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August 10, 1998

AUG 10 1998

Magalie Roman Salas
Secretary
Federal Communications Commission
1919 M St., N.W.
Washington, D.C. 20054

Re: Telephone Number Portability, CC Docket No. 95-116

Dear Ms. Salas:

Pursuant to Public Notice DA 98-1290, released June 29, 1998, on behalf of the Telecommunications Resellers Association, I am enclosing for filing in the referenced proceeding an original and four copies along with a diskette in WordPerfect 5.1 format of the Comments of the Telecommunications Resellers Association on the May 18 Report of the North American Numbering Council on Wireless Number Portability. Please file stamp and return one copy of the Comments (additional copy provided).

Please contact me if you have any questions.

Respectfully submitted,

Linda L Oliver

Linda L. Oliver
Counsel for Telecommunications
Resellers Association

Enclosures

cc: Attached service list

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

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

In the Matter of Telephone Number Portability	)))	CC Docket No. 95-116

COMMENTS OF THE TELECOMMUNICATIONS RESELLERS ASSOCIATION ON THE MAY 18 REPORT OF THE NORTH AMERICAN NUMBERING COUNCIL ON WIRELESS NUMBER PORTABILITY

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Dated: August 10, 1998

SUMMARY

The Telecommunications Resellers Association (TRA) strongly supports the Commission's goal of speedy implementation of wireless number portability. Number portability is crucial to the promotion of competition and consumer choice in the wireless market.

The North American Numbering Council (NANC) Report contemplates adoption of a technology that presents a high likelihood of delaying the implementation of wireless number portability. The technology being contemplated would not be compatible with a phased-in implementation of number portability, because it would require each local wireless network to have the ability to recognize and process two distinct identification numbers -- the MIN and the MDN -- in order to ensure that roaming is supported. TRA is concerned that because the NANC approach requires simultaneous implementation by all wireless carriers, it could create unnecessary costs, delays, and administrative difficulties in implementation of wireless number portability. As a result, the NANC approach could cause serious delays in bringing the benefits of number portability to wireless consumers.

Instead, TRA urges the Commission to seriously consider adopting an approach to wireless number portability similar to the location routing number ("LRN") approach used for local wireline number portability. Such an approach would have cost advantages over the NANC approach, and would permit a phased-in deployment of wireless number portability, with portability brought to the largest markets first. It therefore should be seriously considered by the Commission as the chosen technology for wireless number portability.

TABLE OF CONTENTS

Page

INTRODUCTION AND SUMMARY 3

I. THE NANC REPORT DOES NOT SET OUT A CLEAR PATH FOR IMPLEMENTATION OF CMRS NUMBER PORTABILITY IN THE NEAR FUTURE. 4

II. DELAY IN IMPLEMENTING WIRELESS NUMBER PORTABILITY WILL HARM CONSUMERS AND COMPETITION. 5

III. THE APPROACH SUGGESTED IN THE NANC REPORT IS LIKELY TO LEAD TO AN EXTENDED AND INDEFINITE IMPLEMENTATION PERIOD. 7

IV. AN APPROACH SIMILAR TO THAT EMPLOYED FOR WIRELINE SERVICES SHOULD BE EMPLOYED FOR CMRS AS WELL. 10

CONCLUSION 14

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

In the Matter of	)	
	)	
Telephone Number Portability	)	CC Docket No. 95-116
	)	

COMMENTS OF THE
TELECOMMUNICATIONS RESELLERS ASSOCIATION
ON THE MAY 18 REPORT OF THE NORTH AMERICAN NUMBERING COUNCIL ON WIRELESS NUMBER PORTABILITY

The Telecommunications Resellers Association ("TRA") hereby files its preliminary comments in response to the Public Notice in CC Docket No. 95–116, released on June 29, 1998.[1] In the Public Notice, the Commission seeks comments on the Local Number Portability Administration's Working Group Report on wireless/wireline integration, submitted by the North American Numbering Council on May 18, 1998 ("NANC Report"). [2]

1/ CC Docket No. 95–116, Public Notice DA 98–1290, NSD File No. L–98–84, released June 29, 1998 ("Public Notice").

2/ In that report, which was prepared in response to an order by the Commission released on August 18, 1997, NANC addresses the integration of local exchange carrier ("LEC") and commercial mobile radio service ("CMRS") provider number portability, as well as wireless–specific issues related to number portability.

INTRODUCTION AND SUMMARY

TRA is vitally concerned with this proceeding because implementation of CMRS number portability at the earliest possible time is crucial for the continued development and expansion of a competitive wireless industry. As TRA pointed out in its comments filed in opposition to CTIA's request to defer implementation of wireless number portability, wireless number portability is just as critical to promoting competition and expanding consumer choice as wireline number portability is in local exchange markets.3

Two years ago, the Commission found that wireless number portability will facilitate the entry of new service providers, thus offering incentives for incumbent carriers to reduce prices and improve service quality.4/ TRA concurs with the Commission's finding that wireless customers face a major disincentive to changing carriers if they must also change telephone numbers.5/ The Commission also concluded that number portability will promote competition between wireless and wireline service providers as the markets for these two services converge.6/

3/ See Comments of TRA in Opposition to the Cellular Telecommunications Industry Association's Petition for Forbearance, CC Docket No. 95-116, filed February 23, 1998.

4/ *Id.*, paras. 159–160.

5/ CC Docket No. 95–116, *First Report and Order and Further Notice of Proposed Rulemaking*, released July 2, 1996, para. 157.

6 *Id.*

TRA's comments on the NANC Report focus on whether the approaches recommended in that report are likely to lead to rapid implementation of efficient local number portability for CMRS, and whether there might be alternatives that would be more likely to accomplish that goal. In particular, TRA is concerned that the NANC approach could create unnecessary costs and delays in implementation of wireless number portability, and therefore could delay bringing the benefits of the technology to consumers.

Instead, TRA urges the Commission to seriously consider adopting an approach to wireless number portability similar to that used for local wireline number portability, rather than adopting the NANC proposal. Such an approach would permit a phased-in deployment of wireless number portability, with portability brought to the largest markets first. This approach would bring the benefits of portability to the greatest number of consumers more quickly.

I. THE NANC REPORT DOES NOT SET OUT A CLEAR PATH FOR IMPLEMENTATION OF CMRS NUMBER PORTABILITY IN THE NEAR FUTURE.

The NANC Report, which contemplates use of a technology for wireless number portability that requires implementation of portability everywhere in the country at the same time, does not provide sufficient assurance that CMRS number portability will be available in the reasonably near future. Rather than setting forth an approach to wireless number portability that could accommodate a phased-in implementation, the NANC contemplates an approach that would require simultaneous implementation nationwide, if nationwide roaming capability is to be

supported. 7/ The report emphasizes the technological differences between number portability requirements for wireless and wireline services, rather than the similarities. The report also highlights the challenges that NANC faces in crafting an appropriate solution,8/ but fails to define how number portability for CMRS will be achieved — now or in the foreseeable future.

II. DELAY IN IMPLEMENTING WIRELESS NUMBER PORTABILITY WILL HARM CONSUMERS AND COMPETITION.

Unfortunately, the lack of a clear implementation schedule for wireless number portability is a continuation of past events. In November 1997, CTIA petitioned for a nine–month delay in the implementation of wireless number portability on the grounds that it is too complex a task to be completed within the original schedule.9/ Then, a month later, the CTIA petitioned for a five–year "forbearance" from the number portability obligation, arguing that the resources needed for implementation could be better deployed to construct and expand wireless networks.10/ The Commission has not yet acted on these requests.

7/ NANC Report at Section 7.

8/ NANC Report, p. 7.

9/ CC Docket No. 95–116, Petition for Extension of Implementation Deadlines of the Cellular Telecommunications Industry Association, November 27, 1997.

10/ CC Docket No. 95–116, Petition for Forbearance of the Cellular Telecommunications Industry Association, December 16, 1997.

These actions undoubtedly reflect the fact that the wireless carriers have little if any incentive to implement number portability. In fact, wireless carriers appear to have strong incentives to defer implementation of number portability. If wireless number portability were implemented within the existing schedule, customers would be able to shop among wireless carriers for better services and lower costs without changing their telephone numbers -- just as they can on the local wireline side.

An additional benefit to the wireless carriers from deferring number portability is that this action may virtually eliminate any competitive threat that might be posed by resellers. Wireless carriers perceive resellers as a threat because they are knowledgeable "comparison shoppers" in the market. More than any end user, a reseller knows the coverage, quality, and efficiency of each wireless carrier's operations. Therefore, resellers are uniquely situated to match each customer's needs to the most appropriate wireless carrier. But number portability is essential to the fulfillment of the resellers' competitive role in the wireless markets. Only with number portability can resellers provide the best wireless service to their customers at the lowest cost in a manner that appears seamless to their customers. Of course, number portability will increase the competitive pressure on the wireless carriers themselves, as consumers will be more willing to shift their business among competing wireless networks.

Carriers also have an incentive to delay indefinitely wireless number portability because there is no current statutory obligation to implement wireless number portability because CMRS providers have not been classified as "local

exchange carriers" subject to the requirements of Section 251(b) of the Telecommunications Act of 1996.[11] Rather, the extension of number portability to wireless carriers was a policy decision of the Commission to maximize the ability of competitive market forces to maintain reasonable rates and high service quality.

TRA strongly supports rapid implementation of wireless number portability. Portability is critical to the full achievement of the potential for competition and consumer choice in wireless services.

III. THE APPROACH SUGGESTED IN THE NANC REPORT IS LIKELY TO LEAD TO AN EXTENDED AND INDEFINITE IMPLEMENTATION PERIOD.

Number portability for CMRS must accommodate the fact that a wireless subscriber may be "roaming" outside of the geographic rate center area to which the ported number is assigned. The NANC's suggested approach to this problem is to introduce the requirement that each local wireless network be able to recognize and process two distinct identification numbers — a Mobile Identification Number ("MIN") and a Mobile Directory Number ("MDN").[12] The MIN is used to uniquely associate the mobile handset with the network, while the MDN is the number that is dialed to reach the mobile phone. Under NANC's approach, when attempting to

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[11] Telecommunications Act of 1996, Pub. L. No. 104–104, 110 Stat. 56, amending the Communications Act of 1934, 47 U.S.C. § 151 *et seq.* ("Telecommunications Act"). See 47 U.S.C. § § 251(b)(2), 153(26).

[12] NANC Report, p. 13.

initiate or receive a call, a mobile station must provide both numbers as well as validation information. All networks must be capable of recognizing and handling separate MIN and MDN for each call.

Development and deployment of the national capability for this MIN/MDN separation is almost certain to be a major cause of delay in implementing wireless number portability. Indeed, because the MIN/MDN requires that every possible cell or network where a caller might roam have the capability to distinguish and process both numbers, a time–phased approach to implementing wireless number portability would not be feasible.

Thus, to successfully implement the NANC approach, each CMRS cell must be "flash cut" with this capability. 13/ That is, number portability must be provided even in the smallest networks covering very sparsely populated rural areas at the same time as for the metropolitan regions with tens of thousands of subscribers. A solution that requires 100 percent deployment to work is not likely to be a viable approach to implementation of wireless number portability in the foreseeable future, because under such an approach, it will be necessary to wait until every CMRS provider is ready to cut over to number portability.

Smaller carriers may have fewer resources to devote to speedy implementation. There also are likely to be significant administrative difficulties in

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13/ The NANC Report acknowledges, in Section 7, that the approach it is considering could not support nationwide roaming unless all wireless carriers were to implement number portability simultaneously.

implementing the capability to perform wireless number portability over such a wide number of participants and in coordinating the effort so that there can be a simultaneous cutover nationwide. Such an approach also would create many administrative complexities and difficulties, because cutover must be coordinated nationwide.

In contrast to the approach being considered by NANC for wireless number portability, the approach adopted for local wireline portability allowed the Commission to specify a phased-in implementation schedule, with the earliest implementation taking place in the larger Metropolitan Statistical Areas ("MSAs").[14] As a result, the Commission's plan for wireline number portability, covering 100 major MSAs, is already bringing the benefits of number portability for wireline services to consumers in most of the nation's largest cities. In contrast, the approach outlined by NANC for wireless number portability would delay the introduction of wireless number portability in the largest markets because it cannot accommodate a phased-in introduction of number portability.

The wireless approach discussed in the NANC Report also has a major infirmity concerning Enhanced 911 service ("E911"). As discussed in Section 4.1 of the NANC Report, there are impacts on E911 related to the roaming impacts described above. While the MIN is a 10–digit number which may have the same format as a telephone number, it is not the same as the telephone number for a

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14/ CC Docket No. 95–116, *First Memorandum Opinion and Order on Reconsideration*, released March 11, 1997.

ported subscriber.[15] Consequently, if the MIN is delivered to the public safety answering point (PSAP) for a ported subscriber, that number will not be the same as the calling number, and the PSAP will be unable to locate the caller in an emergency.

IV. AN APPROACH SIMILAR TO THAT EMPLOYED FOR WIRELINE SERVICES SHOULD BE EMPLOYED FOR CMRS AS WELL.

TRA recommends that the Commission seriously consider adopting a different approach for wireless number portability than the one being considered by NANC. Specifically, TRA recommends that the Commission consider adopting an approach similar to that used for wireline number portability -- a "location routing number" (LRN) approach.

For wireline services, an LRN approach was chosen as the preferred method for providing long–term number portability.[16] With this approach, a unique 10–digit number, or "location routing number," is assigned to each central office switch to identify the switch for call routing purposes. LRN provides call routing, but it does not address signaling system routing.

Signaling systems frequently route messages based on the NPA–NXX of the target number. This is called a 6–digit Global Title Translation ("GTT"). The six

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15/ NANC Report, p. 16.

16/ FCC Docket No. 95–116, *Second Report and Order*, released August 18, 1997, para. 8.

digits are translated to a Destination Point Code ("DPC"), which identifies a signaling node. Signaling messages are routed to the DPC, which identified a signaling node. Typically, remote networks route signaling messages on a 6–digit GTT, but when the message enters the home network a 10–digit GTT is performed to identify the appropriate signaling node for the individual telephone number. GTTs are used for queries to the Line Information Data Base ("LIDB") to provide premium services such as calling card verification, CLASS services, inter–system voice mail, and message waiting indication.

To maintain the integrity of these premium services, the wireline industry agreed to provide the appropriate DPC information for ported numbers. Each telephone number that is uploaded to the Number Portability Administration Center ("NPAC") has an associated LRN for call routing, and associated DPCs for signaling system routing. This gives wireline service providers the ability to identify the appropriate signaling node when a 10–digit GTT is performed. With this solution, networks serving smaller MSAs did not need number portability capabilities to maintain the integrity of the CLASS services and other services identified above.

The signaling system processing defined in paragraph 4.1.3 of the NANC Report to perform roamer registration is no different than the signaling message processing discussed above for premium services. This is a better solution for roamer registration than the one recommended by NANC. The LIDB is used to store the routing information for end users who have ported their telephone numbers to other local carriers. Seven number portability database regions were

established to correspond with the boundaries of the seven original Bell Operating Company regions.[17] Two firms were selected to serve as administrators for the regional databases.

There are important advantages to this approach for CMRS number portability. First, experience gained in employing the approach for wireline services should reduce the cost, and greatly reduce the time, required for implementation of number portability for CMRS. Second, and even more important, control would reside with the home area of the ported number, and not be necessarily dispersed to all networks serving areas to which the mobile station with a ported number may travel. Since control resides in the home areas, it is possible to phase in implementation of number portability for CMRS, just as it is for the wireline network. For example, wireless number portability might be provided in the first phase to subscribers in 20 of the largest MSAs. All wireless users based in those 20 MSAs would enjoy the benefits of number portability no matter where they traveled in the nation, even if CMRS number portability had not yet been implemented in the area where they were roaming.

There is nothing to suggest that an LRN-based approach would not be feasible for wireless number portability. In fact, the NANC Report acknowledges that such an approach would be feasible for short messaging service ("SMS").[18]

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[17] *Id.*

If this procedure is feasible for short messaging services, it should also be suitable for all CMRS services.

In sum, an LRN approach to implementing wireless number portability provides benefits to the greatest number of mobile stations at the earliest time, and appears to be technically feasible. It does not have the disadvantages of the NANC approach discussed above. The LRN approach also provides benefits initially in the areas where, because of high population density and economies of scale, the potential for competition among service providers (including resellers) is the greatest. The Commission should seriously consider adopting this approach instead of the approach being contemplated by NANC.

18/ Short messaging service ("SMS") allows the transfer of a limited amount of text information to or from a mobile station. As the NANC Report acknowledges,

> Since SMS requires that a message be delivered to the appropriate mobile subscriber, it is necessary to determine the current service provider associated with a specific directory number. One method of facilitating this is to upload the SMS routing address, i.e. the Global Title Address, for each ported subscriber in the Number Portability Administration Center ("NPAC"). The NPAC would then disseminate this for inclusion in the Number Portability Database ("NPDB"). This information would have the same attributes and NPAC procedures as defined for Global Title Addresses associated with: Calling Name Delivery ("CNAME"), the Line Information Data Base ("LIDB"), CLASS services, and the Inter–system Voicemail/Message Waiting Indication ("ISVM/MWI").

NANC Report, pp. 15–16.

CONCLUSION

For the reasons given above, the Telecommunications Resellers Association urges the Commission seriously to consider adopting an approach to wireless number portability similar to that used for local wireline number portability, rather than adopting the approach under consideration by NANC. The NANC approach could create unnecessary costs and delays and therefore could delay the benefits of number portability for wireless subscribers.

Respectfully submitted,

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Counsel for the Telecommunications
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Dated: August 10, 1998

CERTIFICATE OF SERVICE

I, David A. Maybee, Jr., hereby certify that a copy of the foregoing Comments of the Telecommunications Resellers Association on the May 18 Report of the North American Numbering Council on Wireless Number Portability was served by hand delivery upon the following:

David A. Maybee, Jr.

Dated: August 10, 1998

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