

BEFORE THE FEDERAL COMMUNICATIONS COMMISSION

NSD File No. L-98-134

AMENDED AND SUPPLEMENTAL COMMENTS
BY COMMUNICATIONS VENTURE SERVICES, INC. and RICHARD BARTEL
RE: THE NORTH AMERICAN NUMBERING COUNCIL
REPORT CONCERNING TELEPHONE NUMBER POOLING
AND OTHER OPTIMIZATION MEASURES

Pursuant to FCC Notice DA 98-2265 of 11/6/98, these amended and supplemental comments are filed with the FCC (Commission) by Communications Venture Services, Inc. and Richard C. Bartel, regarding the NANC report concerning telephone number pooling and other optimization measures. Original comments were filed December 21, 1998. The original attachments (research reports) are incorporated herein as well.

These are comments regarding:

- mandatory ten-digit dialing
- industry assignment guidelines
- auditing procedures
- enforcement procedures
- sanctions for ensuring accurate submission of telephone number usage information.

COMMENTS

1. "Mandatory" ten-digit dialing

We are adamantly opposed to national, or NPA-overlay, "mandatory ten-digit dialing":

The Commission, in its Notice stated:

"...mandatory ten-digit dialing could increase the number of NXX codes available in a given NPA by eliminating so-called "protected" codes within the NPA and by allowing an NXX code to begin with either a "0" or a "1." See NANC Report § 10. We seek comment on both the ten-digit dialing measure, and on modifying the CO Code Assignment Guidelines to achieve optimization of numbering resources.....We therefore encourage parties to focus on those measures that appear to be the most effective.....Footnote 1 stated: The Notice described Protected codes as "NXXs not available for use, typically because they are being used in close geographic proximity in an adjacent NPA in an area where there exists inter-NPA seven-digit dialing. Ten-digit dialing would allow the combined total of protected NXXs in two adjacent NPAs to be made available for assignment. The **CO Code Assignment guidelines** recommend, as a central office code conservation measure, that the use of protected codes should be eliminated by requiring ten-digit inter-NPA dialing, **while retaining seven-digit dialing for intra-NPA calls.** See Central Office Code (NXX) Assignment Guidelines, INC 95-0407-008 (reissued July 13, 1998), at § 9.2(D).

- a) **10-digit dialing by the public caller is not technically necessary** for calls within the same area code (home NPA or HNPA; originating switch can append the originating NPA, if necessary);
- b) **10-digit dialing is not socially desirable, and thus not good public policy under the Act**, due to the known memory limitations of the elderly, young children, and persons with other memory limitations resulting from Alzheimers and depression disease.¹

¹ "Age Differences in Everyday Memory: Laboratory Analogues of Telephone Number Recall", by Robin L West (Univ. of Florida (west51@nervm.nerdc.ufl.edu) and Dr. Thomas H. Crook (Memory Assessment Clinics, Inc., now Psychologx , Psychology and Aging, 1990 Vol. 5, No. 4, 520-529, American Psychological Association (0882-7974/90). (**Attached**).

Also see: "Structure of Everyday Memory in Adults with Age-Associated Memory Impairment", Adrian Tomer, Glenn Larrabee & Thomas Crook, Psychology & Aging, 1994, Vol. 9, No. 4, 606-615; "Everyday Memory Performance Across Life Span: Effects of Age and Noncognitive Individual Differences," Psychology & Aging, 1992, Vol. 7, No. 1, 72-82; "Evaluation of Drugs in Alzheimer's Disease and Age Associated Memory Impairment," T.H. Crook, B.A. Johnson, & G.J. Larrabee, in "Methodology of the Evaluation of Psychotropic

c) **In the past, 10-digit dialing temporarily² has been deemed by FCC to be necessary only in NPA-overlay areas** to mitigate the possibility of an incumbent LEC's (CLEC) customers retaining 7-digit dialing while a competitive LEC's (CLEC) customers must be called with 10-digits if being called by the ILEC's customers.³

This 10-digit necessity will disappear when 1000s-block assignments or pooling take effect, at which time all NPA overlay areas can begin both 10 and 7-digit dialing in the home NPA (HNPA), or resort back to only 7-digit dialing within the home NPA.⁴ In addition, as the market share of CLECs increases, any anti-competitive effect will mitigate. Current CLEC market share is estimated at 4-5%. The current threshold for triggering anti-trust concern generally by the Justice Department is 15-25%, thus an ILEC market share exceeding 25% of lines in an NPA should continue to draw the attention of the FCC.

Drugs", Editors: O. Benkert, W. Maier, & K. Rickels (Psychopharmacology Series 8), Copyright Springer-Verlag, Berlin / Heidelberg, 1990).

Children: The average 4-5 year old has a digit span of 4, while 9-10 year olds have a digit span of 6. (See: Case, R. (1995), Capacity Based Explanations of Working Memory Growth: A Brief History and Reevaluation; In F.M. Weinert & W. Schneider (Eds.), Memory Performance and Competencies: Issues in Growth and Development. Erlbaum.). Research indicates that Chinese children have slightly larger spans because the number names are shorter and can be said faster. (Provided by Shari Ellis, University of Florida (ellis@psych.ufl.edu)).

² If the FCC had delayed consideration of 10-digit dialing as a prophylactic measure to prevent yet-to-be-proven anti-competitive effects of disparate dialing patterns between ILEC and CLEC network customers, then it is possible that this measure may never have had to be implemented if number pooling or even 1,000-block pooling were now available. It may not be too late to reverse the 10-digit adoption trend in NPA overlays (or stop additional implementations) since the CLEC impacted customers are still less than 5% of the total line numbers and there is no evidence that 10-digit vs 7-digit dialing has been a marketing inhibition affecting CLECs.

³ The INC (INC Uniform National Dialing Plan, INC 97-1031-017, n.1) and NANC (NANC ATF report to the NRO Committee) both have recognized that 10-digit dialing need not apply in any case to the 555 and 950 NXXs, since their national number assignments are made to the same entity in all geographic area codes in the NANP area (USA, Canada, Caribbean), thus retention of seven digit dialing for 555 and 950 line numbers cannot have anti-competitive effects, even in NPA overlay areas, and thus should be exempt from any 10-digit requirements and encouraged to be used for services to the memory impaired and children, in addition to other uses.

⁴ It is much easier for a person to recognize that they are calling from the same area code as the party being called, thus reversion to 7-digit or 7-and-10-digit dialing does not require the reprinting of advertising, business cards, letterhead, etc., or re-programming of alarms or other auto-dialers. The standard would be simple: when printing or displaying a number, use 10-digits. When dialing within a home-NPA, use 7 or 10 digits. When dialing another NPA, use 10 or 11 digits (11 when charges are assessed beyond a local call).

Maintaining both seven and 10-digit dialing in the home NPA costs only 10,000 line numbers per adjoining or overlapping NPA, a cost of **less than 1/8 of 1 % per adjoining or overlapping NPA** (and cost nothing if foreign NPA calls require 1+ or 0+ to complete, such as 11-digit dialing). Thus "mandatory" 10-digit dialing is only a de-minimus conservation measure with substantial public costs and social undesirability.

d) **Maintaining 7-digit dialing only followed by a # sign** (or timeout to append the NPA to the HNPA calling stream) also costs nothing except timeout without a #. The # tone at the end of a dialing string has been recognized as a useful tool for abbreviated dialing. (See NANC Abbreviated Dialing report from an Ad Hoc committee of NANC).

1. Industry assignment guidelines

Industry Assignment Guidelines have been adopted as reference material for dispute resolution before the North American Numbering Council. The Commission has also relied on Industry Guidelines when resolving formal disputes. (See: SNET case on 800-555 numbers).

All industry numbering assignment guidelines contain the following general rule:

"NANP resources, including those covered in these guidelines, are collectively managed by the North American Telecommunications industry with oversight of the North American federal regulatory authorities. The NANP resources are considered a public resource and are not owned by the assignees. Consequently, the resources cannot be sold, brokered, bartered or leased by the assignee for a fee or other consideration. If a resource is sold, brokered, bartered, or leased for a fee, the resource is subject to reclamation by the Administrator."

We encourage the Commission to confirm the same and additional language in a regulation contained within the general provisions of FCC Part 52 (see below, as amended). We encourage the addition of the language prohibiting transfer through "releasing for a fee or other consideration" and other items described below.

2. Auditing procedures

Auditing procedures should include an independent network sampling measure to assure the reliability and validity of the carrier reported numbers, particularly the aggregates used for NPA-exhaust and NXX or 1,000-block exhaust calculations. This measure could be a sampling of line numbers to determine if they are actually "in service" with a customer who is actually answering the line.

Audit procedures should also cover the detection of hoarding, warehousing, or stockpiling of numbering resources by a carrier or by a customer.

3. Enforcement procedures

The baseline **anti-hoarding and anti-warehousing policy** of the FCC should be codified into the Telecommunications Act and into the Code of Federal Regulations (Part 52), and should apply to all NANP resources, particularly those dialable by the public. All of the numbering conservation measure we can design would be of little value if carriers were able to hoard or warehouse line numbers.

It is becoming increasingly evident that hoarding and warehousing (or "stockpiling" of numbers has been occurring in the toll free context (entire internet web-sites may be dedicated to transactions which might lead to hoarding or warehousing toll free numbers, i.e. <http://www.tollfreenumbers.com>, etc.), despite FCC Part 52 restrictions. It is also becoming evident that hoarding or warehousing of line numbers has spilled over into the CLEC / ILEC relationship and possibly wireless/pager.⁵

Thus, we recommend that the Congress (i.e. beginning in the Senate Commerce Committee), adopt a statutory provision in the Telecommunications Act which affirms the illegality of hoarding, warehousing, or stockpiling numbering resources, and provides both criminal penalties and private right(s) of action. In addition, the FCC should amend Part 52 to explicitly expand the current provisions for toll free to affirm the general prohibition on warehousing and hoarding for all numbering resources. The proposed hoarding **example** is:

⁵ Illinois recently reinforced its Order to save NPA 847 numbers due to demonstrated hoarding or warehousing. (See: Excerpt from Chicago Tribune, December 17, 1998):

"The five-member Illinois Commerce Commission's previous May, 1998 Order requiring paging, cellular and phone companies to conserve numbers and return unused ones to a common pool was largely ignored, with carriers **returning less than a third of the 1.6 million phone numbers they were stockpiling**, according to Cohen. For the first time, the new order requires carriers to turn over detailed quarterly reports showing how the numbers they control are being used. It also requires carriers to return all blocks of numbers in which no more than 10 percent are in use by customers. Before requesting additional blocks of numbers, phone companies have to assign at least 75 percent of the ones they currently control. Carriers now are allowed to keep what they feel they need to last the next six months but must turn back all additional numbers. Cohen acknowledged **that some may inflate their future needs** in order to hang onto as many numbers in 847 as possible, but he said he also expected requests for new blocks to drop sharply. The order still falls short of imposing conservation and pooling measures in the 312, 773, 630 and 708 area codes. The phone industry contends those codes, too, will run out of numbers to distribute between June and February 2000. Though the IL ICC said number pooling measures "should" be imposed in those areas, a technology glitch has delayed its start. The new order may well be too little, too late to further delay the tentative April 17 date when 847 is expected run out of numbers to distribute to carriers. That also will signal the start of mandatory 11-digit dialing."

47 CFR 52.xxx Hoarding, Warehousing, or Stockpiling of Numbering Resources.

(a) Numbering resources are considered a public resource and are not owned by the assignees. Consequently, the resources cannot be sold, brokered, bartered, leased, or released, by the assignee or any other person, for a fee or other consideration. If a resource is sold, brokered, bartered, leased, or released, for a fee or other consideration, the resource is subject to reclamation by the numbering Administrator. Numbers may be licensed for shared or other use, but the number assignee must maintain control and responsibility for all interconnection and routing arrangements.

(b) As used in this section, hoarding {warehousing, stockpiling} is the acquisition, through assignment, sale, brokering, bartering, leasing, or releasing back to inventory, for a fee or other good or valuable consideration, by any person, of more numbers than any person actually reasonably intends to use for the provision of telecommunications service or subscribing to telecommunications service, or of more numbers than permitted by appropriate assignment guidelines.

(c) No person or entity shall hoard, warehouse, or stockpile numbers.

(d) Numbers may be licensed by the assignee for shared or other use, provided that that assignee shall remain in control of and responsible for, all interconnection, primary financial, and routing arrangements for that number.

(e) Routing multiple numbers to a single location, circuit, or switch will create a rebuttable presumption that the person or entity or carrier is hoarding or brokering numbers.

(f) Tariff Provision. The following provision shall be included in any tariff involving numbering or in any numbering agreement(s), including those for the administration of numbering resources:

"The Federal Communications Commission (" FCC") has concluded that hoarding, warehousing, and/or stockpiling, defined as the acquisition of more numbers than one actually reasonably intends to use for the provision of telecommunications service, as well as the sale, bartering, brokering, leasing, or releasing back to inventory, of a number by a person or entity for a fee or other consideration, or in excess of assignment guidelines, is contrary to the public interest in the conservation of numbering resources and contrary to the FCC's responsibility to promote the orderly use and allocation of numbering resources. Numbers may be licensed by the assignee for shared or other use, provided that that assignee shall remain in control of and responsible for, all interconnection, primary financial, and routing arrangements for that number."

1. **Sanctions for ensuring accurate submission of telephone number usage information:**

Sanctions for inaccurate reports should be covered by 18 U.S.C. 1001 by adopting an OMB approved and mandatory reporting requirement as a condition of continued carrier certification and/or tariff approval(s).

An original and four copies of our comments are filed hereby with the Office of the Secretary, Federal Communications Commission, 1919 M Street, N.W., Washington, D.C. 20554. In addition, we have send two copies to Jeannie Grimes, Common Carrier Bureau, FCC, Suite 235, 2000 M Street, N.W., Washington, D.C. 20554, and one copy to ITS, at 1231 20th Street, N.W., Washington, D.C. 20036 with a floppy disk in DOS WordPerfect 5.1 format.

December 22, 1998

Richard C. Bartel, President
And Individually