



CTIA

Building The Wireless Future™
Cellular Telecommunications & Internet Association

November 21, 2001

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
445 12th Street, S.W.
12th Street Lobby, TW-A325
Washington, DC 20554

**Re: Ex Parte Presentation
CC Docket No. 99-200**

Dear Ms. Salas:

On November 21, 2001, the Cellular Telecommunications & Internet Association ("CTIA") sent an electronic copy of the attached letter to Dorothy Attwood, Chief, Common Carrier Bureau, regarding CMRS implementation of Thousands-Block number pooling.

Pursuant to Section 1.1206 of the Commission's Rules, an original and one copy of this letter is being filed with your office. If you have any questions concerning this submission, please contact the undersigned.

Sincerely,


Dustun L. Ashton



EX PARTE FILING

November 21, 2001

Dorothy Attwood, Esq.
Chief, Common Carrier Bureau
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20544

***Re: CMRS Implementation of Thousands-Block Number Pooling;
Numbering Resource Optimization, CC Docket No. 99-200***

Dear Ms Attwood:

Yesterday, Robert Atkinson, Chairman of the North American Numbering Council (NANC), sent a letter reporting that the Wireless Number Portability Operations (WNPO) Team, a NANC subcommittee, recently had informed the NANC of delays in the inter-carrier testing schedule for wireless number portability and pooling.¹ Because the wireless industry is firmly committed to meeting the thousands-block number pooling ("TBNP" or "pooling") deadline, which is just one year away, CTIA voluntarily submits this report detailing the industry's progress to date, along with a description of the most critical issues associated with the timely implementation of thousands-block number pooling for Commercial Mobile Radio Services ("CMRS") carriers.²

¹ Letter to Dorothy Attwood, Esq. From Robert Atkinson, North American Numbering Council Chair (Nov. 20, 2001) ("NANC Letter"), attached as Exhibit 1.

² CMRS carriers are required to simultaneously implement both local number portability and thousands-block number pooling on November 24, 2002. To reflect the focus of the Commission's *Numbering Resource Optimization* proceeding, CC Docket No. 99-200, and the NANC's primary role of advising the Commission on numbering resource issues, this letter addresses the timely implementation of number pooling by wireless carriers. CTIA continues to believe that the simultaneous implementation of both local number portability and number pooling needlessly risks the timely implementation of the number pooling mandate.



INTRODUCTION

The wireless industry has developed an implementation work plan that will meet the Commission's November 24, 2002, deadline for thousands block number pooling. In this report, CTIA reports on the industry's progress to date with respect to its implementation path, and how the wireless industry intends to catch up, where necessary, in order to successfully meet the November 24, 2002 deadline. While tremendous progress has been made, numerous challenges still lie ahead. As described below, these include: Testing deadlines and vendor readiness; Impacts to the Public Switched Telephone Network; Potential impact on E-911; Separation of the Mobile Identification Number ("MIN") from the Mobile Directory Number; MIN Block Identifier Administration; and Wireless to Wireline portability integration issues.

CTIA's Board of Directors has directed the Association to assist and facilitate carriers' efforts in meeting the November 24, 2002, mandate for number pooling. CTIA is actively involved in these efforts. For example, CTIA has been working with the wireless industry to understand implementation issues and develop an industry implementation work plan. In addition, CTIA and its members are working with the wireline industry to better understand the combined impacts on TBNP and LNP to the Public Switched Telephone Network ("PSTN") when porting and pooling are simultaneously implemented. CTIA also recognized that many carriers outside the top 100 MSAs are confused or uncertain about the effects of this mandate on their operations, and CTIA has developed industry outreach efforts to assist carriers, especially smaller carriers, understand the technical implementation steps and processes. Finally, in light of the concerns regarding vendor readiness that recently were expressed to the NANC, the wireless industry will continue to maintain an open dialogue with the vendor community to determine when the industry can expect to receive critical software deliverables.

The wireless industry, working with CTIA and the Wireless Number Portability Operations ("WNPO") Subcommittee of the NANC, has developed a revised implementation schedule and set benchmarks to prepare the wireless industry to meet the November 24, 2002 deadline. The following implementation timeline submitted to the NANC reflects both the progress made and new targets for the implementation milestones that have been missed. CTIA supports the WNPO's updated timeline as an accurate and reasonable estimate of the current implementation time schedule. CTIA will continue to work with the industry to facilitate awareness of the targeted dates for testing and deployment and achieving these benchmarks.

Updated Testing and Deployment Timeline³

Original Timeline	EVENT	Revised Timeline
Complete – 04/01	Inter-Carrier Communications Process	Not shown - complete
Complete – 04/00	Functional Specifications	Complete by 12/01
05/00 thru 01/01	System Development	Complete by 02/02
02/01 thru 04/01	Internal End-to-End Testing	02/02 thru 04/02
05/01 thru 09/01	NPAC Turn-up Testing	Complete by 04/02
Complete by 09/01	Inter-carrier test coordination and logistics	Complete by 04/02
10/01 thru 05/02	Inter-carrier testing	04/02 thru 09/02
06/02 thru 08/02	Deployment	09/02 thru 10/15/02
09/02 thru 11/24/02	Final Adjustments	10/15/02 thru 11/24/02

CTIA INDUSTRY OUTREACH

1. Workshops and Forums

To help the wireless industry meet the November 24, 2002 deadline, CTIA has reached out to the industry through workshops and forums to facilitate the resolution of specific implementation issues. CTIA has sponsored Subject Matter Expert (SME) workshops to bring specific issues into focus. The issues and recommendations raised in workshops often lead to industry-wide forums, which seek to reach consensus on administrative and operational processes. For example, the “Inter-Carrier Communications Report,” an industry-consensus “working document,” was the end result of a SME workshop, which evolved into several industry-wide meetings. This document defines the protocol and procedures for the Wireless to Wireless Pre-Port Process. CTIA’s work efforts have been effective, especially when used in parallel with established industry working groups.

CTIA recently facilitated a work effort to develop an industry “Pooling Readiness” strategy to provide a baseline forecast for the overall wireless pooling demand. The work effort resulted in a draft document reporting that approximately 160 numbering plan areas (“NPAs”) will be engaged in number pooling on November 24, 2002, and that wireless carriers will likely request blocks in every one of these area codes. CTIA released this draft report to a NANC working group for wider discussion among wireline carriers and the National Thousands-Block Number Pooling Administrator (“Pooling Administrator”). The report serves as the baseline for developing administrative strategies with the Pooling Administrator.

Based on the success of two earlier forums, CTIA plans to conduct a third Critical Issues Forum (CIF) for Wireless Number Portability and Thousand Block Number

³ Updated Testing and Deployment Timeline, The Wireless Number Portability Operations Team (WNPO) (rel. Nov. 20, 2001). WNPO has indicated that the implementation targets are subject to change.

Pooling. The CIFs represent CTIA's most wide-ranging attempt at Industry Outreach. The upcoming forum is scheduled to take place in January 2002, in San Francisco, to attract carriers who may have been unable to attend a CIF located in other regions. National Pooling Administration and Mobile Identification Number ("MIN") Administration are key forum topics. CTIA anticipates that both administrators will attend the forum. Educating all wireless carriers and in particular, smaller carriers, is critical as new numbering administrative functions are adopted by the industry.

IMPLEMENTATION ISSUES

1. Testing Deadlines & Vendor Readiness

The wireless industry must complete a rigorous phase of testing as part of the overall wireless portability and number pooling implementation plans. CMRS carriers were scheduled to begin inter-carrier testing in early October, but the testing has been postponed due to delays by some carriers' vendors. In a recent letter to the Commission, the NANC alerted the Commission of concerns about vendor readiness, and referenced the WNPO report stating that there have been vendor delays in providing upgrades necessary to implement wireless pooling and portability.⁴ The vendor readiness issue was raised by the WNPO, a working group of the NANC, which determined that a number of switch and network component vendors and back office system vendors have been unable to provide system upgrades to meet wireless industry benchmarks. As reported by the WNPO, the NANC letter states that these events have "resulted in a delay of the start date of WNPP (wireless porting and pooling) inter-carrier testing, initially planned for October 1, 2001, and may cause testing to extend beyond the proposed completion date of May 31, 2002."⁵ "Of equal concern, many providers in the top 100 MSAs have not yet identified their test readiness."⁶

CTIA is taking the concerns of the WNPO seriously and plans to examine this issue with the industry. CTIA also has been informed that some vendors have been unable to deliver critical upgrades on schedule. This is a significant setback because it directly impacts the schedule for completing pooling implementation. In recent comments, CTIA affirmed the wireless industry's support of the proposed National Pooling Schedule and restated the industry's intent to be ready in all affected NPAs.⁷ CTIA firmly believes that it is in the best interest of all parties to communicate the timetable for when the vendor deliverables will be made available to carriers.

⁴ See NANC Letter.

⁵ NANC Letter at 1.

⁶ NANC Letter at 1.

⁷ See CTIA Comments, Numbering Resource Optimization, CC Docket No. 99-200 (Nov. 6, 2001); CTIA Reply Comments (Nov. 16, 2001).

CTIA first addressed the vendor readiness issue in June 2001 by sending a letter to all major switch and Operational Support Systems (“OSS”) providers, in an attempt to better learn of the current deliverable rollout schedule. Unfortunately, we received only a few responses. As the Commission is aware, the vendor industry has experienced substantial staff reductions in the past year. These force reductions coincide with several other mandates thrust upon the industry, including E-911, CALEA, and now Priority Access Service (PAS) capabilities. Wireless carriers continue to place significant pressures on their vendors who are, in turn, experiencing significant pressures in a difficult economic period.

CTIA has undertaken two action items to help resolve these inter-dependent issues. First, CTIA will circulate a Vendor Survey requesting feedback about software deliverables. Second, CTIA will conduct a carrier survey of the top thirty carriers in order to determine their testing readiness. At the conclusion of these two action items, CTIA will work with the industry and the NANC to revise and update the wireless industry’s implementation timeline. Finally, the Commission should be mindful that all vendors must complete upgrades in order for full inter-carrier testing to occur.

2. Impacts to the Public Switched Telephone Network

CTIA did not challenge the recently released pooling rollout schedule, and the wireless industry intends to meet the National Pooling Schedule and be ready to participate in all NPAs where pooling is ordered by November 24, 2002. However, based upon the pooling volume forecasts we anticipate for next year’s implementation, CMRS carriers have significant concerns about how the pooling volume will impact both wireless and wireline networks. CTIA’s draft report aimed at pooling readiness highlights the conclusion that carriers will likely request numbering resources from each of the 160 NPAs ordered to pool next year. With respect to wireless carriers, concern about pooling readiness is due, in part, to the demand for numbers and the staff resources it will take to prepare for TBNP. As an industry, carriers will continue to explore these issues with the Pooling Administrator, in order to ensure that NeuStar can meet the wireless industry demand for new thousand block assignments.

CTIA and its members also are reviewing the specific concerns expressed by several LECs in comments filed recently with the Commission. These comments address the impacts associated with the proposed national pooling rollout schedule.⁸ CTIA believes that the LECs have raised valid concerns based upon the difficulties wireline carriers have encountered in their roll-out of number pooling and porting, and we are

⁸ See Bellsouth Comments, Numbering Resource Optimization, CC Docket No. 99-200 (Nov. 6, 2001); SBC Communications Inc. Comments, Numbering Resource Optimization, CC Docket No. 99-200 (Nov. 6, 2001) (“SBC Comments”); WorldCom Comments, Numbering Resource Optimization, CC Docket No. 99-200 (Nov. 6, 2001); The United States Telecom Association Comments, Numbering Resource Optimization, CC Docket No. 99-200 (Nov. 6, 2001).

hoping to learn from the experience of the wireline network in regards to what the wireless industry can anticipate. Indeed, the LECs have a unique appreciation for the workload and impacts to the Public Switched Telephone Network ("PSTN") since the wireline industry has participated in interim pooling trials since 1998.

As CTIA repeatedly has urged, the Commission should be sensitive to network integrity concerns as the wireline and wireless industries work together to implement TBNP. SBC, in particular, has identified numerous, specific consequences of insufficient resources to implement the proposed schedule.⁹ In their view, the schedule may be too aggressive and "customer service outages due to service order errors" could occur.¹⁰ Additionally, more general administrative problems will likely arise due to lack of staff resources.

3. MIN/MDN Separation

All MIN-based wireless carriers must separate the Mobile Identification Number ("MIN") from the Mobile Directory Number ("MDN") in order to complete the calls of ported subscribers or for carrier-participation in TBNP. Prior to the MIN/MDN separation upgrade, AMPS, CDMA, TDMA Service Providers (SP) performed registration, call processing, provisioning, customer care and billing based upon a single number---the MIN. Traditionally, the MIN has also been used by SPs within the North American Numbering Plan (NANP) serving area as the 10-digit MDN.

In a porting environment, mobile subscribers will require two types of numbers: a MDN and a MIN. The MDN will be the dialable NANP telephone number and will be portable in a SP portability environment. The MIN will be non-portable and non-dialable. Separation of these two numbers is considered to be one of the most difficult steps in wireless portability and pooling implementation.

The industry hopes to find guidance from the answers obtained from vendor and carrier surveys to estimate the industry's progress towards completing this critical upgrade.

4. MIN Block Identifier Administration

In June 2001, CTIA completed an open-industry process for selecting an administrator to assign and administer MINs. NCS-Pearson, a Minneapolis based company, was selected as the MBI administrator. As part of the overall industry implementation timeline, the Administrator was scheduled to begin the initial stage of preparation -- referred to as the "grandfathering process" -- by December 2001. It was recently announced that this schedule has been delayed by approximately 60 days. CTIA

⁹ SBC Comments at 5 (reminding the Commission that "year 2002 activities will impact the same SBC resources," including wireless pooling testing, wireless porting, and wireless pooling which begins on a flash-cut basis).

¹⁰ SBC's Comments at 5.

believes that the MIN administration process will be back on track soon. The wireless industry is forming a Limited Liability Corporation (LLC) to provide oversight for the MBI administration process. The anticipated completion date of LLC formation is mid-December 2001.

5. Wireless to Wireline Portability Integration Issues

In simple terms, differences exist between the local serving areas of wireless and wireline carriers. Wireline carriers rate and route calls based upon individual rate centers. Wireless Carriers calling plans are not limited in geographic scope to rate centers. Rather, wireless serving areas typically extend beyond several Rate Centers. Given that the FCC mandate for "Service Provider Portability" is limited to "Rate Centers", the geographic scope of Wireless to Wireline Portability is out of balance.

Developing operational solutions for separate and distinct technologies is a complicated challenge. The wireless and wireline industries have different calling areas and rating systems, as well as different distribution channels and service activation systems. The FCC mandate does not exclusively mandate "Wireless-to-Wireless" Porting scenarios. Rather, the Commission has mandated that the industry be capable of supporting "Wireless-to-Wireline" Ports, and vice versa. Because the rules for Service Provider Portability only permit porting when the subscriber's physical location is within wireline rate center and is associated with the wireless NPA, this mandate requires that two separate process flows for different technologies be developed and implemented. The industry still has not resolved how to "provision" Wireless-Wireline" Ports.

The "Rate Center Issue" is one of the most important and complicated problems associated with "Wireless-to-Wireline" Portability. As early as January 1998, a NANC working group raised this concern and submitted a "Rate Center Issue Position Paper" to the Council.¹¹ The NANC was unable to respond to the three key questions posed by the Working Group:

1. Does the difference in scope of porting capabilities between wireless and wireline service providers create a competitive disadvantage which would be inconsistent with the FCC's objectives for numbering?
2. If so, is this competitive disadvantage overridden by the FCC's order to implement wireless-wireline portability to encourage CMRS- wireline competition?
3. Would the inability in certain situations for a wireless end user, staying at the same location, to keep their telephone number when changing to a wireline service provider be acceptable from a statutory or regulatory perspective?

¹¹ *Wireless Wireline Integration Task Force Rate Center Issue Position Paper*, North American Numbering Council (Jan. 20, 1998).

The “rate center issue” was forwarded to the Commission for resolution after the NANC was unable to reach consensus. The Commission must resolve these issues before “Wireless-to-Wireline” portability can proceed.

6. Potential Impact on E-911

CTIA is closely monitoring industry discussion concerning the potential impacts of LNP on the E-911 mandated initiatives. There are concerns that, in some scenarios, calls from ported subscribers may not be able to receive response calls from the Public Safety Answering Point (“PSAP”). Currently, the switch assumes that the MIN value sent during “registration” is the same as the MDN. While the MIN is a 10-digit number, with the same format as a telephone number, it is not the same as the telephone number after a customer ports their phone number. Since wireless carriers complete all 9-1-1 calls, even from customers of other carriers and from non-subscribed-to phones, it is likely that some MINs will be delivered to the PSAP. Consequently, if a wireless customer who has ported their number dials 9-1-1, and the MIN is delivered to the PSAP, unless the PSAP has been upgraded to differentiate between the separation of MINs and MDNs, the number received by the PSAP cannot be used to call back the customer. Industry experts continue to review the potential impacts of LNP on E-911.

CONCLUSION

The wireless industry intends to successfully meet the November 24, 2002 deadline. As noted above, while tremendous progress has been made, numerous challenges still lie ahead.

Sincerely,



Michael Altschul

cc: Tom Sugrue—FCC
Kris Montieth—FCC
Diane Harmon—FCC
Cheryl Callahan – FCC
Sanford Williams –FCC
Robert Atkinson
NANC Members

Exhibit 1

North American Numbering Council
c/o Columbia Institute for Tele-Information
Columbia University Business School
1A Uris Hall
3022 Broadway
New York, NY 10027-6902

November 20, 2001

Dorothy Attwood, Esq.
Chief, Common Carrier Bureau
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20544

Dear Ms Attwood:

The Wireless Number Portability Operations (WNPO) Team, a subcommittee of the North American Numbering Council (NANC), brought to NANC's attention at its October 16th meeting certain events that have caused delays in the inter-carrier testing schedule for wireless number portability and pooling (WNPP). In the WNPO's opinion, these delays could impact the availability of WNPP by the November 24, 2002 date specified by the FCC. The purpose of this letter is simply to bring the WNPO's concern to your attention; at this time, NANC is not recommending or suggesting any action on the part of the FCC. Rather, it is my understanding that representatives of the wireless companies and the wireless industry may be in touch with you directly to suggest any action that they might consider to be appropriate.

The events which gave rise to WNPO's concerns are:

- A number of switch and network component vendors (but not all) have been unable to provide upgrades for WNPP until after October 2001 and possibly not until after May 2002
- A number of back office (OSS) system vendors (but not all) have been unable to provide system upgrades for WNPP until after October 2001 and possibly not until after May 2002
- Many non-participating providers in the top 100 MSAs have not yet identified their test readiness.

Apparently, these events have resulted in a delay of the start date of WNPP inter-carrier testing, initially planned for October 1, 2001, and may cause testing to extend beyond the proposed completion date of May 31, 2002. During the October 16 NANC meeting, a number of NANC members expressed surprise that the wireless carriers had been

unable to encourage their vendors to provide the necessary equipment and software on a timely basis. Subsequent to the NANC meeting, I received messages from most of the State public utility commission members of NANC expressing their strong concern about the potential for delay.

NANC will continue to monitor developments affecting the availability of WNPP and will report significant developments to you, as appropriate.

Sincerely,

Robert Atkinson
NANC Chair

cc: Tom Sugrue – FCC
Diane Harmon – FCC
Cheryl Callahan – FCC
Sanford Williams -FCC
NANC Members