they bear the burden of demonstrating why the transition should not occur when wireless participation in pooling commences. State commissions should, in all instances, indicate which of these transition triggers they propose to use, and explain how the proposed transition mechanism meets our numbering resource optimization goals and equitably balances the interests of affected carriers and consumers in their proposal for transitioning SOs to all services overlays.

5. Take-Backs

88. Most commenters oppose mandatory take-backs,[212] with several commenters arguing that take-backs are anti-competitive to those technologies and service providers that receive numbering resources from the SO NPA.[213] Take-backs require certain providers to reprogram their equipment and change their customers' phone numbers.[214] Thus, take-backs result in significant cost and inconvenience to those customers and their service providers that are required to relinquish their existing numbers and use numbering resources in the SO NPA. If take-backs were imposed in the context of a wireless services technology-specific overlay, for example, the costs would be particularly significant due to the large and rapidly growing number of wireless subscribers, particularly in major markets.[215] We acknowledge, therefore, that take-backs have significant drawbacks and costs, which need to be considered in determining whether a SO should include take-backs.

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[211] This approach could help to ensure that the demand for numbering resources in the underlying NPA is not affected by an increase in the demand for wireless services, while increasing the likelihood that the SO is not underutilized.

[212] *See, e.g.*, AT&T Wireless Comments at 6; BellSouth Comments at 8; Cingular at 6; CTIA Comments at 7; Illinois Commerce Commission Comments at 5; Ohio PUC Comments at 8-9; PCIA Comments at 8; Verizon Comments at 8; VoiceStream Comments at 6.

[213] *See, e.g.*, AT&T Wireless Comments at 6; Illinois Commerce Commission Comments at 5; Ohio PUC Comments at 8-9; Verizon Wireless Comments at 8; VoiceStream Comments at 5-6. Other commenters support take-backs only under certain circumstances. For example, the Connecticut Department of Public Utility Control supports take-backs, but only for unopened NXX codes, and Cox supports take-backs only for certain service providers such as point-of-service technologies that have little impact on the public. Connecticut Department of Public Utility Control Comments at 6; Cox Comments at 4-5.

[214] However, as Ad Hoc notes, wireline providers and their subscribers experience the cost and inconvenience of take-backs when a geographic split occurs. *See* Ad Hoc Comments at 4.

[215] According to data set forth by the CTIA, wireless subscribership has more than tripled since 1995. *See* FCC, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 12.2 (as reported by the CTIA) (Aug. 2001). This report is available at <http://www.fcc.gov/ccb/stats>. *See also* Cahners In-Stat Group Expects 32% Increase in Wireless Phone Use by Corporate Employees by 2000, *Press Release* (Oct. 5, 1998). This document is available at <http://www.instat.com/pr/1998/wir-ser.htm>.