

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

In the Matter of )  
 )  
Telephone Number Portability ) CC Docket No. 95-116  
To: Chief, Wireless Telecommunications Bureau

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OFFICE OF THE SECRETARY

**COMMENTS OF  
AIRTOUCH COMMUNICATIONS, INC.**

AirTouch Communications, Inc. ("AirTouch") submits these comments in support of the petition filed by the Cellular Telecommunications Industry Association ("CTIA") seeking a nine-month extension of the CMRS number portability implementation deadline, from June 30, 1999 to March 31, 2000.<sup>1</sup> AirTouch supports CTIA's request because it is technically impossible to comply with the June 30, 1999 implementation date. In addition, AirTouch believes it is important to reconsider the entire implementation scheme for wireless number portability at a minimum to better align the dates with marketplace realities.<sup>2</sup>

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<sup>1</sup> See *Public Notice*, "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), *Erratum*, DA 97-2625 (Dec. 17, 1997). See also *Telephone Number Portability*, CC Docket No. 95-116, *First Report and Order and Further Notice of Proposed Rulemaking*, 11 FCC Rcd 8352 (1996) ("First Report"); *First Memorandum Opinion and Order on Reconsideration*, 12 FCC Rcd 7236 (1997) ("First Report on Reconsideration"); *Second Report and Order*, FCC 97-289 (Aug. 18, 1997) ("Second Report").

<sup>2</sup> AirTouch does not address in these comments the issues raised by CTIA's more recent forbearance petition, although the issues in the two petitions are related. See *Petition for Forbearance of the Cellular Telecommunications Industry Association*, CC Docket No. 95-116 (Dec. 16, 1997). Because of this overlap, AirTouch encourages the Commission to issue expeditiously a public notice requesting comment on the forbearance petition.

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CTIA's petition details the significant progress the CMRS industry has made in developing national standards for implementing local number portability. The petition also documents that the standards work is incomplete because of "the special technical challenges" the CMRS industry faces.<sup>3</sup> Thus, CTIA's expert accurately states that "the wireless industry will not be able to meet the CMRS number portability deadline of June 30, 1999."<sup>4</sup>

The industry has made considerable progress in developing a solution for number portability. The most important and complex task the industry faces, which will impact many network components and most supporting systems, is the separation of the Mobile Directory Number ("MDN") from the Mobile Identification Number ("MIN"). At this time it is not expected that national standards incorporating the separation of the MDN and MIN will be finalized until late this year. It is only after these standards are finalized that vendors are able to commence necessary design, engineering, and manufacture work necessary to develop number portability solutions — a process which ordinarily takes a minimum of 18-to-24 months from the completion of standards.

Further, once standard-compliant modifications become available, vendors and carriers will have to test the new applications, and the MDN/MIN separation standard in particular. This will be a major undertaking, and the CMRS industry will need to introduce the new technology in much the same fashion that the landline industry introduced number portability in their networks.<sup>5</sup>

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<sup>3</sup> *First Order on Reconsideration*, 12 FCC Rcd at 7312 ¶ 134.

<sup>4</sup> Declaration of Arthur L. Prest at 2 ¶ 6, *appended to CTIA's Petition*.

<sup>5</sup> The Commission has noted that CMRS providers must phase-in implementation of number portability in their networks. *First Report on Reconsideration*, 12 FCC Rcd at 7313 ¶ 136. It adopted a phased implementation schedule for landline carriers to "eas[e]" (continued...)

First, each CMRS switch vendor will need to engage in a “first office application” with one of its carrier customers to help “identify technical problems in advance of widespread deployment, thereby safeguarding the network.”<sup>6</sup> It obviously makes little sense for multiple CMRS carriers to implement the same initial release software containing the same “bugs;” such an approach would result in unnecessary delays and the imposition of needless costs. The better approach is to undertake initial testing prior to further deployment.

Once the “first office application” is completed successfully, the next step is for the carriers to conduct tests of the vendor’s new applications (as modified during the first office application) within their respective networks. These carrier, market-specific tests do more than simply test new number portability switch and signal transfer point (“STP”) software. Carriers also use this time to test necessary modifications to their “back office” systems. Number portability — and the separation of the MIN and MDN in particular — will require carriers to redesign and modify virtually every system they use in provisioning services, including ordering, provisioning, customer care, call center, sales automation, toll rating, collections, inventory, maintenance, repair, reseller activation, billing, and roaming systems. These changes are expected to be major, and each carrier will require time to test and integrate each system to ensure service quality is not interrupted when number portability goes “on line.” In addition, once all preliminary bugs have been identified and corrected, additional time will be needed to

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<sup>5</sup> (...continued)  
the burden on carriers serving multiple regions,” to “avoid the potential strain on vendors,” and to “safeguard the integrity of the public switched telephone network.” *First Report*, 11 FCC Rcd at 8395 ¶ 81. These considerations apply with equal force to the CMRS industry.

<sup>6</sup> *First Report*, 11 FCC Rcd at 8393-94 ¶ 79. Indeed, the Commission required the landline industry to conduct a first office application because “we have a significant interest in ensuring the integrity of the public switched network as number portability is deployed nationwide.” *Id.*

allow carriers to “soak” the new portability application — that is, make a “limited use of the software in a live environment for a length of time sufficient to find initial defects.”<sup>7</sup> Finally, once the first carrier application is successfully completed in one market, carriers will need additional time to install number portability in additional markets.

CMRS providers then face “technical burdens” *not* encountered by landline carriers.<sup>8</sup> For example, landline number portability can be implemented on an area-by-area basis. Thus, number portability need not be installed in Los Angeles for number portability to work successfully in Chicago. Moreover, in landline networks number portability need not be deployed ubiquitously within a given area. Indeed, the Commission has required landline carriers to convert only those switches within the 100 most populous MSAs which are subject to a specific request for conversion.<sup>9</sup>

This is not the case with CMRS providers because of the need to support national roaming.<sup>10</sup> Ubiquitous roaming requires that *all* switches operated by *all* CMRS providers (large and small) must be capable of recognizing and distinguishing MDNs from MINs — so that roamers with ported numbers can continue to roam while outside their home market. What is more, while CMRS carriers must test and implement number portability capability on a phased basis, all CMRS carriers and switches must be ready to cut over to number portability “on line” at the same time.<sup>11</sup>

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<sup>7</sup> *First Report on Reconsideration*, 12 FCC Rcd 7285-86 ¶ 84.

<sup>8</sup> *First Report*, 11 FCC Rcd at 8439 ¶ 164.

<sup>9</sup> *See First Order on Reconsideration*, 12 FCC Rcd at 7273 ¶ 60.

<sup>10</sup> *See First Report*, 11 FCC Rcd at 8440 ¶ 166.

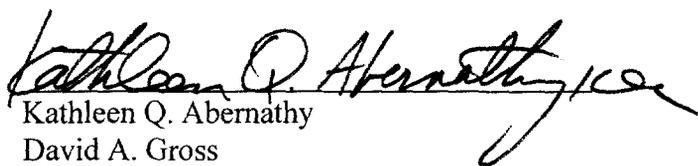
<sup>11</sup> *See First Report*, 11 FCC Rcd at 8440 ¶ 166 (“[W]e believe a nationwide implementation (continued...)”).

The successful conversion to number portability on a flash-cut basis involving thousands of CMRS providers nationwide will be an intricate undertaking requiring careful coordination, especially when each carrier needs time to test and phase-in the new technology within its own network. The challenge is not insurmountable, but it will certainly be complex and time consuming.

In conclusion, the Commission should extend the CMRS number portability implementation date by nine months for the reasons discussed above and in CTIA's petition. However, the Commission should be aware that, even with such an extension, the industry will need additional time to implement this capability throughout their networks to ensure network reliability is not undermined and current roaming capabilities are not impaired. The Commission should therefore reconsider the entire implementation scheme for wireless number portability to better align the dates with marketplace realities.

Respectfully submitted,

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<sup>11</sup> (...continued)  
date for number portability for . . . [CMRS] providers is necessary to ensure that validation necessary for roaming can be maintained.”).