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

In the Matter of	)	
	)	
Numbering Resource Optimization	)	CC Docket No. 99-200
	)	

COMMENTS OF THE CELLULAR TELECOMMUNICATIONS & INTERNET ASSOCIATION

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September 21, 2001

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The Cellular Telecommunications & Internet Association ("CTIA"),[1] hereby submits its Comments on the petition filed by Verizon Wireless seeking relief from the Commission's rules that require CMRS carriers to provide Local Number Portability ("LNP").[2]

I. INTRODUCTION AND SUMMARY

Verizon Wireless has filed a petition for partial forbearance from the LNP mandate that CMRS carriers implement both LNP and thousands-block number pooling ("TBNP") on a flash-cut basis.[3] In particular, Verizon Wireless has requested the Commission to permanently forbear from requiring CMRS carriers to provide LNP, but stressed its support to participate in TBNP by November 2002. CTIA strongly agrees

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[1] CTIA is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the association covers all Commercial Mobile Radio Service ("CMRS") providers and manufacturers, including cellular, broadband PCS, ESMR, as well as providers and manufacturers of wireless data services and products.

[2] *See WTB Seeks Comment on Wireless LNP Forbearance Petition Filed by Verizon Wireless, Public Notice* (rel. Aug. 7, 2001).

with Verizon Wireless that the Commission should grant CMRS carriers relief from the LNP obligation. At the very least, to insure that the TBNP can go forward as currently scheduled, the Commission must decouple the pooling obligation from the deployment of LNP capability.

II. BACKGROUND

In an effort to open wireline telephone markets to competitive entry, Congress directed the Commission in the Telecommunications Act of 1996 to impose numbering portability obligations on wireline service providers. In 1996, the Commission adopted a number portability mandate which required covered CMRS providers to implement number portability in the top 100 MSAs by June 30, 1999,[4] believing at that time that number portability between CMRS providers would foster increased competition. In adopting CMRS numbering portability requirements, the Commission did not, however, provide any evidence that wireless customers had been or would be deterred from switching service providers because of the unavailability of number portability.

After the Commission imposed the LNP mandate on wireless carriers, the Commission's attention was directed towards a numbering crisis that had developed as a consequence of the rapidly expanding telecommunications marketplace. In its efforts to insure that the numbering resources of the North American Numbering Plan ("NANP") were used efficiently and that all carriers had the numbering resources necessary to compete in the marketplace, the Commission and the industry considered various

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[3] *Verizon Wireless' Petition Pursuant to 47 U.S.C. §160 for Partial Forbearance from the Commercial Mobile Radio Services Number Portability Obligation*, WT Docket 01-184 (filed July 26, 2001) ("Verizon Wireless Petition").

[4] *See Telephone Number Portability*, CC Docket No. 95-116, *First Report and Order* (1996).

numbering resource optimization measures.[5] The Commission embraced number pooling as a numbering conservation measure that would prevent the misallocation and hording of numbers in full blocks of 10,000, which it had identified as the leading cause of number exhaust.[6] Since pooling required a similar infrastructure to LNP, the numbering rules on pooling were tied to the deployment of LNP capability.

In 1999, in response to a Petition for Forbearance filed by CTIA, the Commission postponed the LNP implementation deadline until November 24, 2002.[7] The Commission agreed with CTIA that the wireless industry needed additional time to "complete network buildout, technical upgrades, and other improvements that are likely to have a more immediate impact on enhancing service to the public and promoting competition in the telecommunications marketplace."[8] The Commission concluded that it could not justify the cost and technical burden of implementing LNP more rapidly where more direct competitive initiatives like CMRS buildout and improving service quality were achievable.

The Commission rejected full forbearance from the number portability obligations due to its growing concern over numbering resource exhaust. The Commission believed

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[5] *See Numbering Resources Optimization,* Notice of Proposed Rulemaking, 14 FCC Rcd 10322 (rel. June 2, 1999).

[6] *See Numbering Resources Optimization,* Report and Order and Further Notice of Proposed Rulemaking, 15 FCC Rcd 7574 (rel. March 31, 2000).

[7] Cellular Telecommunications Industry Association's Petition for Forbearance From Commercial Mobile Radio Services Number Portability Obligations, WT Docket No. 98-229, *Memorandum Opinion and Order*, 14 FCC Rcd 3092 (1999) ("*CTIA Forbearance Order*") at ¶25.

[8] *CTIA Forbearance Order* at ¶14.

that "certain important number optimization strategies, including number pooling, are based on existing LNP architecture."[9] The Commission proposed to establish a nationwide system of number conservation, including certain non-LNP-based numbering resource optimization requirements, to address the number crisis, slow the alarming pace of number exhaust, and increase the efficiency of number utilization. Believing that LNP-architecture was necessary for pooling, the Commission subsequently adopted rules requiring the simultaneous implementation of LNP and pooling on November 24, 2002. However, the Commission has never considered how the two separate mandates for the implementation of pooling and porting interacted with one another.

As a result of widespread industry concern over the FCC's November 2002 mandate that require CMRS carriers to "flash cut" to both number pooling and LNP, CTIA established working groups to address the risks of network disruptions and other problems that may result from the Commission's simultaneous pooling and porting mandate. In the process of examining various technical aspects of pooling and porting, such as the network architecture, industry numbering experts discovered that LNP implementation was not a precondition of number pooling. On August 2, 2001, Verizon Wireless filed its petition for forbearance, demonstrating that it is neither accurate nor necessary to link the implementation of pooling to the provisioning of number portability.

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[9] *See CTIA Forbearance Order* at ¶2.

III. THE BURDENS OF CMRS NUMBER PORTABILITY OUTWEIGH ANY TANGIBLE BENEFITS OF LNP IMPLEMENTATION

A. CMRS NUMBER PORTABILITY DOES NOT FURTHER THE COMMISSION'S NUMBER CONSERVATION GOALS

In adopting the LNP mandate, the Commission based its decision on the belief that number portability would foster competition in the CMRS industry. In a completely separate proceeding commenced shortly after the Commission adopted the LNP mandate, the Commission established numbering resource optimization rules based on the assumption that "implementation of LNP is a necessary precondition to the implementation of number pooling techniques used to conserve numbers."[10] The Commission subsequently rejected CTIA's petition for relief from the numbering portability implementation schedule because it then believed that LNP deployment is a prerequisite to implement pooling and thus, it believed that forbearance of LNP would be inconsistent with its number conservation goals. In reality, based on the record established by the Verizon Wireless Petition, it is now clear that the LNP mandate will neither promote the deployment of number pooling nor facilitate the achievement of other important regulatory goals.

1. LNP Capability is not a Prerequisite for Number Pooling

As Verizon Wireless aptly demonstrates in its Petition, LNP capability is *not* a prerequisite for number pooling and LNP is not tied to the Commission's number conservation objectives. Despite the fact that the Commission's rules are premised on the assumption that number portability is a prerequisite for pooling, TBNP can be fully implemented using the Location Routing Number ("LRN") architecture without the

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[10] *See CTIA Forbearance Order* at ¶43.

additional operational requirements required for LNP. While it initially seemed that pooling required carriers to be able to support number porting, *i.e.,* the ability of customers to retain their telephone numbers when switching service providers, it turns out that wireless carriers can support pooling by deploying the LRN-based network technology, without the additional requirements, which burden carriers with no benefit to consumers, that are needed to support wireless number portability.[11]

In addition to the implementation of the LRN network architecture, pooling requires separation of the Mobile Identification Number ("MIN") from the Mobile Directory Number ("MDN"), roaming system changes, and Number Portability Administration Center ("NPAC") pooling functional requirements.[12] The deployment of these functions, as well as the LRN network architecture, can be accomplished without the simultaneous deployment of LNP systems and upgrades. Verizon Wireless explains that "while the LRN network architecture serves as the technological foundation for pooling, there are many additional tasks required for number portability that are not required to implement number pooling."[13]

Moreover, the substantial investment for network upgrades and communications systems required for LNP implementation far exceeds the costs associated with pooling. Unlike pooling, portability "impacts all segments of a wireless carrier's business and operations, including its billing systems, customer records, point of sale and customer

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[11] Pooling is accomplished through the same LRN database used by LNP because the industry built upon the LRN network architecture to develop the protocol for implementing TBNP.

[12] *See Verizon Wireless Petition* at Appendix 1-5.

[13] *Id.* at 12.

care systems."[14] Portability also requires "carriers to set up systems to make comprehensible to their sales staffs and customers the limitations that the rate center system and carrier contracts place on customers' ability to switch carriers but keep their numbers. These major changes are not caused by, nor are they needed for, pooling."[15] Thus, the implementation of number portability imposes an unnecessary burden and involves an expensive process that does not advance the Commission's number conservation purposes.

2. LNP Implementation Will Divert Valuable Resources From the Number Conservation Efforts of CMRS Providers

CTIA agrees with Verizon Wireless that removing the LNP implementation requirements will not impede the timely deployment of number pooling. CTIA fully supports TBNP as an alternative to the rationing of new numbering resources currently used in many states. Neither Verizon Wireless nor CTIA is asking the Commission to excuse carriers from implementing the LRN network architecture and other system upgrades needed to support pooling. The industry reaffirms its commitment to number conservation through TBNP. Verizon Wireless has demonstrated that even when relief from the LNP mandate is granted, the Commission can fulfill its number conservation goals though the implementation of LRN-based network modifications. By allowing carriers to focus their efforts on the deployment of pooling, the Commission will further their conservation efforts.

Finally, any benefits derived from number portability are not commensurate with the resource-intensive costs associated with the implementation of number portability. The costs associated with LNP to small and rural carriers are especially great, since cost

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[14] *Id.* at 10.

recovery can only be spread across a limited subscriber base.[16] In addition, software upgrades may disproportionately impact small carriers.[17] Whereas most carriers will be required to make incremental upgrades from IS-41 A or B to IS-41 revision C to implement LNP, many rural carriers do not have IS-41 deployed in all markets, and will be forced to incur exorbitant expenses for software upgrades. In addition, small carriers will face insurmountable problems with billing revenue due to software that is inadequate or unavailable for small carriers. Many small carriers have reported that billing vendors are not prepared for LNP.[18]

Indeed, the flash-cut implementation of porting as well as pooling will jeopardize the ability of carriers to successfully implement TBNP, divert valuable resources from carriers, and thwart carrier efforts to implement number optimization measures. In addition, the flash-cut to both LNP and number pooling will pose an unacceptable risk to continued network reliability. Removing the LNP mandate would enable carriers to focus on implementation and testing of pooling, and ensure that the pooling mandate is successfully implemented.

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[16] Because these carriers typically serve markets outside of the 100 largest MSA's, there is no benefit to their customers; only the financial burdens required to preserve roaming.

[17] CTIA Survey of Small Carriers (Spring 2001).

[18] Proper routing of calls from ported subscribers and accurate billing are among the most important elements to successful LNP implementation. If the billing software cannot distinguish a MIN from an MDN, calls from ported subscribers risk being billed to the wrong carrier or, in a worst-case scenario, these calls may be dropped altogether. In the case of dropped calls, unless the appropriate software is implemented, the network is unable to process calls where a MIN does not match the MDN.

B. CMRS NUMBER PORTABILITY IS NOT NECESSARY TO FOSTER COMPETITION

It is now clear that the Commission's belief that LNP was necessary to promote competition in the wireless industry was largely misplaced. The Commission promulgated LNP rules in 1996, at a time when PCS licensees had not yet successfully deployed their networks. Nearly three years later, during which time the wireless industry experienced unprecedented growth and competition,[19] the Commission concluded that the competitive benefits of LNP were insufficient to "justify the cost and technical burden" of the June 30, 1999 implementation deadline for CMRS number portability.

In the *CTIA Forbearance Order*, the Commission determined that the three criteria set forth in Section 10 of the Communications Act had been largely satisfied. Specifically, the Commission determined that 1) LNP is "not necessary to prevent unjust or unreasonable charges or practices by CMRS carriers; 2) there is "no evidence that requiring wireless carriers to adhere to the current [LNP] implementation schedule is necessary to prevent harm to customers; and 3) forbearance of the LNP obligations is "also in the public interest on competitive grounds":

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[19] *See, e.g.,* Implementation of Section 6002(b) of the Omnibus Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, *Sixth CMRS Competition Report to Congress*, FCC 01-192 (July 17, 2001) ("Sixth CMRS Competition Report"); Implementation of Section 6002(b) of the Omnibus Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, *Fifth CMRS Competition Report*, 15 FCC Rcd 17660 (Aug. 8, 2000); *See* Implementation of Section 6002(b) of the Omnibus Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, *Fourth CMRS Competition Report*, 14 FCC Rcd 10145 (June 24, 1999).

> [T]he high churn rates associated with wireless carriers suggest that the lack of [LNP] currently is not a barrier to customers switching wireless carriers. . . .[W]e find that the factors that most influence competition (price, service area coverage, and service quality) may be more positively influenced by rapid construction of networks and provision of service by new entrants….[20]

A similar analysis of the CMRS market today would reveal that the number portability mandate can no more be justified on competitive grounds now than it could be in 1999. In short, as the Commission has found, competition continues to flourish. The LNP mandate cannot be justified to ensure just and reasonable rates as this has occurred without LNP. Without LNP, the CMRS market continues to provide the benefits of competition, *i.e.,* lower prices, new services, greater wireless penetration, and more facilities based competitors for consumers to choose from. Given these facts, the LNP mandate is not necessary to ensure consumer protection.

Finally, the Commission must consider whether the LNP mandate can be justified by public interest concerns. In light of the deregulatory directive from Congress to rely on competition rather than unnecessary regulation,[21] the Commission must justify why the LNP mandate is essential to achieve competition. In addition to the reasons stated above, the Commission has not provided any evidence that CMRS number portability is necessary to promote competition in the wireless market. Moreover, there is no indication that CMRS number portability is necessary to promote competition in the

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[20] *CTIA Forbearance Order* at ¶¶19, 22, 34. See 47 U.S.C. §160(a)

[21] The Commission imposed number portability obligations upon CMRS carriers under its Section 332 authority; which is ordinarily considered a deregulatory mandate. In fact, the Commission has repeatedly used Section 332 of the Telecommunications Act of 1996 and the 1993 amendments to be a deregulatory mandate for CMRS. *See* Telecommunications Act of 1996, Pub. L. No. 104-104 (1996).

landline market.[22] In fact, wireless-landline competition has grown as wireless carriers have begun offering service plans that are competitive with wireline offerings. Furthermore, forcing CMRS providers to pass through the costs of LNP implementation may impede, rather than promote, landline-CMRS competition.

The Commission further stated in the *CTIA Forbearance Order* "not only is CMRS competition currently growing rapidly without LNP, but in the near term, LNP does not appear to be critical to ensuring that this growth continues."[23] The Commission's observation were accurate in 1999, and today it is even more clear that the LNP mandate is not necessary given the intense competition that exists in the CMRS market today. Indeed, the extension of the LNP deadline has not curbed the growth of CMRS competition, which continues to rapidly increase without LNP.[24]

IV. THE RECORD SUPPORTS THE COMMISSION'S GRANT OF A WAIVER OF THE CMRS LNP REQUIREMENT

The Commission should totally forbear from imposing the LNP requirement on CMRS carriers. But in any event, it should grant an extension of the November 24, 2002 LNP implementation deadline. Under the Commission's rules, a waiver is appropriate where good cause is shown.[25] This standard requires that a petitioner demonstrate that

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[22] At the time the Commission adopted its LNP mandate, it contemplated that number portability would provide a source of competition to incumbent landline carriers.

[23] *CTIA Forbearance Order*, 14 FCC Rcd at 3102 ¶19.

[24] *See Sixth CMRS Competition Report*, FCC 01-192 (rel. July 17, 2001). The Commission's latest report on competition states that the mobile telephony sector of CMRS has experienced "strong growth and competitive development" and the price of mobile telephony continues to drop. *See id*. at ¶¶4, 83.

"special circumstances warrant a deviation from the general rule and that such a deviation will serve the public interest."[26] In the *CTIA Forbearance Order*,[27] the Commission recognized that the public interest would be served by postponing the LNP mandate deadline because LNP was not necessary to promote CMRS competition. Given the Commission's own findings on the state of CMRS competition today, the case against the implementation of CMRS number portability is even more compelling.

At a minimum, the Commission should grant a transition between pooling and porting because doing so would be consistent with its historical concern over protecting the integrity of the telecommunications network. The Commission has consistently required phased implementation of new technologies because it "consider[s] network reliability to be of paramount importance."[28] Finally, a transition will allow CMRS providers to avoid complications and comply with a number of other technical factors and regulatory requirements that will be imposed during the same timeframe. The November 24, 2002 implementation deadline dismisses the anticipated risks created by

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[25] 47 C.F.R. § 1.3. The Commission may suspend any deadline "for good cause shown, in whole or in part, at any time."

[26] Northeast Cellular Tel. Co. v. F.C.C., 897 F.2d 1164, 1166 (D.C.Cir. 1990), citing WAIT Radio v. F.C.C., 418 F.2d 1153, 1159 (D.C.Cir. 1970).

[27] Cellular Telecommunications Industry Association's Petition for Forbearance From Commercial Mobile Radio Services Number Portability Obligations, WT Docket No. 98-229, *Memorandum Opinion and Order*, 14 FCC Rcd 3092 (1999) ("CTIA Forbearance Order").

[28] *First LNP Reconsideration Order*, 12 FCC Rcd 7236, 7285 ¶83 (1997). *See also Third LNP Reconsideration Order*, 13 FCC Rcd 16090, 16097 ¶10 (1998) ("We continue to believe that network reliability is of utmost importance.").

imposing porting and pooling requirements on a flash-cut basis, such as the strain to the Public Switched Telephone Network ("PSTN").

Based upon discussions of the North American Numbering Council ("NANC"), the CMRS LNP mandate will produce massive traffic volumes that may put PSTN security at risk. The NANC, at the April 2001 meeting, reviewed reports from the LNP Work Center in the Northeast section of the United States[29] and determined that the current wireline porting volumes alone are passing through the Service Order Administrations ("SOA") at a pace 2.5 times above its current specifications. Wireless porting may double the volume currently being realized by wireline activity. Strains on the SOA, which is the critical function for processing LNP requests, will lead to greater strains on the network. To the extent that industry technical experts have determined that the two mandates *can* be implemented separately, it is prudent for the Commission to consider the associated risks to the network.

Even without the additional upgrades and efforts required by the LNP mandate, meeting the Commission's pooling mandate will require an overwhelming commitment of resources from the wireless industry. In order for CMRS carriers to meet the TBNP implementation deadline, carriers will be forced to "turn up" pooling on November 24, 2002, which involves pooling in the approximately 160 NPAs where wireline carriers already support pooling. In addition, CMRS providers must implement TBNP in all NPAs where ordered and meet the requirements of maintaining nationwide roaming. A decision that allows CMRS providers to focus solely on TBNP implementation will

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[29] North American Numbering Council Meeting Minutes April 17-18, 2001 http://www.fcc.gov/ccb/Nanc/APR2001MIN.doc

safeguard network integrity and help the wireless industry meet this important on November 24, 2002 number pooling deadline. The high level of anticipated pooling volumes for CMRS carriers will create corresponding strains to the administrative and network functions for the entire CMRS industry. A transition between pooling and porting will permit a phased-in deployment and reduce the risk of adverse effect on the operation of critical network functions. Thus, CTIA urges the Commission to extend the LNP deadline for a minimum of two years.

A. THE COMMISSION SHOULD ACT ON CTIA'S PENDING PETITION FOR RECONSIDERATION

Over six months ago, CTIA petitioned the Commission to reconsider its decision not to adopt a transition between the date CMRS carriers deploy number portability technology and the date they begin number pooling. In its Petition for Reconsideration,[30] CTIA noted that there is ample evidence in the record supporting a transition period for the deployment of number pooling by CMRS providers.[31] The complicated nature of LNP combined with number pooling implementation will significantly increase the risk of service disruptions. CTIA urges the Commission to decouple CMRS number pooling and porting since this matter is now ripe for decision.

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[30] Petition for Reconsideration of the Cellular Telecommunications & Internet Association, Docket No. 99-200 (March 12, 2001).

[31] CTIA asserted that the Commission's decision combining portability and pooling deadlines for CMRS providers exhibits an impermissible indifference to potential costs and benefits. In its Second Report and Order, the Commission ignored the statements of several CMRS providers concerning complex modifications to networks, the effects of which cannot be completely anticipated and where the consequences of small defects can be very large.

V. CONCLUSION

For these reasons, CTIA respectfully requests that the Commission exercise its forbearance authority to relieve CMRS providers from their number portability obligations. At a minimum, the Commission must decouple the CMRS number pooling and number porting mandates and establish a transition period between CMRS number portability and pooling.

Respectfully submitted,

/s/ _____

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