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

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| In the Matter of | ) | |
| | ) | |
| North American Numbering Council | ) | DA 97-2234 |
| Letter Seeking Clarification of the | ) | CC92-237 |
| term "Technology Neutral" | ) | |

**Comments of Sprint Spectrum L.P., d/b/a Sprint PCS**

Numbering conservation and exhaust relief methods must recognize that providers of telecommunications service use different technologies and must recognize the limitations of those different technologies. "Technological neutrality" is closely related to competitive neutrality, and any conservation or relief method must ensure fair and impartial access to numbering resources to all carriers, without disproportionately burdening one industry segment over another.

Existing FCC guidelines recognize the impact of numbering solutions on users of different technologies and require that numbering solutions not unduly favor one technology over another. In its *Second Report and Order*, FCC 96-333 (August 8, 1996), the FCC restated the guidelines issued in its *Ameritech Order*:

> Existing Commission guidelines, which were originally enumerated in the *Ameritech Order*, state that numbering administration should: (1) seek to facilitate entry into the communications marketplace by making numbering resources available on an efficient and timely basis; (2) **not unduly favor or disadvantage any particular industry segment or group of consumers**; and (3) **not unduly favor one technology over another**. *Second Report and Order*, paragraph 281 (emphasis added).

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The FCC has also recognized that numbering resources are essential public resources to be shared as fairly and as equitably as possible and that without them there can be no real competition:

> The Commission has repeatedly recognized that access to telephone numbering resources is **crucial for entities wanting to provide telecommunications services because telephone numbers are the means by which telecommunications users gain access to and benefit from the public switched telephone network**. In enacting the 1996 Act, Congress also recognized that **ensuring fair and impartial access to numbering resources is a critical component of encouraging a robustly competitive telecommunications market in the United States**. *Second Report and Order*, paragraph 261 (emphasis added).

The following four criteria must be taken into account when evaluating whether a conservation or relief method is technologically neutral:

> **(1) Whether numbers are made equally available to all segments of the industry,**
>
> **(2) The impact on customers,**
>
> **(3) Switch, Development, and Administration impacts, and**
>
> **(4) Implementation impacts, including the time for availability and whether an industry segment is disproportionately burdened.**

Carrier Liaison Committee (CLC) and the Industry Numbering Committee (INC) have recognize that these criteria must be considered. CLC participants agreed:

5. Participants agreed to document key technical considerations of the alternatives in the following classifications:

- Equal Availability
- Switch/OSS Development/Administration
- User/Service Impacts
- Implementation Impacts (Out-of-Area, By All, Disproportionate)

*CLC Ad Hoc Committee on NXX Exhaust*, May 20-22, 1997, paragraph 5 of "Agreement Reached."[1]

Number Pooling with LRN and Unassigned Number Porting are not technologically neutral under criteria (1), (2), and (4). CMRS providers can't use 1000s blocks without number portability, and number portability may be delayed[2] or may not be required to be implemented by CMRS providers at all.[3] In any event, CMRS providers are not required to implement number portability until June 30, 1999. And, so long as number portability is not available to CMRS providers, Number Pooling with LRN and Unassigned Number Porting will put CMRS providers at a competitive disadvantage, if CMRS providers cannot access numbering resources to meet their service demands or if a service provider using number portability is able to acquire numbering resources and can provide service to customers in an area where the CMRS provider cannot offer service

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[1] INC recognized the concerns behind the four CLC criteria in the eight criteria INC used to evaluate number pooling alternatives: (1) Improvement in Number Utilization, (2) Impact on Infrastructure, (3) Impact on Operations, (4) Impact on End Users, (5) Impact on Number Assignment, (6) Impact on Administration, (7) Relative Cost, and (8) Time for Availability. *Industry Numbering Committee (INC) Initial Report to the North American Numbering Council on Number Pooling*, October 17, 1997, §12. INC concluded that number pooling should be implemented under a number of principles, including cost impact, availability of numbering resources, and the ability of providers to participate in an LRN based solution, for example. *Industry Numbering Committee (INC) Initial Report to the North American Numbering Council on Number Pooling*, October 17, 1997, §6.1.

[2] The FCC rules allow for a 9 month extension.

[3] The FCC's number portability mandate has been challenged.

because of the lack of availability of numbers. Along this line, even if CMRS providers are excepted from Number Pooling with LRN and Unassigned Number Porting, so that they may use 10,000s blocks, it must still be demonstrated that requiring other carriers to participate actually makes additional numbers available sufficient for CMRS providers to meet their service demands. Another consideration is that Number Pooling with LRN and Unassigned Number Porting disproportionately burden CMRS providers that are new market entrants, because of the enormous cost burden number portability places on these new start-up companies. Moreover, CMRS providers, unlike wireline carriers, typically make efficient use of 10,000 blocks – CMRS provider's fill rates are typically higher than those of wireline carriers. So, it also makes no practical sense to force CMRS providers to adopt Number Pooling with LRN. It appears, too, that Unassigned Number Porting causes call completion and roaming problems, which are also problems from the end user's perspective, and therefore also put CMRS providers at a competitive disadvantage.

Number Pooling with LRN and Unassigned Number Porting should not be used as area code exhaust relief measures, unless it can be demonstrated that these solutions (which non-CMRS carriers would participate in) would really free up sufficient numbers to meet demand and that CMRS providers would have access to full 10,000 blocks.

Number Pooling with LRN and Unassigned Number Porting are unlikely to free up sufficient numbers in exhaust situations where fill rates are high. INC concludes:

3.4 APPLICABILITY OF NUMBER POOLING

> **Although pooling may be considered generally beneficial, its implementation may not prove to be desirable in all areas**. The understanding that number pooling will enhance the efficiency of number utilization, and therefore delay the need for area code relief is based upon the belief that current

> number assignment practices (the assignment of full NXXs per rate center) are inherently inefficient because some NXXs may never achieve optimum utilization levels. There is no doubt that in many, if not most areas, this is indeed the case. **It may be, however, that in some environments, perhaps specifically in those which are densely populated and where there is a large demand for communications services, number utilization is quite high and the level of unused numbers within central office codes assigned to any service provider in that area is quite small. In such areas, the benefit provided by number pooling may not be significant.** Accordingly, the implementation of pooling may need to be area specific, with deployment only in those areas where the benefit of increased utilization and delayed exhaust exceeds some yet to be determined threshold.

*Industry Numbering Committee (INC) Initial Report to the North American Numbering Council on Number Pooling*, October 17, 1997, §3.4 (emphasis added).

CLC evaluated Number Pooling with LRN and Unassigned Number Porting based on the above four criteria, and found that both methods may negatively, and unduly, impact CMRS technologically and competitively. Sprint PCS generally concurs with CLC's findings.

With respect to Number Pooling with LRN, CLC concluded, in part:

**Technical Considerations:**

1. Equal availability of numbers

   - Because this solution requires LNP, it is not currently technically feasible for all segments of the industry:

     ⇒ **It may be neither possible nor appropriate for CMRS providers to utilize numbers made available in 1000s blocks. Nonetheless, CMRS providers are capable of utilizing entire NXX codes that could be made available by the NXX-X LRN proposal.**

⇒ It may not be possible or practical for non-LRN capable wireline entities to utilize numbers made available via porting of NXX-X LRN. Nonetheless, those entities are capable of utilizing entire NXX codes that could be made available by utilizing this proposal.

* * *

4. Implementation Impacts (out-of-area, by all, disproportionate)

* * *

Disproportionate:

- **This method may competitively disadvantage one service provider over another because of LNP technology. If one service provider using LNP is able to acquire numbering resources and can provide services to customers in an area where another service provider cannot provide services to customers due to a lack of numbering resources (due to no LNP technology), then a competitive advantage has been provided to the service provider who obtained the numbering resource**.

- **It is recognized that CMRS providers will not be LNP capable before June 30, 1999, and could therefore be negatively impacted if obligated to participate in NXX-X LRN prior to that time**. Specifically, their **participation in NXX-X LRN could create additional burdens with call completion and cause errors in the existing systems used to support registration and roaming**. Accordingly, it is suggested that **wireless carriers could be considered exempt from participation in NXX-X LRN until they deploy their LNP capability. CMRS providers still need equal and non-discriminatory access to numbers**. **As such, the implementation of NXX-X LRN alone may not be sufficient to relieve a jeopardy NPA situation**.

*Carrier Liaison Committee (CLC) Report to the North American Numbering Council (NANC)*, "Short-term Technical Alternatives to NXX Exhaust," September 2, 1997, §2.5 (emphasis added).

With respect to Unassigned Number Porting, CLC concluded in part:

**Technical Considerations:**

1. Equal availability of numbers

- **Because this solution requires LNP, it is not currently technically feasible for all segments of the industry**:

  ⇒ **It is not technically feasible for CMRS providers to utilize numbers made available via the porting of unassigned numbers**. **Nonetheless, CMRS providers are capable of utilizing entire NXX codes that could be made available by utilizing this proposal**.

  ⇒ It may not be possible or practical for non-LRN capable wireline entities to utilize numbers made available via porting of unassigned numbers. Nonetheless, those entities are capable of utilizing entire NXX codes that could be made available by utilizing this proposal.

* * *

4. Implementation Impacts (By all, out-of-area, disproportionate)

* * *

If Not Uniformly Implemented By All Service Providers

- **An underlying premise of this alternative is that all carriers participating in LNP will be required to utilize this method**. If this is performed on a voluntary basis only, there should be no negative impacts, but the potential advantages will not be realized.

Disproportionate

- **This method may competitively disadvantage one service provider over another because of LNP technology. If one service provider using LNP is able to acquire numbering resources and can provide services to customers in an area where another service provider cannot provide services to customers due to a lack of numbering resources (due to no LNP technology), then**

**a competitive advantage has been provided to the service provider who obtained the numbering resource**.

- Entities with unassigned numbers will bear the burden of additional workload in order to administer these numbers in a neutral manner.

- It is recognized that **CMRS providers will not be LNP capable before June 30, 1999 and could therefore be negatively impacted if obligated to participate in unassigned number porting prior to that time**. Specifically, **their participation in unassigned number porting could create additional burdens with call completion and cause errors in the existing systems used to support registration and roaming**. Accordingly, it is suggested that **wireless carriers could be considered exempt from participation in unassigned number porting until they deploy their LNP capability**. **CMRS providers still need equal and non-discriminatory access to numbers**. As such, the implementation of unassigned number porting alone may not be sufficient to relieve a jeopardy NPA situation.

*Carrier Liaison Committee (CLC) Report to the North American Numbering Council (NANC)*, "Short-term Technical Alternatives to NXX Exhaust," September 2, 1997, §2.6 (emphasis added).

It is appropriate to discuss the so-called "Transparent Overlay" here, too. Even assuming that it were possible to demonstrate that the Transparent Overlay really makes more numbers available and that they are equally available to all carriers, the Transparent Overlay disproportionately burdens cellular and PCS providers and negatively impacts their customers. For example, it would be necessary to dial 10-digits from all handsets programmed with the transparent area code (the area code and 7-digit phone number must be programmed into the handset), since the wireless system recognizes the "transparent" area code as the phone's area code. That kind of dialing disparity, which affects only

wireless customers, has been found by the FCC to pose an unacceptable competitive disadvantage.

The Transparent Overlay also conflicts with wireless 911 and roaming technology, negatively impacting end users and placing wireless providers at a disadvantage compared to wireline companies and their end users that do not face those same problems. When calling 911, the "transparent" area code programmed into the handset, not the nominal area code for that area, is delivered to the PSAP. The transparent phone number apparently cannot be called back. It becomes a nationwide problem, if the end user travels out-of-state. If the Transparent Overlay also involves using 1000s blocks, then that creates problems for roaming, as well, which is presently based on the recognition of the first six digits of the phone number. A change to 1000s blocks in just one State would require changes to switches nationwide to maintain the same roaming scope.

Even if CMRS providers are excepted from a Transparent Overlay, numbering resources must be made equally available to <u>all</u> carriers. A Transparent Overlay should not be implemented unless it can be demonstrated that requiring non-CMRS carriers to participate in the Transparent Overlay actually makes sufficient numbers available to all carriers to meet their service demands. Technological neutrality is closely related to competitive neutrality, and any conservation or relief method must ensure fair and

impartial access to numbering resources to all carriers, without disproportionately burdening one industry segment over another.

Respectfully submitted,

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