DOCKET FILE COPY ORIGINAL

FCC MAIL SECTION

SEP 4 2 43 PM '98

DISPATCHED BY

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

In the Matter of	)	
	)	
Telephone Number Portability	)	CC Docket No. 95-116
	)	
Petition for Extension of Implementation	)	
Deadlines of the Cellular Telecommunications	)	DA 97-2579
Industry Association	)	

MEMORANDUM OPINION AND ORDER

Adopted: September 1, 1998 **Released: September 1, 1998**

By the Chief, Wireless Telecommunications Bureau:

I. INTRODUCTION

1. By this Order, we grant the petition filed by the Cellular Telecommunications Industry Association (CTIA) requesting that the Wireless Telecommunications Bureau (Bureau) stay for nine months the requirement that all cellular, broadband personal communications service (PCS), and covered specialized mobile radio (SMR) carriers provide service provider number portability by June 30, 1999.[1] Pursuant to our delegated authority under section 52.31(c) of the Commission's Rules, we find that extending the deadline from June 30, 1999 to March 31, 2000 is necessary to ensure the efficient development of wireless number portability.[2]

II. BACKGROUND

2. On July 2, 1996, the Commission released its First Report and Order and Further Notice of Proposed Rulemaking in this docket, which promulgated rules and deployment schedules for the implementation of number portability by local exchange carriers (LECs) and commercial mobile radio service (CMRS) providers.[3] The Commission mandated that all cellular, broadband PCS, and covered SMR providers have the capability to deliver calls from their networks to ported numbers anywhere in the country by December 31, 1998, and to offer service provider portability, including the ability to support roaming, throughout their networks by June 30, 1999.

---

[1] Telephone Number Portability, CC Docket No. 95-116, Petition for Extension of Implementation Deadlines of the Cellular Telecommunications Industry Association (filed Nov. 24, 1997) (CTIA Petition).

[2] 47 C.F.R. § 52.31(c).

[3] Telephone Number Portability, *First Report and Order and Further Notice of Proposed Rulemaking*, CC Docket No. 95-116, 11 FCC Rcd 8352 (1996) (*First Report and Order*).

3. The Commission recognized that due to the technical complexities of implementing wireless number portability,[4] wireless carriers would require more time than LECs to develop standards and protocols "to overcome the technical burdens unique to the provision of seamless roaming on cellular, broadband PCS, and covered SMR networks."[5] The Commission also found that additional technical issues could arise as the wireless industry transitions from the development of standards and protocols to the actual implementation of number portability.[6] Subsequently, the Commission issued its First Memorandum Opinion and Order on Reconsideration, which clarified that by June 30, 1999, "CMRS providers must (1) offer service provider portability in the 100 largest MSAs, and (2) be able to support nationwide roaming."[7]

4. To accommodate additional technical issues, the Commission delegated authority to the Chief, Wireless Telecommunications Bureau to extend the dates contained in the implementation schedule. Section 52.31(c) of the Commission's Rules provides that:

> The Chief, Wireless Telecommunications Bureau, may waive or stay any of the dates in the [number portability] implementation schedule, as the Chief determines is necessary to ensure the efficient development of number portability, for a period not to exceed 9 months (*i.e.*, no later than September 30, 1999, for the deadline in paragraph (b) of this section, and no later than March 31, 2000, for the deadline in paragraph (a) of this section).[8]

In the *Order on Reconsideration*, the Commission found that a nine-month extension, coupled with the carrier-specific relief contained in 47 C.F.R. § 52.31(d), provided enough flexibility for the wireless industry to implement number portability according to the schedule established in the Rules.[9]

---

[4] In the *First Report and Order*, the Commission noted that "the CMRS industry is only beginning to address the additional standards and protocols specific to the provision of portability by CMRS carriers . . . Moreover, [CMRS] providers face technical burdens unique to the provision of seamless roaming on their networks, and standards and protocols will have to be developed to overcome these difficulties." *First Report and Order*, 11 FCC Rcd at 8439, ¶ 164. The Commission also has observed that the wireless industry has lagged behind the wireline industry in developing a method for providing number portability, and that the wireless industry faces special technical challenges in doing so. *Order on Reconsideration*, 12 FCC Rcd at 7312, ¶ 134.

[5] *First Report and Order*, 11 FCC Rcd at 8440, ¶ 166.

[6] *Id.* at 8440-41, ¶ 167.

[7] Telephone Number Portability, *First Memorandum Opinion and Order on Reconsideration*, CC Docket No. 95-116, 12 FCC Rcd 7236, 7313, ¶ 136 (1997) (*Order on Reconsideration*).

[8] 47 C.F.R. § 52.31(c).

[9] *Order on Reconsideration*, 12 FCC Rcd at 7312, ¶ 134.

5. On November 24, 1997, CTIA filed its petition on behalf of the CMRS industry to extend the service provider number portability deadline by nine months.[10] CTIA claims that the wireless industry will not be able to implement wireless number portability, including the ability to support nationwide roaming, under the existing implementation schedule.[11] CTIA states that technical and equipment standards for implementing number portability have not been finalized, and that until those standards are finalized, the wireless industry cannot complete certain final provisions that are critical to the deployment of wireless number portability.[12]

6. On December 9, 1997, the Bureau issued a Public Notice seeking comment on the relief requested in the CTIA Petition.[13] The Bureau has received sixteen comments and fourteen reply comments in response to the petition.[14]

III. DISCUSSION

7. Pursuant to our delegated authority under section 52.31(c) of the Commission's rules, we stay for nine months the requirement that CMRS providers implement service provider number portability by June 30, 1999. We find that extending the June 30, 1999 deadline to March 31, 2000 is necessary to facilitate efficient number portability implementation because the record in this proceeding demonstrates that the standards required to allow carriers to meet the current deadline have not been completed.[15] In

---

[10] *See* CTIA Petition. CTIA is a trade organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the association covers all CMRS providers, including forty-eight of the fifty largest cellular and broadband PCS providers. *Id.* at 1 n.1.

[11] *Id.* at 4-5.

[12] *Id.* at 3-4.

[13] *Public Notice*, CC Docket No. 95-116, Wireless Telecommunications Bureau Seeks Comment on CTIA Petition for Waiver To Extend the Implementation Deadlines of Wireless Number Portability, DA 97-2579 (Dec. 9, 1997).

[14] A complete list of commenters is appended to this Order. On December 16, 1997, CTIA filed a separate but related petition requesting the Commission to forbear from enforcing number portability requirements for CMRS licensees until the five-year build-out period for PCS carriers has expired. *See* CC Docket No. 95-116, Petition for Forbearance of the Cellular Telecommunications Industry Association (filed Dec. 16, 1997) (*CTIA Forbearance Petition*). The *CTIA Forbearance Petition* is currently pending before the Commission. We also note that certain SMR carriers supported the petition for extension, but urged the Commission to apply the "covered SMR" definition adopted in another proceeding to the Commission's number portability Rules. *See, e.g.*, AMTA Comments at 2; Mobex Comments at 4. Because this request seeks reconsideration of matters outside the scope of this order, we will not address this request in this Order.

[15] CTIA Petition, Declaration of Arthur L. Prest, *CTIA Report*. We also take official notice of the 1998 North American Numbering Council, Local Number Portability Administration Working Group Report on Wireless Integration (May 8, 1998) (*NANC Report*). The *NANC Report* addresses concerns regarding the implementation of number portability as delegated to NANC by the Commission. The *NANC Report* is available on the Commission's website at www.fcc.gov/ccb/Nanc.

fact, the overwhelming majority of the commenters in this proceeding support granting a nine month extension of the June 30, 1999 deadline.[16]

8. Our finding that most CMRS providers will be unable to meet the June 30, 1999 deadline is based in part on the delays in finalizing the standards necessary for full implementation of number portability. Because standards must be in place before software development, network testing, and implementation can occur, delays in finalizing the standards cause delays in meeting the June 30, 1999 deadline. Although final standards have not yet been adopted that would permit carriers to implement wireless number portability, including seamless roaming, the standards-setting process appears to be nearing completion. CMRS carriers employ wireless technologies including advanced mobile phone service (AMPS), code division multiple access (CDMA) and time division multiple access (TDMA), and Global System for Mobile Communications (GSM).[17] The wireless industry has been working on the development of IS-41 standards for AMPS, CDMA, and TDMA technologies through the TR-45.2 Ad Hoc Committee for Wireless Number Portability (TR-45.2 Committee).[18] TR-45.2 has developed its standards proposal and distributed a letter ballot to all TIA members.[19] One of the primary considerations in the balloting process is whether to adopt standards for implementation of IS-41 number portability through the separation of the Mobile Identification Number (MIN) and the Mobile Directory Number (MDN).[20]

---

[16] *See generally* 360o Communications Company (360o) Comments; AirTouch Communications, Inc. (AirTouch) Comments; AT&T Wireless Services, Inc. (AT&T Wireless) Comments; American Mobile Telecommunications Association, Inc. (AMTA) Comments; BellSouth Corporation (BellSouth) Comments; GTE Service Corporation (GTE) Comments; Mobex Communications (Mobex) Comments; PrimeCo Personal Communications, L.P. (PrimeCo) Comments; Rural Telecommunications Group (RTG) Comments; Southern Company (Southern) Comments; Southwestern Bell Mobile Systems, Inc. & Pacific Bell Mobile Services, Inc. (SBC) Comments; Sprint Spectrum, L.P. d/b/a Sprint PCS (Sprint PCS) Comments; United States Cellular Corporation (USCC) Comments; Century Cellunet, Inc. (Century) Reply Comments; Comcast Cellular, Inc. (Comcast) Reply Comments; Cellular Telecommunications Industry Association (CTIA) Reply Comments; Motorola, Inc. (Motorola) Reply Comments.

[17] *See* Letter from Michael Altschul, CTIA, to Steven E. Weingarten, Chief, Commercial Wireless Division, Wireless Telecommunications Bureau, Federal Communications Commission, at 2-3, dated Aug. 25, 1998. Wireless number portability standards are being developed in Telecommunications Industry Association (TIA) standards committees. AMPS, CDMA, and TDMA are the most common wireless technologies in the United States. GSM is the standard digital cellular phone service found in 85 countries around the world. *Id.*

[18] *Id.* at 2.

[19] *Id.* TIA members may respond to comments received in the balloting process in three ways: (1) approved; (2) approved with comments; and (3) submit back to the committee with extensive comments. *Id.* According to CTIA, if the standards committee receives extensive comments, "additional time must be spent resolving all associated issues before sending the standard back to the industry for re-balloting. As a matter of practice, it is not uncommon for extensive commenting, and re-balloting when facing a difficult technical challenge." *Id.*

[20] Letter from Michael Altschul, CTIA to Magalie Roman Salas, Secretary, Federal Communications Commission, dated July 17, 1998. When a subscriber is roaming, the MIN is used by the carrier in the visited market to identify the roamer. The MIN permits the visiting carrier to identify the roamer's home market and to communicate with the roamer's carrier for validation and to prevent fraud. For CDMA, and TDMA based carriers, the MDN and the MIN are the same number and are associated with a particular carrier. In a number portability environment, however, every MIN will remain integrated in the phone as a ten-digit non-dialable number and will be associated with a carrier, but the MDN will move with the ported user (every ported subscriber will require a new

The TR-45.2 Committee plans to complete this process by the end of 1998.[21] Similarly, wireless number portability standards are being developed for GSM-based carriers, through the T1P1/TR-46 Committee (T1P1/TR-46 Committee).[22] The T1P1/TR-46 Committee has scheduled balloting for the first quarter of 1999.[23]

9. If the TR-45.2 Committee adopts standards for implementation for IS-41 wireless number portability through the MIN/MDN separation,[24] a nine-month extension will be necessary because, following the adoption of separation standards, manufacturers will need additional time to develop and test the necessary software products, produce the software, and deliver the software to carriers for roll out in the top 100 MSAs. Estimates from manufacturers of the amount of time it will take them to provide the software to their CMRS customers for the MIN/MDN separation demonstrates the critical need for a nine-month extension. According to Ericsson, for example, it will take between twelve and eighteen months after standards are available to deliver software to their CMRS customers for deployment.[25] This twelve to eighteen month period would include eight to twelve months for software development by manufacturers, three to four months of functional testing by manufacturers, and one to two months of customer site testing.[26] Following the delivery of software, CMRS operators will need time to conduct extensive testing in the laboratory and in the field under varying conditions to ensure reliability, quality and integrity of the service. In addition, if a MIN/MDN separation standard is adopted for IS-41 wireless technologies, CMRS operators will be required to ensure that every switch in the top 100 MSAs is capable

---

MIN from the new carrier, which will require re-programming the subscriber's wireless unit). *See generally* CTIA Petition, Declaration of Arthur L. Prest at ¶¶ 9-11.

[21] *See* Letter from Barbara A. Baffer, Ericsson Inc. to Magalie R. Salas, Secretary, Federal Communications Commission, dated Aug. 5, 1998. Motorola estimates that the MIN/MDN separation standards will not be completed until November 1998, and that it will take twelve to eighteen months to develop a deployment schedule and to incorporate these requirements into 1999 operations software. Letter from Mary E. Brooner, Motorola, Inc. to Magalie R. Salas, Secretary, Federal Communications Commission at 3, dated Aug. 7, 1998.

[22] Letter from Michael Altschul, CTIA, to Steven E. Weingarten, Chief, Commercial Wireless Division, Wireless Telecommunications Bureau, Federal Communications Commission, at 2-3, dated Aug. 25, 1998.

[23] *Id.*

[24] Some commenters on the WWITF Report recommend the adoption of a Location Routing Number approach *in lieu* of MIN/MDN separation. *See* Telephone Number Portability, CC Docket 95-116, Comments of the Telecommunications Resellers Association on the May 18 Report of the WWTIF, NANC on Wireless Number Portability at 10-11. With the LRN approach, a unique ten-digit number is assigned to each central office switch to identify the switch for call routing purposes. We express no opinion here as to whether the CMRS industry should implement wireless number portability through MIN/MDN separation, the LRN approach, or an alternative method.

[25] *See* Letter from Barbara A. Baffer, Ericsson Inc. to Magalie R. Salas, Secretary, Federal Communications Commission, dated Aug. 5, 1998. *See also* Letter from Mary E. Brooner, Motorola, Inc. to Magalie R. Salas, Secretary, Federal Communications Commission at 3, dated Aug. 7, 1998. Motorola estimates it will take eighteen months from the completion of standards work to the first office application and one year from the time of the first office application to nationwide roll out. *Id.* at 2-5.

[26] Letter from Barbara A. Baffer, Ericsson Inc. to Magalie R. Salas, Secretary, Federal Communications Commission, dated Aug. 5, 1998.

of recognizing the MIN and MDN as separate and distinct parameters.[27] Moreover, in order to implement number portability through a MIN/MDN separation, CMRS carriers must make extensive modifications and upgrades to billing, customer care, sales automation, maintenance, and repair and inventory systems.[28]

10. The record indicates that it will be less difficult for GSM-based carriers to implement number portability by the June 30, 1999 deadline. In fact, one GSM carrier, Omnipoint Communications, Inc. (Omnipoint) states that it intends to meet the Commission's current implementation schedule. Omnipoint contends that the financial and technical obstacles cited by CTIA and others do not apply to all CMRS carriers, and Omnipoint's readiness to implement number portability heavily weighs in favor of proceeding under the Commission's existing implementation schedule.[29] We are not convinced, however, that the ability of one class of CMRS providers to implement number portability justifies retaining the existing schedule.[30] Even if some GSM-based carriers are ready, the majority of CMRS carriers are not far enough along with the development of standards to support seamless nationwide roaming.[31] We note that many CMRS carriers now use dual-mode mobile phones, which allow their customers to roam in a system using a different technology. Thus, even if all GSM carriers were to support number portability, a GSM mobile unit roaming into an IS-41 system, for example, would encounter difficulties if the IS-41 system were not number portability enabled.

11. MCI Communications, Inc. (MCI) and WorldCom, Inc. (WorldCom) argue that CTIA has not adequately demonstrated that a nine-month extension is justified, and that if the Bureau grants a nine-month extension, it will be followed by a very high number of requests by individual carriers for individual extensions.[32] We disagree. The record before us strongly substantiates the claims of CTIA and others that a nine-month stay of the June 30, 1999, deadline is warranted and serves the public interest.[33]

---

[27] Letter from Michael Altschul, CTIA to Steven E. Weingarten, Chief, Commercial Wireless Division, Wireless Telecommunications Bureau at 3, dated August 13, 1998.

[28] CTIA Petition, Declaration of Arthur L. Prest at ¶¶ 11-13 *Accord* 360o Comments at 2; AT&T Wireless Comments, Declaration of Carol H. Peters at ¶¶ 5-10; PrimeCo Personal Communications Comments at 3; GTE Comments at 4-5.

[29] Omnipoint Comments at 2-5.

[30] SBC, a GSM-based PCS provider, does not share Omnipoint's view that the June 30, 1999 deadline can be met by GSM based CMRS providers. SBC Comments at 3. SBC contends that GSM markets are also affected by the work associated with the separation of the MIN/MDN as it relates to the roaming process. *Id.* According to SBC, CMRS number portability requires a rework of the GSM 1900/AMPS dual mode specifications to assure that seamless automatic roaming is available, and work is still needed to develop standards to support various PCS features. *Id.*

[31] SBC Reply Comments at 3.

[32] MCI Comments at 4; WorldCom Comments at 7.

[33] Further, we do not believe that we have to address the carrier-specific, five-part test articulated in section 52.31(d), as urged by MCI. *See* MCI Comments at 2-4. The Commission has drawn a distinction between the industry-wide relief that may be granted by the Bureau Chief under section 52.31(c) of the Commission's Rules and the carrier-specific relief that may be granted by the Commission under section 52.31(d) of the Commission's Rules. In the *Order on Reconsideration*, the Commission stated that "in the event that a wireless carrier is unable to meet the Commission's deadlines for implementing a long-term number portability method, it may file a request for

The Commission's rigorous criteria under section 52.31(d) of its Rules will likely deter the filing of unsubstantiated and frivolous extension requests.[34] To the contrary, we believe that by granting the nine-month extension at this time, we will allow the industry to work cooperatively towards full implementation of wireless number portability and decrease the need for individual carrier requests for deployment.[35]

12. Some commenters have expressed concern that any delay in number portability implementation may potentially harm related number administration policies, such as number pooling.[36] We share these concerns about the effect of a delay in number portability on number conservation techniques such as number pooling, which is technologically dependent on number portability, and we acknowledge that the nine-month extension will delay further CMRS carriers' ability to participate. We believe, however, that if CMRS providers are required to adhere to the existing number portability schedule with incomplete and untested standards, their billing systems would be unmanageable, and seamless roaming would be difficult. We urge the CMRS industry to work both formally and informally with the states and through industry fora, including NANC, to examine numbering conservation solutions that will preserve and increase numbering resources.

13. Some of the commenters have argued that neither CTIA nor its supporters have demonstrated they will be able to implement wireless number portability within the nine-month extension period, and that the Bureau instead should impose an interim implementation schedule with milestones.[37]

---

extension with the Commission. If it becomes apparent that the wireless industry is not progressing as quickly as necessary to meet the deadlines for providing querying capability and service provider portability, the Wireless Telecommunications Bureau Chief may waive or stay the implementation dates for a period of up to nine months." *Order on Reconsideration*, 12 FCC Rcd at 7312, ¶ 134; *see also First Report and Order*, 11 FCC Rcd at 844, ¶ 168 (setting out the five-part, carrier-specific test that was codified under 47 C.F.R. § 52.31(d)). *Accord*, AT&T Wireless Reply Comments at 2 & n.3; AirTouch Reply Comments at 3 n.4.

[34] A carrier seeking [an extension of the Commission's number portability requirements] must demonstrate through substantial, credible evidence the basis for its contention that it is unable to comply with [the number portability deadlines]. Such requests must set forth:

> (1) The facts that demonstrate why the carrier is unable to meet our deployment schedule:
> (2) A detailed explanation of the activities that the carrier has undertaken to meet the implementation schedule prior to requesting an extension of time;
> (3) An identification of the particular switches for which the extension is requested;
> (4) The time within which the carrier will complete deployments in the affected switches; and
> (5) A proposed schedule with milestones for meeting the deployment date.

47 C.F.R. § 52.31(d)(1)-(5).

[35] *See* 47 C.F.R. § 52.31(a)(1)(ii) ("For MSAs identified in the appendix to this part, carriers must submit requests [for deployment of number portability] by September 30, 1998 . . . ."). Under this rule, if we do not extend the deadline for nine months, before September 30, 1998, CMRS carriers would receive requests for number portability before the final standards are adopted.

[36] *See, e.g.*, MCI Comments at 9-10; WorldCom Comments at 6-7; ALTS Comments at 2.

[37] MCI Comments at 11-12 (the "CTIA petition and other attempts to delay number portability demonstrate the need for the Commission to define specific interim wireless number portability milestones."); MCI Reply Comments at 5-6 ("The Commission should not be held hostage to the unbounded discretion of CTIA and its

We are not persuaded by these arguments. As explained above, the record demonstrates that a nine-month extension is necessary to ensure efficient development of wireless number portability. Furthermore, as noted above, the *Forbearance Petition* seeks forbearance from imposing number portability requirements on the wireless industry until the completion of the five-year build-out period for PCS carriers. In that proceeding, the Commission will determine whether an alternative implementation schedule is appropriate and, if so, the appropriate length of time to forbear from imposing the current wireless number portability schedule.

14. In conclusion, by the action we take today, we delay for a period of nine months the following dates in the implementation schedule for CMRS number portability: (1) carriers must submit requests for deployment of number portability in the top 100 MSAs by June 30, 1999, instead of September 30, 1998; and (2) all cellular, broadband PCS, and covered SMR providers must offer number portability in the top 100 MSAs including the ability to support nationwide roaming, throughout their networks by March 31, 2000, instead of June 30, 1999. We take no action with respect to the requirement that by December 31, 1998, all cellular, broadband PCS, and covered SMR providers must have the capability to obtain routing information, either by querying the appropriate database themselves or by making arrangements with other carriers that are capable of performing database queries, so that they can deliver from their networks to any party that has retained its number after switching from one telecommunications carrier to another.

III. ORDERING CLAUSES

15. Accordingly, IT IS ORDERED that, pursuant to section 52.31(c) of the Commission's Rules, 47 C.F.R. §§ 52.31(c), the petition of the Cellular Telecommunications Industry Association for an Extension of the Implementation Deadlines for Number Portability is hereby GRANTED. We hereby stay until March 31, 2000, the requirement that all cellular, broadband PCS, and covered SMR providers offer number portability in the top 100 MSAs, including the ability to support nationwide roaming, throughout their networks. We also stay until June 30, 1999, the requirement that carriers submit requests for deployment of number portability in the top 100 MSAs.

FEDERAL COMMUNICATIONS COMMISSION

Daniel E. Phythyon
Chief, Wireless Telecommunications Bureau

members' failure to commit to a specific implementation schedule."); Omnipoint Reply Comments at 2 (remarking that CTIA has given no indication that nine months will be sufficient to implement wireless number portability).

APPENDIX OF COMMENTERS

Comments/Opposition

360o Communications Company (360o)
Association for Local Telecommunications Services (ALTS)
AirTouch Communications, Inc. (AirTouch)
AT&T Wireless Services, Inc. (AT&T Wireless)
American Mobile Telecommunications Association, Inc. (AMTA)
BellSouth Corporation (BellSouth)
GTE Service Corporation (GTE)
Mobex Communications (Mobex)
MCI Telecommunications Corporation (MCI)
Omnipoint Communications, Inc. (Omnipoint)
PrimeCo Personal Communications, L.P. (PrimeCo)
Rural Telecommunications Group (RTG)
Southern Company (Southern)
Southwestern Bell Mobile Systems, Inc. and Pacific Bell Mobile Services (SBC)
Sprint Spectrum L.P. d/b/a Sprint PCS (Sprint PCS)
United States Cellular Corporation (USCC)
Worldcom, Inc. (Worldcom Opposition)

Reply Comments

360o Communications Company (360o)
AT&T Wireless Services, Inc. (AT&T Wireless)
AirTouch Communications, Inc. (AirTouch)
Century Cellunet, Inc. (Century)
Comcast Cellular Communications, Inc. (Comcast)
Cellular Telecommunications Industry Association (CTIA)
GTE Service Corporation (GTE)
MCI Telecommunications Corporation (MCI)
Motorola, Inc. (Motorola)
Omnipoint Communications, Inc. (Omnipoint)
Southwestern Bell Mobile Systems, Inc. and Pacific Bell Mobile Services (SBC)
Sprint Spectrum L.P. d/b/a Sprint PCS (Sprint PCS)