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February 12, 2001

VIA ELECTRONIC COMMENT FILING SYSTEM

Ms. Magalie Roman Salas  
Office of the Secretary  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Room TW A325  
Washington, D.C. 20554

Re: Numbering Resource Optimization, CC Docket No. 99-200  
Petition for Rulemaking

Dear Ms. Salas:

Pursuant to § 1.401 of the Commission's rules, enclosed please find a Petition for Rulemaking filed by the Ad Hoc Telecommunications Users Committee ("Ad Hoc"). This Petition requests the Commission to adopt, on an expedited basis, a Notice of Proposed Rulemaking concerning rate center consolidation as a method for conserving national numbering resources. Ad Hoc's Petition is being transmitted to the Federal Communications Commission via the Federal Communications Commission's Electronic Comment Filing System ("ECFS").

If you have any questions or concerns, please do not hesitate to contact me at (202) 857-2550.

Respectfully submitted,



James S. Blaszak

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the Matter of  
Numbering Resource Optimization

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CC Docket No. 99-200

**PETITION FOR RULEMAKING  
AD HOC TELECOMMUNICATIONS USERS COMMITTEE**

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February 12, 2001

## **SUMMARY**

In this Petition, Ad Hoc respectfully requests the Commission to adopt, on an expedited basis, a Notice of Proposed Rulemaking that focuses specifically on the issue of rate center consolidation as an essential component of any number resource optimization plan. Current proposals and Commission efforts to identify a solution to the exhaustion of the North American Numbering Plan (NANP) will not succeed unless they include a comprehensive, nationwide solution to the problem of fragmented rate centers. By seeking comment on this issue now, the Commission will facilitate the necessary step of implementing nationwide rate center consolidation, a policy that will substantially delay, and possibly prevent, the exhaustion of number resources.

The rapid depletion of area codes in the NANP has been caused primarily by the inefficient assignment of NXX codes. As described further herein, the bulk of this inefficient allocation is attributable to two causes—ten thousand-block number pooling and rate center fragmentation. In short, the available pool of numbers is divided into the blocks in which the numbers must be distributed to carriers (pooling), then divided across nearly 800 area codes, then further divided into some 800 rate centers within each area code (rate center fragmentation). The Commission, if it hopes to solve the exhaustion problem, must adopt policies that directly address both causes.

Although the Commission and various state utility commissions have undertaken certain efforts to address ten thousand-block pooling, those efforts—unless combined with rate center consolidation—are unlikely to significantly delay the exhaustion of the

NANP. Thousands-block pooling is most effective when implemented in a brand new area code in which numbers have not yet been assigned. Mature area codes, however, have few available “thousand-blocks” that have not already been contaminated by numbers assigned to a single carrier. Thus, thousands-block pooling cannot solve the NANP exhaustion problem unless coupled with the reclamation of already assigned numbers and the consolidation or elimination of rate centers. Carriers have successfully resisted reclamation of assigned numbers. Thus, the only effective measure available to preserve the ten-digit NANP is aggressive rate center consolidation.

By consolidating rate centers nationwide, the Commission will significantly reduce carrier demand for additional numbers. The proliferation of CLECs, each one of which requires a distinct block of numbers in each of the individual rate centers in which it desires to offer local telephone service, has been the primary cause of central office code exhaust and has created the greatest need for area code relief. While CLECs have been assigned quantities of NXX codes that could potentially support nearly 300 million individual telephone numbers, CLECs currently provide only 12.7 million lines to actual customers. The discrepancy between those two figures represents unused numbers that are unavailable to customers solely due to the fragmentation of the NANP across rate centers. The NANP does not have a shortage of numbers but rather a wasteful allocation that prevents accessing its full supply.

The consolidation of rate centers will not cause any significant technological or financial dislocation in the current telecommunications market. The nationwide rate center structure is an anachronism held over from a period when usage charges were distance sensitive. In competitive markets, such as those for long distance and wireless services, rates track the relevant underlying costs. In these markets, distance has become an insignificant, if not entirely irrelevant factor, for determining usage fees. Only in the non-competitive market for local services has distance sensitive calling, measured by rate centers, survived. If rate centers were consolidated, local carriers will be required to revise their rate structures for certain types of calls, an action that is primarily administrative. No significant technology upgrades to the local loop or PSTN would be required. Importantly, the most significant cost, loss of intraLata toll revenue resulting from the abolition of rate centers, totals at most \$2.7 billion. When compared with the costs of NANP exhaust, estimated by the Commission to be between \$50 and \$150 billion, the economic choice for the Commission should be clear.

Thus far, the individual states have been unwilling to undertake meaningful rate center consolidation in the absence of a national policy mandating such action. The Commission has plenary authority over the NANP under the 1996 Telecommunications and should exercise that authority to establish NXX utilization thresholds across NPAs that must be met by a state before additional NPAs will be assigned for relief of number exhaustion. The freshly-minted Commission policy of imposing specific utilization levels on carriers in order to obtain growth NXX codes in any given rate center will be largely ineffective as long as the number of individual rate centers remains as large as

it currently is. Therefore, the Commission should adopt a utilization threshold for NXX numbers within any NPA equal to 44% that must be met before the NANPA will release any additional NPAs to the state utility commission for numbering relief purposes. Such a standard will impose minimal burdens on carriers as it is consistent with the current quantity of numbers assigned by carriers to their customers divided by the total quantity of numbers assigned by NANPA to the carrier. To encourage improved utilization, the threshold should be raised by 5% each year until it reaches a level of 60%, which is consistent with the Commission's utilization threshold for growth NXX codes within rate centers.

In the absence of a Commission mandated threshold, states are unlikely to consolidate their rate centers, and the ultimate goal of preventing exhaustion of the ten-digit NANP will be frustrated. The entire nation will then be subjected to the completely avoidable costs associated with the expansion of the NANP to eleven or twelve digits.

By freeing numbers that are currently unavailable, rate center consolidation will fulfill each of the Commission's number optimization policy goals by: (1) minimizing the negative impact on consumers of premature area code exhaustion by delaying or preventing the problem altogether; (2) ensuring sufficient access to numbering resources for all service providers seeking to enter the telecommunications market by increasing the quantity of numbers available; (3) avoiding the need to expand the NANP to eleven or twelve digits; (4) imposing a relatively insignificant cost upon society in the form of lost intraLata toll revenue, especially when such cost is compared with

permitting number exhaustion to occur; (5) ensuring competitive neutrality by applying a utilization standard to all carriers equally; and (6) minimizing the incentives for carriers to maintain excessively large inventories of numbers for stockpiling purposes by eliminating the “shortage” of numbers and making available a large supply of numbers currently unavailable for use.

The process of consolidating rate centers across the country will, however, take time. If the Commission waits to address the rate center consolidation issue in the current rulemaking in CC Docket 99-200, the opportunity to avoid the unnecessary and avoidable imposition of significant costs on the national economy could be lost. Because the cost of inaction is intolerably high, the Commission should pursue expeditiously the cost effective and simple solution offered by rate center consolidation.

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**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

**PETITION FOR RULEMAKING**

Pursuant to §1.401 of the Commission Rules, the Ad Hoc Telecommunications Users Committee (“Ad Hoc”) hereby submits this Petition for Rulemaking and respectfully requests that the Commission promulgate national policies to encourage the consolidation of rate centers which would dramatically reduce the demand for additional telephone numbers.<sup>1</sup> Current numbering policies and conservation measures, without rate center consolidation, will not prevent mandatory utilization of eleven or twelve-digit dialing in the North American Numbering Plan (NANP). The relief sought through this Petition would increase telephone number utilization rates, slow the demand for telephone numbers by carriers and, in so doing, could quite possibly eliminate any need for expansion of the existing ten-digit NANP.

**I. THE COMMISSION CAN SIGNIFICANTLY DELAY, AND PERHAPS ENTIRELY AVOID, EXHAUSTION OF THE NANP BY ADDRESSING BOTH CAUSES OF THE EXHAUSTION: NUMBER POOLING AND RATE CENTER FRAGMENTATION.**

As the Commission is well aware, the North American Numbering Plan is currently in danger of exhausting the assignable Numbering Plan Area (NPA or area

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<sup>1</sup> The Ad Hoc Telecommunications Users Committee consists of twenty corporate purchasers of telecommunications products and services and represents the interests of its members before governmental entities.

codes). Prior to 1995, there were only 152 assignable NPA codes in the NANP, eight of which (those with the N00 format) were being reserved for non-geographic service access codes (such as 800 for toll-free service and 900 for pay-per-call). In 1995, with the introduction of so-called interchangeable NPA codes (those with 2 through 9 as their middle digit), the potential number of assignable NANP codes was increased by 640 codes, to 792. In the intervening six years (1995 through 2000), however, some 133 of these 640 additional NPA codes have either been placed in service or designated for specific assignment.<sup>2</sup> At this rate of use assignable area codes will almost certainly be exhausted by the end of this decade.<sup>3</sup>

The Commission has estimated that NANP expansion will cost between \$50 and \$150 billion.<sup>4</sup> Most of these costs will be borne by corporate, government and institutional organizations and, directly or indirectly, by consumers generally. The

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<sup>2</sup> Codes were activated at the following rate: 14 in 1995, 20 in 1996, 43 in 1997, 20 in 1998, 23 in 1999, and 13 in 2000. See NANPA, *NPA's Introduced since 1995*, current through October 30, 2000, (visited February 5, 2001), <[http://www.nanpa.com/area\\_codes/npa\\_introduced.html](http://www.nanpa.com/area_codes/npa_introduced.html)>. At least an additional 21 NPAs are currently scheduled for implementation by the end of 2001. See NANPA, *Planned NPAs Not Yet In Service*, (visited February 5, 2001), <[http://www.nanpa.com/area\\_codes/npa\\_planned.html](http://www.nanpa.com/area_codes/npa_planned.html)>. This number could rise significantly, dependent upon the resolution of numerous suspended area code relief proceedings in California, Michigan and Illinois.

<sup>3</sup> In fact, the North American Numbering Plan Administrator ("NANPA") has projected the NANP to reach exhaust as early as 2006. North American Numbering Plan Administrator Lockheed Martin CIS, *North American Numbering Plan Exhaust Study*, April 22, 1999 ("*Numbering Plan Exhaust Study*") at 2-1, (visited February 7, 2001) <<http://www.nanpa.com/reports/index.html>>.

Commission should pursue all reasonable measures to save the economy from the enormous dead weight loss that NANP exhaust and expansion would produce.

NANP exhaust is neither inevitable nor unavoidable. Current industry focus on determining how to add one or more digits to the NANP is misguided<sup>5</sup> when less costly solutions that will render NANP expansion unnecessary are readily available to the Commission and to the state PUCs. Ad Hoc has studied this issue extensively and has determined that NANP exhaust is entirely avoidable by enacting measures that will impose a fraction of the potential societal cost that would be incurred by NANP expansion. The specific measures that the Commission adopted and/or proposed in both the *First Report and Order* and *Second Report and Order*, however, do not go far enough to prevent the impending number exhaustion. They must be supplemented with additional remedial measures described herein.

Exhaustion of the NANP is attributable to two causes: first, the method of assigning numbers to carriers in blocks of 10,000; and second, the requirement that competitive LECs be assigned blocks of numbers in each of the extraordinarily small and numerous individual rate centers that make up the nationwide service territory.

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<sup>4</sup> Notice, 14 FCC Rcd 10337, para. 34, NANC Meeting Minutes, February 17-18, 1999.

<sup>5</sup> The Industry Numbering Council began examining the prospects for NANP expansion back in July, 1995. After reviewing some 27 possible NANP expansion plans, the INC issued a report in December, 1999 setting forth the best five options that were then under active review. Industry Numbering Council, *INC Interim NANP Expansion Report*, December 10, 1999, at 1 (visited February 7, 2001) <<http://www.atis.org/pub/clc/inc/99121025.doc>>.

The exhaustion of numbers is not the result of an inadequate supply or, as is commonly argued, increased demand for numbers. The ten-digit dialing format of the existing North American Numbering Plan can potentially support as many as 6.4 billion telephone numbers. With the combined populations of the United States, Canada, and the other sixteen Caribbean nations that currently participate in the NANP totaling about 320-million—or only about 5% of the theoretical limit of numbers—6.4 billion potentially assignable telephone numbers are more than adequate to meet numbering needs for the foreseeable future.

Instead, the impending number shortage has been caused by the inefficient allocation—or fragmentation—of the existing pool of numbers. Under current practice, numbers must be assigned to carriers in discrete blocks, each of which is tied to a specific geographic area. Thus, the 6.4 billion number capacity is fragmented across nearly 800 area codes, each one of which has a potential capacity of 8 million individual numbers. Each of the 800 area codes is further fragmented into approximately 800 central office codes (“NXX codes”) each one of which has a potential capacity of 10,000 individual numbers. Most area codes possess a specific geographic identity (*i.e.*, a state or a major portion thereof) and most central office codes similarly possess a specific geographic identity, albeit smaller in scope (*i.e.*, a city or town, or a specific portion thereof).

Historically, numbers have been assigned to individual service providers in blocks of 10,000.<sup>6</sup> Because central office codes are linked to specific geographic locations known as "exchanges" or "rate centers," carriers desiring to do business in multiple communities will generally require multiple central office code assignments of 10,000 (or, if available, 1,000) numbers regardless of the actual, or even approximate, number of customers interested in obtaining service from that carrier. The fragmentation of number assignments across area codes, rate codes, and individual service providers prevents an excess supply of numbers in one geographic area or assigned to one carrier from being allocated to another community or carrier that may not have access to an adequate supply.

In its *Numbering Resource Optimization* proceeding, CC Docket 99-200, the Commission has thus far focused most of its attention on the pooling issue and has taken steps to reduce the quantities of numbers assigned to carriers in blocks by implementing a national roll-out of thousands-block pooling. The Commission, however, appears to have acted under the presumption that these policies could be

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<sup>6</sup> Within the past year, numbers have been assigned in blocks of 1,000 in a handful of jurisdictions where "thousands-block pooling" has been implemented. In June, 1998, Illinois became the first state to implement a thousands-block number pooling trial, followed shortly thereafter by New York. Other states, including Maine, California, New Hampshire, Texas, Illinois, and Connecticut have also implemented number pooling trials.

implemented quickly and would produce immediate and measurable results.<sup>7</sup> Although thousands-block pooling addresses one cause of number exhaustion, it will not prevent the imminent exhaustion of the NANP. Only through the consolidation or elimination of rate centers can NANP exhaust be avoided. While the Commission has encouraged to state commissions to address the rate center issue<sup>8</sup> and has described rate center consolidation as both an attractive numbering optimization measure<sup>9</sup> and a vitally important long-term measure to optimize the utilization of numbering resources.<sup>10</sup> It has not provided any guidelines or incentives to the states to consolidate rate centers within their jurisdictions. It is time for the Commission to implement national policies that will encourage individual states to assess and implement rate center consolidation on a nationwide basis.

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<sup>7</sup> *Numbering Resource Optimization*, CC Docket No. 99-200, Report and Order and Further Notice of Proposed Rulemaking, 15 FCC Rcd 7574 (2000) (“*First Report and Order*”).

<sup>8</sup> Petition for Declaratory Ruling and Request for Expedited Action on the July 15, 1997 Order of the Pennsylvania Public Utility Commission Regarding Area Codes 412, 610, 215, and 717, CC Docket No. 96-98, Memorandum Opinion and Order and Order on Reconsideration, 13 FCC Rcd 19009 (1998) (“*Pennsylvania Numbering Order*”); *Numbering Resource Optimization*, CC Docket No. 99-200, Notice of Proposed Rulemaking, 14 FCC Rcd 10322 (1999) (“*Notice*”), at 10373-74, paras. 116-17.

<sup>9</sup> *Notice*, 14 FCC Rcd at 10371, para. 114.

<sup>10</sup> *Id.*, at 10373, para. 116.

**II. NATIONWIDE ADOPTION OF THOUSANDS-BLOCK POOLING, WITHOUT FURTHER REFORMS, WILL NOT PREVENT NANP EXHAUSTION.**

In its December 29, 2000 *Second Report and Order and Second Notice of Proposed Rulemaking* in CC Docket 99-200 ("*Second Report and Order*"), the Commission has adopted and/or has proposed policies intended to reduce the extent of fragmentation as a means for conserving number resources. Principal among these are raising the utilization threshold that must be satisfied before additional numbers in the same rate center can be assigned to a carrier,<sup>11</sup> and further expansion of thousands-block pooling.<sup>12</sup> In its *First Report and Order*, the Commission indicated a willingness to consider unassigned number portability and individual telephone number pooling.<sup>13</sup> Also, in its *Second Report and Order*, the FCC indicated a willingness to revisit its prior policies with respect to service-specific or technology-specific area code assignments.<sup>14</sup> These measures, while commendable, will not solve the number resource crisis and are unlikely to materially delay the ultimate exhaustion of the NANP without additional measures.

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<sup>11</sup> *Numbering Resource Optimization*, CC Docket No. 96-98 and CC Docket No. 99-200, *Second Report and Order*, *Order on Reconsideration*; and, *Second Further Notice of Proposed Rulemaking*, CC Docket 99-200, (2000) ("*Second Report and Order*"), at paras. 18-33.

<sup>12</sup> *Second Report and Order*, at paras. 34-51.

<sup>13</sup> *First Report and Order*, 15 FCC Rcd 7675-77, para. 227-31.

<sup>14</sup> *Second Report and Order*, at paras. 124-43.

In its *First Report and Order* in CC Docket 99-200, the Commission adopted a plan for rolling out thousands-block number pooling, beginning with the largest 100 Metropolitan Statistical Areas (MSAs). For various reasons cited in that *Order*, the Commission established a lengthy timetable for the roll-out of thousands-block pooling,<sup>15</sup> preventing implementation of this form of number resource optimization in most area codes in the immediate future. As a remedy for number exhaustion, thousands-block pooling is most effective when applied to new, largely empty area codes. As these area codes begin assigning numbers, however, and individual blocks of 1,000 numbers become contaminated with assigned numbers, the potential effectiveness of thousands-block pooling significantly diminishes, ultimately to a point where it will have little or no impact upon the life of the area code. If implemented as proposed, this particular measure will at the very most delay for a few years, the complete exhaust of the NANP.<sup>16</sup> The effectiveness of the proposed number pooling can, however, be significantly improved if combined with other number conservation

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<sup>15</sup> *First Report and Order*, 15 FCC Rcd 7644-51, paras. 157-68.

<sup>16</sup> Lockheed Martin CIS, *Number Utilization and Trends*, (February 12, 1999), (*Number Utilization Forecast and Trends*) at 21, wherein pooling is shown to merely extend the life of the NANP, not prevent its exhaust outright. The Commission apparently does not disagree with this assessment. In its *Second Report and Order*, the Commission states that it is “confident that those [number resource optimization] steps [adopted in the *First Report and Order*], and the ones we implement in this order, will help us to achieve our goal of *extending the life of the current NANP*.” *Second Report and Order*, at para. 5 (emphasis supplied). The Commission's goal with respect to numbering resource optimization should be revised so as to adopt readily available measures that will prevent NANP exhaust, rather than simply delay it.

measures (such as rate center consolidation) that can be pursued at both the federal and state level.

**III. THE RAPID DEPLETION OF NPAS HAS BEEN CAUSED PRIMARILY BY INEFFICIENT ASSIGNMENT OF NXX CODES, NOT AN INCREASE IN DEMAND FOR NUMBERS BY END USERS.**

In contrast to popular explanations, the need for additional NPAs has not resulted from increased demand for telephone numbers for wireless phones, modem lines, and fax machines. In fact, the actual causes of the number exhaust problem are directly attributable to a combination of factors largely unrelated to the growth of end user demand for phone numbers.

The proliferation of CLECs, each one of which requires a distinct block of numbers in each of the individual rate centers in which it desires to offer local telephone service, has been the primary cause of central office code exhaust and has created the greatest need for are code relief.<sup>17</sup> As demonstrated in Table 1 below, CLEC demand accounts for some 53% of all new NXX codes cut into service since July 1997, while ILEC demand for the same period has actually decreased.<sup>18</sup>

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<sup>17</sup> In areas where number pooling has not yet been implemented, carriers must receive an entire NXX code for each rate center in which it plans on providing service. In the few areas where thousands-block number pooling is available, carriers can receive numbers in blocks of 1,000.

<sup>18</sup> Total NXX codes assigned increased by 43,091 between July 1997 and January 2001, and CLEC demand increased by 23,047, or 53%. See Table 1.

<b>Table 1</b>			
<b>Assignment of US NXX Codes by Carrier Type, 1997-2001</b>			
<b>Carrier Type</b>	<b>1997 NXX Codes</b>	<b>2001 NXX Codes</b>	<b>Percent Change</b>
ILEC	62,472	61,547	-1.5%
CLEC	6,849	29,896	336.5%
Wireless	9,892	30,861	212.0%

Sources: July 1997 and January 2001 *Local Exchange Routing Guide*.

Whereas wireless carrier demand for NXX codes was driven primarily by the actual growth in the number of wireless phones in service, CLECs have been compelled to acquire NXX codes far in excess of demand for their services. The number of wireless phones grew from 48 million in 1997 to some 97 million today,<sup>19</sup> but CLEC-provided dial tone lines account for only 12.7 million lines.<sup>20</sup> Notwithstanding this disparity of actual numbers in use, CLECs currently have some 30,000 NXX codes assigned to them, which are capable of supporting some 300 million individual telephone numbers; wireless carriers, with more than 7 times the end-user demand, have been assigned roughly the same quantity of NXX codes. In contrast to the gap between CLEC-assigned NXX codes and actual lines in use by CLECs, Table 2 shows that the number of NXX codes assigned to ILECs has decreased, notwithstanding the

<sup>19</sup> Federal Communications Commission, CCB, Industry Analysis Division, *Trends in Telephone Service* (visited February 12, 2001) <<http://www.cs.columbia.edu/~hgs/internet/trend196/>>, December 2000, Table 12.2 (“*Trends in Telephone Service*”).

<sup>20</sup> *Id.*, at Table 9.5.

fact that ILECs have experienced nationwide access line demand growth of some 13 million lines since 1997.<sup>21</sup>

<b>Table 2</b>			
<b>Assignment of US NXX Codes by Carrier Type, 1997-2001</b>			
<b>Carrier Type</b>	<b>Growth in Access Lines/End Users Dec 1996 - June 2000</b>	<b>Growth in Numbers Assigned to Carriers July 1997 - Jan 2001</b>	<b>Numbers Assigned to Carriers per Additional End User</b>
ILEC	13,444,257	-9,250,000	-0.7
CLEC	12,746,924	230,470,000	18.1
Wireless	48,330,553	209,990,000	4.3
Sources: FCC, CCB, Industry Analysis Division, <i>Trends in Telephone Service</i> , (December 2000), Tables 9.5 and 12.2; Table 1 (above).			
Note: In calculating Growth in Access Lines/End Users and Growth in Numbers Assigned to Carriers, the most current available data was use. While the time periods for measuring these two factors are not perfectly concurrent, each represents a recent period of 3.5 years.			

Although CLECs and wireless carriers were assigned the vast majority of new NXX codes, the numbering crisis has not been caused by these entities. CLECs have been assigned an excessive quantity of numbers relative to the demand for their service because of: (1) the requirement that numbers be assigned in blocks of 10,000; and (2) the extraordinarily large number of individual rate centers coupled with the necessity that CLECs<sup>22</sup> have an NXX code (or, if thousands-block pooling is available,

<sup>21</sup> *Id.*

<sup>22</sup> Wireless carriers do not confront this problem to the same extent as CLECs because wireless carriers typically offer their subscribers extended outward and inward local calling areas. Consequently, a wireless carrier need not have an NXX presence in each community in which it offers service; it only needs to have NXX codes rated in a sufficient number of rate centers such that it can offer wide area local call access for wireline-to-wireless calls.

a portion of an NXX code) assigned to them in each rate center in which they seek to offer service.

#### **IV. CONSOLIDATION OR ELIMINATION OF RATE CENTERS WILL PREVENT THE IMMINENT EXHAUSTION OF THE NANP.**

As the Commission has on several occasions emphasized,<sup>23</sup> state PUCs already possess the authority to pursue number resource optimization measures that involve realignment or consolidation of individual rate centers. The definition of rate centers, rate center boundaries, local (toll-free) calling areas, and the specific local rate treatments afforded local calls, have always been within the purview of the state commissions. Notwithstanding the authority to do so, states (with minor exceptions)<sup>24</sup> have been reluctant to pursue rate center consolidation or other rate center related issues as part of their efforts to address the number exhaust problem.<sup>25</sup>

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<sup>23</sup> *Notice*, 14 FCC Rcd 10373-74, para. 117; *Second Report and Order*, at para. 8.

<sup>24</sup> *Notice*, at note 185.

<sup>25</sup> States should view rate center consolidation as a one-time solution to the area code problem that should be implemented in a single, generic area code conservation docket, rather than as a measure that must be debated as a relief plan for any one area code in particular. It appears that no state has considered rate center consolidation in this manner.

In addition, some state utility commissions have found that they are unable to consider effective number conservation measures such as rate center consolidation because they have insufficient time to implement solutions to number optimization problems before they must implement new area codes. The inefficient and inaccurate forecasts by the NPA Administrator for NXX code demand in certain area codes were at the heart of just such a situation for both the Massachusetts Department of Telecommunications and Energy and the Maryland Public Service Commission.

The cost of rate center consolidation is low. Solutions that rely upon rate center realignment and consolidation are almost entirely administrative and pecuniary in nature, involving few if any technical or operational modifications to the ILECs' networks. While important, solutions involving any of the various forms of number pooling, which have been the principal focus of the Commission's efforts, involve potentially substantial hardware and software modifications and upgrades to central office switches, network signaling protocols, and the creation of new data bases that must be accessed in real time so that calls can be properly routed to the appropriate carrier. Thus, by advocating rate center consolidation as a solution that states should

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In Massachusetts, the NPA Code Administrator (which at that time was Bell Atlantic Network Services) informed the Department just two months prior to the full implementation of two new geographic area codes in Eastern Massachusetts (781 and 978) that the two preexisting codes, 508 and 617, were in a state of jeopardy due to unexpectedly high demand for exchange codes. Only two weeks after 781 and 978 were fully implemented, they too were placed in jeopardy, and the Department found itself re-examining area code relief issues under a very short timeline. See *Petition of Lockheed Martin IMS, the North American Numbering Plan Administrator, for area code relief for the 508, 617, 781 and 978 area codes in Eastern Massachusetts*, Order, MA DTE Docket No. 99-11, April 25, 2000, at 4.

In Maryland, the forecast exhaust date for the 443 NPA when it was placed in service (in June 1997) was initially calculated to be 2008. In February 2000, NeuStar, Inc. (the NANPA) revised its exhaust date to the fourth quarter of 2000 due to increased demand for NXX codes. Only two weeks later, NeuStar extended the exhaust date for the 443 NPA by 9 months, due to lower-than-expected demand for NXX codes. Three months later, and only twelve days after filing the NPA Relief Petition with the MD PSC, NeuStar declared the 443 NPA to be in extraordinary jeopardy because demand for NXX codes was considerably higher than had been forecast just three months earlier. These ever-shifting exhaust dates prevented the Maryland Commission from implementing number conservation measures that could have prevented the need for new area codes. See *Petition of NeuStar, Inc., North American Numbering Plan Administrator, for Approval of Relief Plans for the 443 and 240 Area Codes*, Comments of the Maryland Office of People's Counsel, MD PSC Case No. 8853, November 1, 2000.

consider immediately, the Commission would not be promoting an expensive solution that imposes a significant cost burden on the states or the ILECs.

**V. RATE CENTER CONSOLIDATION WILL ELIMINATE AN ANACHRONISTIC STRUCTURAL INEFFICIENCY THAT HAS LITTLE RELEVANCE TO THE MODERN TELECOMMUNICATIONS INDUSTRY AND WOULD NOT SURVIVE IN A FULLY COMPETITIVE MARKET.**

The original purposes for which rate centers were developed are no longer relevant to the modern telecommunications industry. Exchanges and rate centers were first created in the earliest days of the telephone industry. Originally, an exchange referred to the geographic area served by a manual switchboard to which all of the telephone lines within that exchange were connected. An operator would complete local calls by physically plugging the calling party's line into the called party's line using a patch cord. If the call was destined to a customer served by a different switchboard (*i.e.*, in a different exchange), the operator would signal the terminating switchboard and verbally instruct the operator at that location as to which phone line the call was to be connected. Because of their increased complexity, such inter-exchange calls were generally rated as toll and additional charges for the call were applied. For calls to nearby exchanges, direct trunks would interconnect the individual switchboards; however, for longer distances, one or more intermediate switchboards would be involved in interconnecting trunks so as to achieve the desired end-to-end connection. In addition to the various connectivity issues, the actual transport of a call over a considerable distance required the use of expensive wire facilities whose cost tended to vary fairly directly with distance. Distance was thus a major factor in both the

complexity and the cost of individual calls, and it was, therefore, appropriate that the pricing of such calls reflected this significant cost component. The use of numerous and geographically small rate centers, each one of which generally corresponded to the physical network serving an individual exchange, was the administrative device through which distance-based pricing was accomplished.

As the number of telephone lines increased and mechanized switches replaced cord switchboards, the exchange began to take on more administrative properties rather than the physical properties associated with individual switchboards. Multiple central office switches could and did serve the same exchange, and local calling was extended to include nearby exchanges in addition to the subscriber's home exchange.<sup>26</sup> Because calls still needed to be differentiated between local and toll and because toll calls (and some local calls) still needed to be priced on the basis of distance, a system of geographic location Vertical and Horizontal (V-H) coordinates was developed by which each rate center's distance to all other rate centers could be readily determined so that the appropriate rate could be assigned to each individual call.

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<sup>26</sup> Prior to the introduction of mechanized billing, all toll calls had to be manually ticketed and posted to a customer's account for billing purposes. This often proved more costly than the call itself, particularly for intra-exchange calls and for calls to nearby exchanges that were connected by a direct trunk, both situations in which relatively large volumes of calls were common. In such cases, the telephone company would voluntarily expand its local calling areas to avoid billing costs and would often increase the local rate to recapture the otherwise foregone toll revenues.

In addition, other (non-cost-based) reasons justified the distinction between local and toll calls. For more than one hundred years, the prevailing view of telephone service pricing was that rates should be set on the basis of value of service and that toll calls were more valuable than local calls and should thus make a disproportionate contribution to what were seen as the joint costs of providing telephone service overall. The largest component of such joint costs was the individual subscriber loop, the pair of wires dedicated to a specific customer and running continuously from the telephone company central office to the customer's premises. Because the same loop was used to provide both local and toll calling, its non-traffic-sensitive costs were apportioned in some manner between local and long distance calls and, although such costs were fixed with respect to the volume of traffic carried over the loop, they were to be recovered in usage-based charges applicable for toll (and some local) calls.

This policy shifted the burden of cost recovery for the subscriber loop from the customer for whose specific benefit the loop had been provided to customers who made the greatest use of the long distance network. As a result, the basic monthly rate for purely local service recovered only a fraction of the cost of the subscriber loop, making it possible for the basic residential access line rate to be relatively inexpensive, with the shortfall being made up through usage-based long distance rates set at levels well in excess of their corresponding usage-sensitive cost.

The purposes for which rate centers or exchanges had been defined are no longer compelling in the current or future telecommunications marketplace. The

explosion in telecommunications technology over the past two decades has both reduced the cost of telephone calls to a mere fraction of a cent per minute,<sup>27</sup> and has essentially eliminated *distance* as a cost-driver for all telephone calls. Thus, any physical distinction that may have once existed between local and toll calls is effectively obsolete, which in turn eliminates the need for rate centers as a device for calculating the (no-longer-required) distance attribute.

In fact, distance has ceased to be a basis for pricing in all of the sectors of the telecommunications industry that are now or that have become robustly competitive. In the long distance industry, distance has disappeared as a rate element in interstate long distance pricing structures. The price of a 40-mile interstate call from Baltimore to Washington is exactly the same as the price of a 5,000-mile call from Bangor, Maine to Honolulu.

In the wireless industry, carriers have largely eliminated distance as a pricing element. Both Sprint PCS and AT&T Wireless Services have offered standard calling plans that do not distinguish local from long distance calls, nor do such plans otherwise charge on the basis of distance. Competitive pressure from these companies has forced incumbent wireless carriers such as Verizon Wireless and Cellular One to adopt

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<sup>27</sup> For example, the proxy TELRIC rates for switching adopted by the FCC in its *First Interconnection Order* are well below one cent per minute. See Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, *First Report and Order*, CC Docket 96-98, 11 FCC Rcd 16222-23 (1996) ("*First Interconnection Order*").

similar distance-insensitive pricing plans. Finally, Internet service businesses have eliminated both distance and usage as pricing elements.

The Commission's access charge policies, as adopted in CC Docket 78-72<sup>28</sup> and more recently as reiterated in the *Telecommunications Act of 1996* and the Commission's 1997 *Access Reform* order, attempt to better align access service rates with underlying costs and to replace implicit subsidies with explicit subsidies.<sup>29</sup> The recovery of fixed (non-traffic-sensitive) costs associated with the subscriber loop from usage-based toll rates is an example of this type of implicit subsidy. Even before the enactment of the 1996 legislation, the Commission had embarked upon a policy of shifting recovery of non-traffic-sensitive costs away from usage-based charges in favor of fixed monthly fees imposed upon the end user.<sup>30</sup> By its adoption of the CALLS settlement,<sup>31</sup> the Commission will have all but eliminated most non-traffic-sensitive costs from interstate switched access charges and, through the operation of

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<sup>28</sup> MTS and WATS Market Structure, CC Docket No. 78-72, Third Report and Order (Phase I) 93 FCC 2d 241 (1983).

<sup>29</sup> Access Charge Reform, CC Docket No. 96-262, First Report and Order, 12 FCC Rcd 15982 (1997).

<sup>30</sup> *Id.*

<sup>31</sup> Access Charge Reform, CC Docket No. 96-262, Sixth Report and Order; Price Cap Performance Review for Local Exchange Carriers, CC Docket No. 94-1, Sixth Report and Order; Low-Volume Long-Distance Users, CC Docket No. 99-249, Report and Order; and Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Eleventh Report and Order, 15 FCC Rcd 12962 (2000), ("*Calls Order*"), *appeal pending sub nom., Texas Office of Pub. Util. Counsel v. Federal Communications Commission*, No. 00-6043 (5<sup>th</sup> Cir.).

marketplace forces in the intensely competitive long distance market, will have eliminated these non-traffic-sensitive costs from end user toll rates as well.

In fact, the only segment of the telecommunications industry where distance-based pricing (in the form of local/toll distinctions and/or mileage-based rates) persists is in the largely noncompetitive local telecommunications sector. Indeed, the fact that this pricing remnant of a monopoly era persists in the case of local telephone services serves to confirm the lack of effective competition in this sector. If the same level of competition existed in the local and intraLATA toll markets as currently exists in the interstate toll market, undoubtedly the distinction between local and toll calling and distance based pricing would have been eliminated. Rate centers could not survive were local markets effectively competitive.

Although no economic or public policy consideration justifies perpetuation of the rate center construct, conservation of the Nation's numbering resources should compel prompt elimination of the current rate center construct. The enormous number of geographically small rating areas is the single most important factor contributing to the exhaust of NXX codes within most NPAs and the eventual exhaust of NPAs within the existing ten-digit North American Numbering Plan. Elimination of rate centers will not just delay NANP exhaust; it probably will eliminate the problem altogether. If it acts quickly, the Commission can solve the nation's numbering crisis by affirmatively and

decisively encouraging states to use their existing authority to restructure and, ultimately, eliminate rate centers as we know them today.<sup>32</sup>

State regulatory authorities and ILECs may, however, oppose rate center consolidation.<sup>33</sup> Were rate centers to be eliminated entirely, for example, intraLATA toll service (and associated switched access service where intraLATA toll is furnished by an IXC) would effectively disappear, and the associated revenues would either have to be foregone or replaced. Revenue-neutral rate restructuring to replace foregone intraLATA toll and access revenues would generally require an increase in monthly rates for basic exchange service.<sup>34</sup> Consumers would get a significantly expanded

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<sup>32</sup> The *Second Further Notice of Proposed Rulemaking* accompanying the *Second Report and Order* suggests, as an alternative to rate center consolidation, that the rating and routing functions of telephone numbers be separated, in effect severing the relationship between NXX codes and specific rate centers. *Second Further Notice* at para. 48. Unlike rate center consolidation/elimination, which requires primarily administrative adjustments and in some cases rate realignment, the use of AIN signaling, data base "dips," or other devices to extract rating information from the dialed telephone number would involve substantial technical and technological enhancements to the existing public switched network and, even if quickly adopted by the Commission as a number resource optimization measure, would undoubtedly require many years to implement nationwide. Rate center consolidation/elimination is a less costly solution that could be implemented more rapidly.

<sup>33</sup> For example, when two rate center consolidation plans for Eastern Massachusetts were raised before the Department of Telecommunications and Energy by the Attorney General, Bell Atlantic-Massachusetts claimed that, should a plan for rate center consolidation be approved, loss of intraLATA toll revenue resulting from the attendant increase in size of local calling areas could be made up by increasing end users' monthly rate for local service. See *Area Code Conservation, Direct Testimony of John Nestor III*, MA D.T.E. 98-38, March 19, 1999, at 12-13.

<sup>34</sup> If existing rates are producing sufficiently high levels of earnings so that rate center consolidation/elimination could be implemented without the need to increase

local calling area in exchange for the somewhat higher rates, but for those consumers who make little or no use of intraLATA toll, the result probably would be an overall increase in their monthly phone bills.<sup>35</sup>

Ad Hoc understands the reluctance of state regulators to pursue policies that might raise local phone rates. Nevertheless, failure to take aggressive number resource optimization measures immediately will subject the entire U.S. economy to significantly greater costs in the future. Ad Hoc estimates that the total elimination of rate centers and intraLATA toll nationwide would eliminate some \$2.7 billion in annual intraLATA toll revenues.<sup>36</sup> The impact of this policy on local rates will vary widely from state to state due to variation in the nature of local calling areas and the proportion of total ILEC revenues that are derived from intraLATA toll.

The existing \$2.7 billion in annual ILEC intraLATA toll revenues represents an upper limit on the extent to which local rates would need to increase were all rate

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monthly local service rates, *i.e.*, without reducing earnings to a point where they would become confiscatory, revenue-neutral rate realignment would not necessarily be required in all cases. *See, e.g., Duquesne Light Co. et al v. Barasch et al.*, 488 U.S. 299, 307-09 (1989).

<sup>35</sup> Those same arguments, of course, have been made with respect to the introduction by the Commission of the Subscriber Line Charge (SLC), the device adopted by the Commission as part of its access charge rules in order to shift recovery of non-traffic-sensitive costs away from usage-based charges and toward fixed end-user monthly rates.

<sup>36</sup> Economics and Technology, Inc., *Where Have All the Numbers Gone? Rescuing the North American Numbering Plan from Mismanagement and Premature Exhaust (second edition)*, June 2000, at 33.

centers eliminated. Offsetting these foregone intraLATA toll revenues would yield savings in administrative and billing costs and improved overall network utilization. Moreover, to the extent that some ILECs are currently earning far in excess of a fair return on their investment, elimination of some or even all intraLATA toll revenue might not require *any* offsetting increase in local rates. Despite the fact that rate center consolidation would in some instances cause changes in local rate structures and rate levels, the impact of these changes on the public will be small compared to the dead weight loss imposed on the economy, and on all consumers, if regulatory authorities do not confront the effect that the current rate center construct for exhaustion of the current NANP. It would be an egregious squandering of the nation's economic resources if preservation of an anachronistic monopoly-era pricing system forced the expansion of the NANP. As a guardian of the public interest, the Commission has an obligation to assure that matters within its jurisdiction do not produce such waste.

**VI. THE COMMISSION SHOULD STRICTLY LIMIT AREA CODE AVAILABILITY TO ENCOURAGE STATES TO CONSOLIDATE RATE CENTERS AND SHOULD REQUIRE STATES TO MEET UTILIZATION THRESHOLDS FOR NPA CODES BEFORE ALLOWING THE NANPA TO ALLOCATE ADDITIONAL NPAS TO THE STATES.**

Given the seriousness of the number exhaustion problem to the national economy and telecommunications industry and the importance of implementing rate center consolidation as part of any solution, the Commission should adopt concrete measures that will compel states to implement rate center consolidation. The Commission should do more than just encourage states to consolidate rate centers and can do so without interfering with the states' authority to set intrastate rates. The

Commission's plenary jurisdiction over the NANP surely gives it the authority to adopt such measures.<sup>37</sup>

Under existing number assignment guidelines and practices, the NANPA will assign an additional area code whenever it can be shown that the number of uncommitted NXX codes within the existing area code is insufficient to satisfy current and near-term projected demand.<sup>38</sup> The NANPA limits its concern to assuring the availability of NXX codes. The decision to award additional area codes to a jurisdiction is made without regard to the quantity of individual telephone numbers actually in use within each of the NXX code and, importantly, over the entire area code in general. Consider the case of the 443 area code in Maryland that was introduced in 1997 as an all-services overlay of the 410 NPA. In February 2000, the NANPA notified the industry that the 443 area code was approaching exhaust, and in April 2000 the NANPA petitioned the Maryland PSC to authorize a second overlay of the same 410 area. Table 3 profiles the distribution of NXX codes among the various types of carriers within the original 410 area code and the overlay 443 code.

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<sup>37</sup> 47 U.S.C. § 251(e)

<sup>38</sup> ATIS, INC 95-0407-008, Central Office Code (NXX) Assignment Guidelines, (Reissued March 3, 2000), Section 4.2.

	<b>410 NXXs in 1998</b>	<b>443 NXXs in 1998</b>	<b>410 NXXs in 2000</b>	<b>443 NXXs in 2000</b>	<b>Total Numbers Held in 2000</b>
Verizon-MD	547	3	546	33	5,790,000
CLECs	69	24	67	323	3,900,000
Wireless	108	0	142	98	2,400,000

Source: January 1998 and March 2000, *Local Exchange Routing Guide*.

As is readily apparent, most ILEC NXXs are assigned to 410,<sup>39</sup> whereas 443 is principally populated by CLECs and by wireless carriers.<sup>40</sup> Since the utilization of individual NXX codes by CLECs (the percentage of the numbers assigned to them that have actually been placed in service for an end-user) is known to be far lower than for ILECs,<sup>41</sup> it is more than likely that the utilization of 410 by end users is far greater than that for 443. That condition was, however, not considered by NANPA when it filed its petition with the Maryland PSC for implementation of a third area code.

<sup>39</sup> 94% of Verizon-Maryland's NXX codes are in the 410 NPA.

<sup>40</sup> 93% of the NXX codes in the 443 NPA have been assigned to CLECs and wireless carriers. The Commission's attempts to effect parity among carriers with respect to NPA assignments, as evidenced by the Commission's persistent refusal to consider service-specific or technology-specific overlay NPAs, is clearly frustrated by this pattern of NXX assignment. Despite the establishment of "all services" overlays, most ILEC NXXs remain in the "old" area code, while most CLEC NXXs are placed in the "new" area code.

<sup>41</sup> A recent FCC report indicates CLEC number utilization to be approximately 9.8%, as compared with ILEC utilization of 53.2%. FCC, CCB, Industry Analysis Division, Numbering Resource Utilization in the United States (visited February 12, 2001), <[http://www.fcc.gov/Bureaus/Common\\_Carrier/Reports/FCC-State\\_Link/number.html](http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/number.html)>, at Table 1 (December, 2000) ("*Number Utilization Report*"). Table 4 of this same report concluded that 70% of NXXs assigned to CLECs are less than 3% utilized, and as many as 60% of these NXXs are less than 1% utilized.

Once most or all of the NXX codes within a given area code have been assigned, the jurisdiction will be granted an additional area code as a matter of right; there is no requirement or prerequisite associated with the assignment such as, for example, a showing that the state has begun to implement number conservation/optimization measures. Thus, if the average utilization of all NXX codes within an area code is, say, 10% but all of those NXX codes are spoken for, the NANP Administrator will nevertheless assign an additional area code based solely upon NXX assignments. Furthermore, there are no current limits to the aggregate quantity of area codes that will be assigned in any state; as long as NXX codes continue to be assigned and existing area codes continue to exhaust their supply of NXX codes, NANPA will issue new area codes without any further showing of actual end-user occupancy.<sup>42</sup>

The *de facto* policy of issuing area codes without examining the utilization of numbers within the NPA is seriously flawed. By providing NPAs effectively on demand, state commissions have deferred, delayed or otherwise avoided dealing with effective number conservation measures.

In the Eastern Massachusetts LATA, for example, splits of the 617 and 508 NPAs became permanent as of May 1, 1998, and two new area codes (781 and 978)

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<sup>42</sup> In its *Second Report and Order*, the Commission established strict utilization requirements for individual NXX codes before a carrier could be assigned an additional code in the same rate center. *Second Report and Order*, at paras. 18-33. The Commission has set no analogous utilization requirements for area codes themselves.

were established.<sup>43</sup> Less than two weeks later, Bell Atlantic Network Services, then acting as NPA Code Administrator, announced that the 781 and 978 NPAs that had just been cut into service were in jeopardy and would shortly reach exhaust,<sup>44</sup> and that *four* new codes would be needed as early as 2000 or 2001. In June 1998, the Massachusetts Attorney General submitted proposals for rate center consolidation and elimination to eliminate the need for four additional area codes. In February 1999, the Massachusetts Department of Telecommunications and Energy refocused its energies on the concept of rate center consolidation within the open proceeding but, following a succession of delays, in April of 2000 disbanded its rate center consolidation efforts and adopted overlays of all four Eastern Massachusetts NPAs using four new area codes that NANPA had assigned to the state.<sup>45</sup> The Department subsequently began an investigation into implementing an overlay of the 413 NPA in Western Massachusetts.<sup>46</sup> The state will soon have as many as ten (10) area codes with a

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<sup>43</sup> Investigation by the Department of Public Utilities on its Own Motion to Adopt a Plan for Addressing the Limited Number of Exchange Codes Remaining in Eastern Massachusetts' 617 and 508 Area Codes, Order, MA D.P.U. Docket No. 96-61, January 23, 1997.

<sup>44</sup> Petition of Lockheed Martin IMS, the North American Numbering Plan Administrator, for area code relief for the 508, 617, 781 and 978 area codes in Eastern Massachusetts, Order, MA D.T.E. Docket No. 99-11, April 25, 2000, at 4.

<sup>45</sup> *Id.*, at 30. The D.T.E. indicated that neither of the two plans for rate center consolidation proposed by the Attorney General could be implemented in time to forestall the need for new codes. *Id.*, at 18-19.

<sup>46</sup> In a June 20, 2000 meeting, NeuStar and industry participants agreed to implement a new all-services overlay code in the 413 NPA region. On August 1, 2000, NeuStar, Inc. submitted a petition for area code relief in the 413 region to the

combined capacity of 77 million telephone numbers, to serve a population of about 6 million. Even before the assignment of the five overlay codes to Massachusetts, the state had a number capacity in its five existing area codes of some 38.5 million numbers, only 6 million of which were actually in use.<sup>47</sup> With an overall utilization level of only 16.2% in the five preexisting area codes, Massachusetts (and the numerous other similarly situated jurisdictions) should never have been permitted to lock up yet another five NPAs, which were and remain a precious numbering commodity. As in Massachusetts, states across the country can avoid pursuing effective number conservation policies by simply requesting—and getting—additional NPAs. Until this policy is changed, states will not give serious attention to other options or make difficult choices.

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Massachusetts D.T.E., and on September 7, 2000, the MA D.T.E. opened a proceeding in Docket 00-64 to examine NeuStar's proposal. Even though NeuStar has not yet declared the 413 NPA to be in a state of jeopardy (due in part to code reclamation activities), certain industry participants have nonetheless urged the D.T.E. to move forward with the assignment of the new overlay area code, irrespective of the fact that there is *not yet* a demonstrated need for a new NPA in that region. See *413 Area Code Relief*, MA D.T.E. Docket No. 00-64, Comments of AT&T Corp., October 27, 2000, at 1, Comments of Global NAPS, October 27, 2000, at 1, Comments of SNET, October 27, 2000, at 5; Comments of SNET, November 15, 2000, at 1, Comments of Verizon Wireless, October 27, 2000, at 2, and Comments of WorldCom, November 15, 2000; at 1.

<sup>47</sup> Incumbent LECs serve 4,313,988 lines in Massachusetts, while CLECs serve 384,548 lines. *Trends in Telephone Service*, Table 9.5. According to the March 2000 *Local Exchange Routing Guide*, 365 NXX codes in the 617/508/781/978/413 NPAs were assigned to wireless carriers. Applying the combined cellular/paging utilization rate of 42.1% (See *Number Utilization Report*, at Table 1) provides an estimate of 1,536,650 wireless subscribers in Massachusetts. Total lines/subscribers is 4,313,988 + 384,548 + 1,536,650 = 6,235,186.

In its *Second Report and Order*, the Commission has undertaken to limit the availability of NXX codes to individual carriers by imposing strict utilization requirements on those carriers' ability to obtain additional codes within the same rate center.<sup>48</sup> The NANP will, however, need to be expanded prematurely unless there is a major reduction in the number of rate centers nationwide. CLECs demand most of the NXX codes, and most CLECs do not satisfy or come close to satisfying the existing utilization requirements for those codes. In addition to establishing utilization requirements for NXX codes (which will have a negligible effect on number exhaustion), the Commission should also establish utilization requirements for entire area codes as well.

Rather than mandate states to eliminate rate centers, the Commission should immediately require that a utilization threshold be met by all carriers, taken as a whole, within an existing area code prior to allocating any additional area code for number exhaustion relief. Setting an industry-wide utilization requirement within an NPA will focus number conservation efforts on improving carrier utilization of numbers and, in most areas, will require state public utility commissions to move forward with the consolidation and elimination of rate centers in an effort to do so. Eliminating rate centers will decrease the demand for additional area codes, because (a) the quantity of

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<sup>48</sup> *Second Report and Order*, at paras. 18-33.

numbers demanded by carriers will decrease dramatically;<sup>49</sup> (b) the utilization rate of numbers will increase dramatically; and (c) today's excessive quantity of stranded, unusable numbers will decline sharply. Numbers reclaimed from local service carriers that no longer need numerous blocks of numbers simply to establish a service "footprint" will provide the geographic region with thousands (perhaps evens millions) of additional telephone numbers available for assignment to carriers who demonstrate need. Consequently, the demand for additional area codes will be abated.

As a starting point, the Commission should set the utilization level of numbers by all carriers within an NPA at 44%. The utilization level should increase to 60% over a three-year period. The initial utilization level is consistent with today's overall quantity of "assigned numbers" (those numbers assigned by carriers to end users) divided by "total reported numbers" (the quantity of numbers assigned by NANPA to carriers) as calculated by the FCC.<sup>50</sup> The 60% utilization level is also consistent with the FCC's newly imposed 60% utilization threshold for growth NXX codes within rate centers.<sup>51</sup>

Setting the initial rate at the current national average utilization rate of numbers by all carriers is a fair and appropriate policy: NPAs that attain higher-than-average industry-wide utilization rates receive new area codes as necessary, while states with

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<sup>49</sup> With fewer rate centers, fewer unique blocks of numbers are required by a carrier to provide service over a given area.

<sup>50</sup> *Number Utilization Report*, Table 1, at 10.

<sup>51</sup> *Second Report and Order*, at para. 22.

NPAs exhibiting below-average utilization rates will have incentives to implement policies to improve utilization levels before new NPAs are allocated to them.

Increasing the utilization threshold for new NPAs by 5% per year to a level of 60% also will provide state commissions and carriers with the incentive to improve number utilization over time.<sup>52</sup>

The Commission should use the authority given it by the Telecommunications Act of 1996 over the NANP and to promote competition in all sectors of the telecommunications market to adopt an NPA-utilization threshold as a national policy. State public utility commissions then will have the necessary incentives to eliminate rate centers, which is the only clear number resource optimization measure that offers a solution to the nation's numbering crisis. The freshly-minted policy of imposing specific utilization levels on carriers in order to obtain growth NXX codes in any given rate center, as set forth in the Commission's *Second Report and Order*, will be largely ineffective as long as the number of individual rate centers remains as large as it presently is. Significantly, nothing in the *Second Report and Order* or, for that matter, in any existing numbering rule or practice, applies a similar end user number utilization standard to the entire area code. Without such a policy mechanism, the ultimate goal of preventing exhaust of the ten-digit NANP will not be realized, and the nation will be forced to suffer the enormous waste with the expansion of the NANP to eleven or twelve digits.

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**VII. BY LIMITING AREA CODE ALLOCATION TO THOSE STATES THAT IMPLEMENT RATE CENTER CONSOLIDATION THE COMMISSION WILL FULFILL ITS NUMBER RESOURCE OPTIMIZATION POLICY OBJECTIVES.**

The Commission has repeatedly stated its policy position with respect to the implementation of numbering optimization measures.<sup>53</sup> As proposed by Ad Hoc in this Petition, a rulemaking to implement utilization thresholds for numbers within an NPA that must be met in order to obtain additional area codes will provide state public utility commissions with the appropriate incentives to move forward with rate center elimination. This result is consistent with each of the FCC's policy goals:

(1) The elimination of rate centers will meet the goal of minimiz[ing] the negative impact on consumers of premature area code exhausts, as future need for area code assignments will most likely be eliminated altogether, particularly in those areas where numbering resources are plentiful due to the fact that additional area codes have already been implemented;

(2) The elimination of rate centers will ensure sufficient access to numbering resources for all service providers to enter into or to compete in telecommunications markets, as literally hundreds of NXX codes in virtually every area code currently in existence will be freed up;

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<sup>52</sup> Id., at para. 26.

<sup>53</sup> The FCC's policy positions are set forth in both the *Notice*, 14 FCC Rcd 10326, para. 6; and the *First Report and Order*, 15 FCC Rcd 7578, para. 3.

(3) As discussed at length above, rate center elimination is likely to avoid exhaust of the NANP and the need to expand the NANP to eleven or twelve-digit dialing;

(4) When faced with NANP expansion costs of \$50 to \$150 billion, rate center elimination and its ability to prevent NANP expansion will impose the least societal cost possible and obtain the highest benefit;

(5) Although certain toll revenue opportunities may be lost,<sup>54</sup> rate center elimination on the whole ensures [both] competitive neutrality and that no class of carrier or consumer is unduly favored or disfavored by the optimization efforts, as all carriers will face the same rate center construct<sup>55</sup> and opportunities for what could potentially be a larger market for usage-based revenue;<sup>56</sup>

(6) Rate center consolidation will not only minimize the incentives for carriers to build and carry excessively large inventories of numbers, it will remove these incentives altogether due to (a) the abundance of numbers that will become available in

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<sup>54</sup> Particularly to the incumbent LEC, which is often chosen as the pre-subscribed interexchange carrier for intraLATA toll service.

<sup>55</sup> In fact, rate center elimination should be considered to be a pro-competitive measure, as more telephone numbers in the original well-established and well-known area codes are likely to become available to competitive LECs.

<sup>56</sup> If, for example, rate centers were eliminated altogether in a certain LATA, *all* carriers could compete for *all* intraLATA usage, not simply intraLATA toll calling, as is the case today.

every NPA; and (b) the need to utilize numbers efficiently in the unlikely case that additional numbering resources (*i.e.*, a new NPA) are needed.

The FCC should embrace the idea of imposing federal limitations on the availability of new area codes and recognize the benefits attendant thereto, most notably the elimination of NANP exhaust and expansion.

### **CONCLUSION**

Improving the utilization of numbers by carriers is a necessary step in curtailing the need for additional area codes from a rapidly diminishing supply. The Commission's recent efforts at implementing numbering resource optimization measures will only postpone, for a relatively short period of time, the need to expand the NANP at great cost to the national economy and the end-user community. Any further delay in adopting and implementing a solution to NANP exhaustion decreases the effectiveness of such measures and will ultimately force the adoption of primitive and expensive solutions such as mandatory eleven and twelve-digit dialing within the NANP. By implementing a utilization threshold for NXX codes on an NPA-wide basis now, the Commission will greatly facilitate the consolidation of rate centers across the country that, in turn, will prevent exhaustion from occurring.

If the Commission waits to address the rate center consolidation issue in the current rulemaking in CC Docket 99-200, the opportunity to avoid the unnecessary and avoidable imposition of significant costs on the national economy will be lost.

Accordingly and for the reasons set forth herein, Ad Hoc respectfully requests the

Commission to adopt, on an expedited basis, a Notice of Proposed Rulemaking that focuses specifically on the issue of rate center consolidation.

Respectfully submitted,

AD HOC TELECOMMUNICATIONS USERS  
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## Certificate of Service

I, Kristin Gosselin, hereby certify that a true and correct copy of the preceding Comments of the Ad Hoc Telecommunication Users Committee was served this February 12, 2001 via hand delivery and the Electronic Comment Filing System upon the following parties:

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