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Hon. Joel A. Linsider
Administrative Law Judge
Public Service Commission
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Re: Case 98-C-0689, Omnibus Numbering Resources
Investigation

Dear Judge Linsider:

AT&T Communications of New York, Inc., and its affiliate, Cellular Telephone Company, d/b/a AT&T Wireless Services (collectively "AT&T"), submit the following comments in response to your Honor's October 15, 1998, Ruling Inviting Comments.

I. General Considerations.

Issues concerning the allocation and utilization of numbering resources can best be resolved from the perspective of the paramount obligation of regulators to ensure that the public network operates in an efficient and competitively neutral manner. Since New York's numbering scheme is an integral component of a system serving the entire North American continent, ultimate responsibility for the adoption of numbering policies that further the efficient use of the public network within the United States is borne by the Federal Communications Commission (FCC). The role of the New York Public Service Commission (PSC), therefore, must be to contribute solutions to New York-specific issues that are consistent with the FCC's policies.

Generally speaking, the FCC has retained responsibility for number administration and has delegated to state regulators responsibility for area code relief planning and implementation. Although state regulators may employ code conservation measures in certain circumstances,

the FCC has concluded that such measures may not be used to defer or as a replacement for necessary area code relief.

This limitation upon the delegated authority of state regulators is grounded in hard experience. Providing necessary area code relief may entail difficult and potentially unpopular choices. As a result, state regulators may be inclined to adopt code conservation measures as substitutes for necessary area code relief. This, however, can significantly disrupt the competitive marketplace and inconvenience customers, as was recently illustrated in the Philadelphia area. There, two area codes, NPAs 215 and 610, completely exhausted because, in part, the adoption of area code relief was delayed while various conservation alternatives were explored. No additional numbers will be made available until an overlay is implemented in June 1999.

As a direct result of the exhaust of the two Philadelphia area codes, CLECs in several rate centers are unable to serve customer demand. Moreover, potential customers of some wireless carriers must accept service with geographically distant area codes - or not take service at all. The distant area codes are competitively inferior since toll charges apply to many calls placed to or from such wireless telephones. Such economic inefficiency and public inconvenience are due, in part, to efforts to employ code conservation and the resulting delay in the adoption of much-needed area code relief.

The turmoil caused by the lack of timely area code relief in the Philadelphia area prompted the FCC to limit on the discretion of state regulators considering adoption of code conservation measures. Specifically, as noted above, conservation measures may not be used to postpone necessary area code relief.¹ Further, NXX code rationing may only be implemented by a state commission if (1) the state regulator has adopted an area code relief plan with a specific implementation date and (2) the industry has been unable to reach consensus on a rationing plan.² FCC Order, at ¶24.

¹ In the Matter of Petition for Declaratory Ruling and Request for Expedited Action on the July 15, 1997 Order of the Pennsylvania Public Utility Commission Regarding Area Codes 412, 610, 215, and 717; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, NSD File No. L-97-42, CC Docket No. 96-98, Memorandum Opinion and Order and Order on Reconsideration, FCC 98-224, released September 28, 1998 ("FCC Order"), at ¶26.

² It should be noted, however, that the industry may adopt rationing voluntarily.

Finally, where forecasts indicate that NXX code depletion is imminent, carriers are authorized to petition the FCC for relief if a state commission has not acted to provide timely relief. FCC Order, at ¶26.

The FCC ruling is of obvious importance to this proceeding because it establishes the procedural conditions upon which the PSC may adopt future code conservation measures. Moreover, the Philadelphia experience which necessitated the FCC's ruling must be kept in mind whenever the PSC considers code conservation measures. Where area code relief is required, the long-term interests of the State's economy, telecommunications industry, and telephone customers are best served by the timely implementation of such relief, with code conservation measures playing the role of forestalling market disruptions prior to such relief.

With this consideration in mind, AT&T generally supports reasonable area code conservation measures that are technologically and commercially feasible. By contrast, conservation methods that delay necessary area code relief without providing adequate and useable numbering resources for all carriers are not in the public interest.

II. Specific Code Conservation Measures.

Recently, the Number Resource Optimization (NRO) working group of the North American Numbering Council (NANC) issued a report discussing a variety of code conservation techniques.³ NANC, in turn, has forwarded the report to the FCC for public comment. Following is a discussion of the approaches considered by the working group.

1. Rate Center Consolidation.

Rate center consolidation (RCC) obviates the need for a new carrier to obtain "whole" NXXs, i.e., blocks of 10,000 numbers preceded by a common three-digit code, for individual rate centers where fewer number resources would suffice. As indicated in our comments in the RCC proceeding, AT&T favors RCC as a means of reducing the demand of new carriers for numbers, so long as potential benefits clearly outweigh any detriments. Principal among

³ Number Resource Optimization Working Group Modified Report to the NANC on Number Optimization Methods, dated October 21, 1998.

the potential detriments that may arise from certain RCCs, however, is a shift in local-toll call boundaries, which may cause adverse carrier or customer impacts.⁴

2. Extended Local Calling Area Arrangements.

An extended local calling area (ELCA), when used as a number conservation technique, is essentially a unilateral RCC inasmuch as numbers in a given NXX are assigned across a geographical area that spans existing wireline rate centers. Callers placing calls to such numbers from within this area or from zones adjacent to the area are not subject to toll charges, but the ELCA NXX assignee must pay additional compensation to the originating carriers. In this effect, the ELCA carrier is economically penalized for participating in number conservation.

ELCA arrangements are not new, and have previously been used by some wireless carriers to ensure that wireline callers are billed "local" rates for calls placed to wireless subscribers in the same LATA.

All carriers should be free to enter into these types of arrangements if they so choose. However, in view of the negative economic consequences of such arrangements, the adoption of such arrangements should be a business decision left to individual carriers and should never be mandated.

3. Inconsistent Rate Centers.

As a technical matter, number conservation could be achieved by permitting individual carriers to use mutually inconsistent rate centers. However, this is not a practical approach. Since rate centers are the basis for routing and rating, variations in the rate center structures of carriers would needlessly complicate interconnection and number portability processes. For this reason, wireline carriers should employ consistent rate centers.

Notwithstanding this need for common definitions of call routing paths among carriers, each carrier should be free to define its own local calling area, which relates

⁴ Case 96-C-1158, Statewide Rate Center Consolidation Review, AT&T Comments, dated June 1, 1998, and AT&T Reply Comments, dated July 13, 1998.

solely to how a carrier bills its own customers for calls originating in its network.

4. Thousand-Block Number Pooling.

Traditionally, carriers were assigned whole blocks of 10,000 numbers within an NPA initiated by common three-digit "NXX" codes. To extend the life of an NPA, NXX codes may be sub-divided into 1,000-number blocks and allocated among more than one carrier. Routing is accomplished in 1,000-number block pooling through the use of location routing number local number portability (LNP).

As a general matter, AT&T supports 1,000-number block pooling as a means of making numbers available to all carriers capable of providing LNP in an area. However, any order to implement pooling must be consistent with the recent FCC order addressing the number relief situation in Pennsylvania. The four main points outlined in the FCC order are as follows:

1. Since 1000-number block pooling requires the use of LNP, only LNP-capable can participate in number pooling.
2. Any state-ordered number-pooling trial must be a voluntary trial (unless the state obtains prior FCC approval for a mandatory trial). States are encouraged to conform their trials to the national guidelines. The FCC should be notified of the aspects of the trial.
3. States do not have the authority to require carriers to return central office codes (NXXs) or 1,000-number blocks.
4. Mechanisms must be in place to insure that carriers that do not participate in pooling have access to adequate numbering resources outside of the pooling process.

The FCC has indicated that once national number pooling guidelines are established, the FCC may delegate more authority to the states. See, generally, FCC Order, at ¶¶27-30.

5. Individual Telephone Number Pooling.

Individual telephone number (ITN) pooling is the placement of all unassigned telephone numbers in a reserve that LNP-capable carriers may draw upon. Such pools are based upon rate centers so that numbers retain their geographic significance for billing.

Although AT&T supports ITN pooling, the system cannot be implemented until certain technical and administrative problems are overcome, specifically, establishment of an industry pool, real-time interfaces from carriers to the pool, and carrier modifications of their operations and number administration systems. For these reasons, the focus of any pooling efforts, for now, should be upon 1,000-number block pooling.

6. Unassigned Number Porting.

Unassigned number porting (UNP) is the transfer from one carrier to another of an individual unassigned number within an NXX (or 1,000-number block) that is associated with the donating carrier. UNP is cumbersome to implement for two reasons. First, UNP is based upon location routing number ("LRN") technology, which is only available to service providers that have local number portability capability. Second, UNP may require significant oversight to ensure competitive neutrality because otherwise carriers may continually go to a single carrier for numbering resources when there may be multiple carriers with numbering resources available.

For these reasons, UNP should be used only under very limited circumstances, specifically, in cases of severe jeopardy, and then only as a stop-gap measure while other relief is being implemented. Like other code conservation techniques, UNP is not a substitute for code relief.

7. Location Portability.

Location portability refers to the porting of numbers outside of rate center boundaries and the attribution to such numbers of the rating and routing characteristics of their assigned new rate centers. This approach conserves number resources by transferring numbers from rate centers with low utilization rates to centers with high utilization rates.

Since location portability requires the development and implementation of new signaling standards, switching and database software, and changes to routing and billing systems, it is not expected to be a viable form of number conservation for five to ten years. Another factor to be considered in connection with location portability is that it diminishes the geographic information now present in telephone numbers. As a result, location portability would not only engender customer confusion, but also may cause customers to incur unanticipated toll charges.

8. NXX Code Sharing.

NXX code sharing refers to the sharing of NXX codes among several service providers by use of switch-based routing rather than by location routing number (LRN) LNP. The sharing is effected by splitting central office codes into 1,000-number blocks by 7-digit routing in carrier's switches, with the 7-digit routing information being entered into the Local Exchange Routing Guide.

As a practical matter, code sharing achieves the same result as 1,000-number block pooling, since one NXX is shared by several service providers. However, it is far less efficient because the implementation and administration of 7-digit routing is much more expensive than that of LRN/LNP-based 1,000-number block number pooling. These costs arise both in the switch development needed to support 7-digit call and signaling message routing and the extra memory capacity required to support the routing tables to effect 7-digit routing. The NRO decided it was not productive to complete the analysis of NXX-X code sharing based on seven-digit routing translations because use of LRN/LNP-based 1,000-number block pooling is a more technically efficient means of number optimization. For the same reason, AT&T does not support NXX code sharing.

9. Route Indexing.

Route Indexing is a form of interim number portability that allows carriers to share numbers by porting unassigned numbers from one carrier to another. As with code sharing, it is an inferior means of accomplishing the same result as 1,000-number block pooling because interim LNP techniques cause loss of feature functionality, degradation of service quality, and add to cost by forcing all incoming calls to route through the donor carrier's network.

10. Ten-Digit Dialing.

Ten-digit dialing refers to the practice of requiring all intra-NPA calls be dialed "NPA-NXX-XXXX." This dialing procedure has two benefits. First, so-called "protected" codes are made available for assignment. A "protected" code is an NXX that is not used in an NPA because the same NXX in an adjacent NPA may be dialed as a 7-digit local call from some part of the first NPA.

Second, 10-digit dialing permits the use of "0" and "1" as the so-called "D-digit." The "D-digit" is the 4th digit of a 10-digit number string, that is, the first digit of the central office code (NXX). Historically, the numbers "0" and "1" could not be used as the first digit of an NXX code. Allowing their use increases the number of NXXs available in an NPA by 25%.

Realizing the number conservation benefits of 10-digit dialing, however, requires more than simply mandating its implementation. Significant changes must be made to both to the network and operations support systems used by all carriers in the North American Numbering Plan. This would be true even if this solution was only implemented in one area. For this reason, mandatory 10-digit dialing will not necessarily conserve numbering resources in an economically efficient manner.

11. Reduced Demand for Telephone Numbers.

In locations with multiple telephone lines and direct inward dialing, each telephone line is assigned a specific telephone number. To reduce the number of telephone numbers used for such purposes, there have been suggestions that a single telephone number might be used for multiple lines at a single location, with callers dialing additional digits or stars (*) or pound (#) keys to differentiate specific lines.

Such approaches are likely to cause service providers to incur considerable expense in terms of network and operations system support development. They also would be very confusing to the general public.

III. Area Code Relief

The NRO working group report also discusses overlays and geographic splits as "conservation measures." While area code relief measures certainly do make more numbers available to carriers and their customers, area code relief is not a conservation method. Moreover, AT&T notes that one of the forms of overlays discussed in the NRO report, a "specialized" overlay, is not competitively neutral.⁵ As a result, FCC rules require that all overlays be "all services" overlays. AT&T strongly supports this policy.

IV. Central Office Code Assignment Guidelines

As a final point, AT&T would emphasize that the rules governing the assignment of NXX codes to carriers, known as the Central Office Code Assignment Guidelines, are developed and maintained by an industry group known as the Industry Numbering Committee (INC). Modification of those guidelines may result in number conservation by encouraging the more efficient utilization of numbers.

AT&T actively participates in the work of the INC and supports the group's efforts to investigate how the guidelines may be modified to encourage more efficient uses of number resources. INC recommendations reflect number conservation methods that are technically feasible and consistent from a national perspective. The efficient and reliable administration of the NANP requires the use of conservation approaches that have been reviewed and approved by the INC.

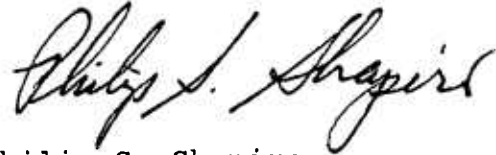
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Thank you for your consideration of these comments. If additional information or explanation is

⁵ A "specialized" overlay only provides numbers to specific type or types of services or providers. In contrast, an "all services" overlay provides resources that all services or service providers may draw upon.

desired, please ask.

Respectfully submitted,

A handwritten signature in cursive script that reads "Philip S. Shapiro". The signature is written in dark ink and is positioned above the printed name.

Philip S. Shapiro

cc: All Active Parties