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

In the matter of	)	
	)	
Commission request for comment on the meaning of the term "technology neutral"	)))	DA 97-2234 CC 92-237

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To: The Commission

COMMENTS OF COMCAST CELLULAR COMMUNICATIONS, INC.

Comcast Cellular Communications, Inc. ("Comcast"), by its attorneys, hereby submits its comments in response to the *Public Notice* in the above-referenced matter.[1/] In the *Public Notice,* the Commission seeks comment on the meaning of the term "technology neutral" in the context of recent proposals for number conservation measures. Comcast maintains that any definition or application of the phrase "technology neutral" requires acknowledgment that different technologies and systems will have different capabilities and limitations. As a result, policies adopted with any one technology or system or type of carrier in mind will necessarily be misapplied to others not similarly situated. In the context of numbering, decisions must, at a minimum, ensure that numbering resources actually will be available to all providers regardless of technology and in such a manner so as to permit full utilization of such technologies.

This proceeding arises out of efforts by the Pennsylvania Public Utilities Commission ("PA PUC") to conserve telephone numbers and reduce the need for more drastic area code

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1/ *See* "Common Carrier Bureau Seeks Comment on North American Numbering Council Letter Seeking Clarification of the Term 'Technology Neutral,'" *Public Notice,* DA 97-2234, rel. Oct. 20, 1997 (the *"Public Notice"*).

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relief. As a licensee of both cellular and PCS systems in Pennsylvania, Comcast has a vital interest in this proceeding because the results could affect the availability of numbering resources for its expanding businesses.

First and foremost, Comcast applauds the initiative and creativity with which the PA PUC has attempted to address number exhaust issues. In 1996, the PA PUC decided to implement an overlay to address the 412 area code exhaust. It did so over opposition from many quarters but with the belief that such an approach would best accommodate the needs of *all* carriers and consumers when considered in light of pending landline number portability, the then distribution of numbers among competitors, and the inevitable future in which ten digit dialing becomes the norm and one's physical location becomes less determinative. In an effort to ensure a smoother transition for consumers, the PA PUC sought to permit seven digit dialing after having weighed the potential negative impact on carriers operating in that area code.

In April, 1997, the Commission denied the PA PUC's request.[2/] After weighing the consumer impacts resulting from an area code split or an overlay with mandatory 10-digit dialing, the PA PUC decided in July to require immediate implementation of a split in 412 due to the pendency of the exhaust.[3/] However, rather than be forced to implement either splits or overlays in other Pennsylvania area codes, the PA PUC, like many other state

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2/ Pennsylvania Public Utility Commission Petition for Expedited Waiver of 47 C.F.R. Section 52.19 for Area Code 412 Relief, *Order*, CC Dkt. No. 96-98 (Comm. Carr. Bur. April 4, 1997).

3/ Among other things, the PA PUC elected to grandfather wireless carrier exchanges in recognition of the undue burden which a split would effect upon existing businesses.

commissions, sought to break convention by addressing number conservation and utilization. Comcast recognizes that the PA PUC's adoption of number pooling is an outgrowth of that spirit. It is the type of initiative that will be sorely needed as commissions attempt to sort through and promote the competitive landscape regulators and wireless providers envision. The only problem is that number pooling, even with the "wireless" accommodations adopted by the PA PUC, cannot be effectively and efficiently implemented by wireless providers, and indeed could so disadvantage these carriers so as to undermine the greatest distinguishing value of those services — customer mobility.

The Commission first determined that area code relief should be technology neutral in the *Ameritech Order,* which invalidated a wireless-only overlay because the overlay discriminated against providers using wireless technologies.[4/] The Commission further elaborated on these concerns in the *Second Report and Order* in the local competition proceeding, finding that its criteria for area code relief, including the requirement for technological neutrality, advanced the Congressional intent "to encourage vigorous competition in the telecommunications marketplace."[5/] Those orders focused on area code relief plans. The Commission now is confronted with a good faith attempt to extend the viability of existing NPA-NXXs. However, the principals of neutrality remain the same, and

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4/ *See* Proposed 708 Relief Plan and 630 Numbering Plan Area Code by Ameritech-Illinois, *Declaratory Ruling and Order,* 10 FCC Rcd 4596, 4604 (1995) (the *"Ameritech Order"*).

5/ *See* Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, *Second Report and Order,* 11 FCC Rcd 19392, 19517 (1997).

therefore, it is critical for the Commission to affirm its commitment to requiring *all* numbering decisions to be technologically neutral.

In this context, the Commission should adopt a definition of "technology neutral" that requires regulators to recognize the differences in the technologies deployed by different providers, and to address these differences by implementing appropriate solutions, which may well vary across technologies. Where it is possible to accommodate specific interests without ultimately discriminating against one industry or service type (*e.g.*, limiting its ability to provide competitive services), regulators should do so. Grandfathering wireless carriers in a split is one example of how commissions can accomplish this.[6/] Where it is not possible to easily segregate interests, the solution must accommodate the needs of all, not just the majority or most influential. Simply put, a technology neutral decision is one that accounts for the differences in technology used by different providers and adjusts regulatory requirements accordingly. "Technology neutral" does not mean that regulators should ignore technology when making their decisions; rather, it means that technology must be accounted for in the decision-making process.

Such an approach is not new. In fact, the Commission and state commissions across the country long have considered technological differences in a wide range of decisions. For instance, in its number portability orders, the Commission has adopted different timetables for landline and wireless providers and, additionally, has deferred implementation of number

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6/ Grandfathering is not a panacea for wireless carriers, who indeed benefit most from an overlay. However, it minimizes disruption in the event that a split is required.

portability in rural areas where it is more likely that older systems are in place.[7] The infrastructure sharing provisions of the Communications Act also recognize that levels of technology may vary from carrier to carrier, especially when one carrier lacks economies of scale and scope that would make more advanced technology affordable.[8]

These basic principles also apply to proposals to avoid area code exhaust. For instance, regulators in various states recently have proposed "transparent" overlays and number pooling as mechanisms for delaying area code exhaust. Both of these proposals raise distinct issues for wireless providers (in addition to certain concerns shared by both wireless providers and landline carriers). For instance, given the way that cellular handsets and switches are programmed, a transparent overlay will not be transparent to cellular users assigned numbers from that area code. Their telephones will display a telephone number

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7/ *See generally* Telephone Number Portability, First Memorandum and Order on Reconsideration, Dkt. No. 95-116, FCC 97-74 (rel. Mar. 11, 1997); Telephone Number Portability, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 8352 (1996). Although the number portability proceeding provides an example of "some" technological distinctions, even in that case the Commission did not truly embrace "technological neutrality." The record in the number portability proceeding on wireless implementation is scant at best. Moreover, a component of any assessment of technology must be a cost benefit analysis by industry segment. No carrier should be required to implement a policy where the costs outweigh the benefits, and where other mechanisms exist to obtain the same objective. As ultimately the objective of number portability is to enhance competition, the Commission should have more carefully considered the already-competitive nature of wireless markets, the remaining opportunities for growth in those markets and the lack of true customer demand for portability. Weighing the costs of implementation against the reduced benefits of wireless number portability clearly results in a different balance. From a purely technological standpoint, the Commission, while ostensibly requiring portability in the top 100 markets, did not consider that the nature of roaming will in fact necessitate that virtually all wireless systems be reconfigured to accommodate portability in the largest markets. Thus, technological neutrality has in fact not been achieved and the costs of implementing number portability not fairly accounted for.

8/ *See* 47 U.S.C. § 259.

from the "hidden" area code, not the number the customer thinks that he or she has been assigned.[9] One consequence of this problem is that it may be impossible for "call back" features of E-911 to work when a customer who has been assigned a number from the transparent overlay is roaming. If this is the case, the Commission's current 911 rules may forbid affected wireless providers from using numbers from the transparent overlay.[10]

In addition, number pooling will not work in the context of a mobile service due to the manner in which carriers across the nation authenticate roaming customers and bill their roaming partners.[11] It also will create distortions in the fraud detection systems that have been implemented by the wireless industry in light of its existing technology.

Finally, number pooling does not work without permanent number portability. Wireless providers are not required to have number portability in place until the middle of 1999.[12] Thus, as a practical matter, pooled numbers will not be available to wireless providers even if the above issues could be overcome.

These limitations on the availability of number conservation measures do not mean that these measures cannot be used, but only that they cannot be applied to wireless providers

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9/ It is likely that six or even all ten of the digits of the "hidden" number will be different from the number the customer has been assigned from the old area code, increasing the potential for customer confusion.

10/ 47 C.F.R. § 20.18.

11/ Today, roaming software performs initial screening based on NPA-NXX. In a pooled environment, roaming software will have to use 10-digit screening for all calls. Thus, implementation of pooling for wireless providers in even one geographic area will require nationwide changes to roaming software and databases.

12/ Because there are significant implementation issues that still remain to be addressed, it is already clear that wireless providers will have difficulty meeting that deadline.

(or that it may be economically inefficient for them to be applied in light of other solutions or the interests at stake). More important, state commissions should not be able to adopt these measures with the expectation that all providers will obtain numbering resources through either a transparent overlay or number pooling. Indeed, a numbering policy that includes these measures can be technologically neutral only if it also includes other mechanisms specifically designed to make numbering resources available to all providers (including wireless providers) that cannot take advantage of transparent overlays or pooling.

This highlights the key issue for the Commission in defining the parameters of "technology neutral." The purpose of the Commission's numbering policies is to make numbering resources available on a reasonable, non-discriminatory basis to all providers, as contemplated under the Commission's long-standing policies and under Section 251(e) of the Communications Act. A numbering policy can be technology neutral only if it achieves these goals for all providers, regardless of their technologies. Any policy that deprives certain providers of access to numbering resources because of the technologies they use must be deemed to violate that requirement. On the other hand, a policy that recognizes technological differences, differentiates providers on that basis and ensures that all providers will have access to numbering resources would be technology neutral and would be consistent with the obligations of the Commission (and any state commission) under the Communications Act and established policy.

For all these reasons, Comcast Cellular Communications, Inc., respectfully requests that the Commission act in accordance with these comments.

Respectfully submitted,

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October 29, 1997

CERTIFICATE OF SERVICE

I, Tammi A. Foxwell, a secretary at the law firm of Dow, Lohnes & Albertson, do hereby certify that on this 29th day of October, 1997, I caused copies of the foregoing "Comments" to be served via hand-delivery to the following:

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