

FCC MAIL SECTION

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

CC Docket No. 92-237 ✓

In the Matter of

Administration of the
North American Numbering Plan

NOTICE OF INQUIRY

Adopted October 9, 1992;

Released: October 29, 1992

Comment Date: December 28, 1992

Reply Comment Date: January 27, 1993

By the Commission:

1. This Notice of Inquiry (NOI) will explore several long range issues related to the administration of the North American Numbering Plan (NANP or, the Plan). No immediate regulatory actions will be taken. Rather, we intend to gather information that the Commission may consider in other proceedings and activities.

2. Given the major changes occurring in the telecommunications industry over the past several years and disputes involving numbering issues, proposals for altering the plan have increased. The National Association of Regulatory Utility Commissioners (NARUC) has filed a petition asking the Commission to begin an inquiry.¹ Although there are differences of opinion about the scope of such a proceeding, the comments filed on that petition reflect broad support for this NOI.²

3. Phase one of this NOI focuses on who should administer the NANP and how the administration might be improved. We also seek comments on numbering for per-

sonal communications services and on local number portability. Phase two seeks comments on the costs, benefits, and technical issues associated with expanding the Carrier Identification Codes used for Feature Group D access to a four-digit format.

I. BACKGROUND

4. The basic numbering scheme for the nation's telephone system was developed by the Bell System; the current format was adopted in 1947, and first implemented in 1951.³ When AT&T divested its operating companies on January 1, 1984, the numbering plan functions performed by AT&T were transferred to Bell Communications Research (Bellcore).⁴ Since that time, a staff at Bellcore has served as the North American Numbering Plan Administrator (NANPA).

5. The numbering practices used within the NANP differ from those used in most of the rest of the world in that the NANP integrates the dialing of eighteen nations. In contrast, international calls to countries not included in the NANP require the dialing of international access codes, the dialing of country codes, and the dialing of telephone numbers that differ in length from country to country. The NANP covers World Zone 1 which includes the United States, Canada, Bermuda, and most of the Caribbean.⁵ Thus, it encompasses virtually all of North America except Mexico.

6. The administrator of the NANP thus administers a numbering plan that covers the United States and seventeen other countries.⁶ While this Commission has plenary jurisdiction over the numbering plan within the United States, most numbering plan issues have been resolved through industry negotiations and forums. Thus, Commission involvement has usually been restricted to disputes brought before the Commission for resolution.⁷

7. Each telephone in World Zone 1 can be reached by dialing a unique ten digit number. "NANP" is sometimes

¹ National Association of Regulatory Utility Commissioners, Petition for Notice of Inquiry Addressing Administration of the North American Numbering Plan, filed September 26, 1991.

² A list of commenters and reply commenters appears in Appendix A.

³ The details of the North American Numbering Plan are spelled out in Bell Communications Research, *BOC Notes on the LEC Network -- 1990*, Special Report SR-TSV-002275, Issue 1, March 1991, Section 3, Numbering Plan and Dialing Procedures.

⁴ The Plan of Reorganization implementing AT&T's divestiture of its operating companies outlined certain technical functions related to numbering and dialing that would be performed by the Central Staff Organization (pp 372-3). Amendment No. 33, added at the request of the Department of Justice, stated that "[T]hus, for example, the Central Staff Organization will administer the North American Numbering Plan, including the assignment of 800 codes." (p 373) The amended Plan of Reorganization was approved and entered by the MFJ Court in *United States v Western Electric Company*, 569 F. Supp. 1057 (D. D. C. 1983). The Central Staff Organization was later re-

designated Bell Communications Research Inc., the ownership of which is shared by the seven regional holding companies resulting from the divestiture.

⁵ International numbering standards are developed under the auspices of the International Telegraph and Telephone Consultative Committee (CCITT). This organization, in turn, is a suborganization of the International Telecommunication Union (ITU) which is an agency of the United Nations.

⁶ Three parties from Canada have filed comments. They generally support the initiation of a NOI. Unitel, comments, p 1; Cantel, comments, p 2. Telecom Canada takes no position, but indicates interest in participating in the proceedings if a NOI is issued; Telecom, comments, p 1. We note that the Canadian Department of Communications has recently formed a Canadian Steering Committee on Numbering to address a variety of numbering issues.

⁷ See *Referral of Questions from General Communication Inc. v. Alascom Inc.*, 3 FCC Rcd 700, 709 (1988); *FCC Policy Statement on Interconnection of Cellular Systems*, Appendix A to *The Need to Promote Competition and Efficient Use of Spectrum for Radio Common Carrier Services* 59 R.R. 2d 1275, 1279 (1986) recon.

used narrowly to refer to these ten digit numbers.⁸ In this NOI we use the term more broadly to include other issues as identified herein.

8. In the NANP, each ten digit number is composed of three parts. The first three digits are called a "Numbering Plan Area" code or NPA code. Most of these codes indicate geographic areas and are simply known as area codes. At present,⁹ these codes always conform to the following format: the first digit is never 0 or 1;¹⁰ the second digit is always 0 or 1; and the third digit can be any number. Symbolically, this is often written as N 0/1 X, where N represents any digit except 0 or 1, and X is any digit from 0 through 9.

9. Using the current format, there are only 160 possible NPA codes.¹¹ Eight of these 160 codes have the format N00: (200, 300, 400...900) and are called Service Access Codes (SACs). Eight of the 160 codes have the format N11 (211, 311...911) and are called Service Codes. Most of the remaining 144 primary codes are recognizable as area codes: 141 are used as geographic area codes; one code is assigned to the U.S. government; one code is assigned for specialized uses in Canada,¹² and only one code has not yet been assigned.¹³ Clearly NPA codes that resemble traditional area codes are in short supply.¹⁴ Some of the N00 codes or N11 codes may have to be assigned as area codes in the near future.

10. The three digit NPA code is followed by a three digit secondary code and, finally, a four digit "station" or "line" number. Together, the secondary code and the line number comprise a typical 7 digit local telephone number. The secondary code is referred to as an "office" code, a "central office" code, or "CO" code. Traditionally, the format of the office code was NNX (using the previous notation). For the same reason as with area codes, the first digit could not be 0 or 1. In contrast to area codes where the second digit was always 0 or 1, the second digit of an office code was never 0 or 1. From a practical standpoint, this provided a simple way to distinguish between area codes and office codes: a

telephone switch, by simply examining the second digit dialed, could identify the number being called as either beginning with an area code or a local number.

11. In recent years, the increasing proliferation of telecommunications services and service providers have placed increasing demands on numbering resources. Accordingly, it has long been expected that the stock of NPA codes in the present format would be exhausted sometime in the 1990's. A relief plan, adopted in 1962, features "interchangeable" codes.¹⁵ In the new format, area codes and office codes will look alike: for example, the digits "632" could be used as an area code, and the digits "202" could be used as an office code. This change, scheduled for early 1995, will expand the number of potential NPA codes from 160 to 800.

12. NPA codes, of course, have great potential value. They have been requested by interexchange carriers for traffic routing purposes. They have been requested by cellular carriers for mobile service identification.¹⁶ Recently one particular variant of these codes -- those in the form N11 -- have been requested by enhanced service providers for abbreviated dialing arrangements.¹⁷

13. Earlier this year, Bellcore published a proposal for allocating the new interchangeable NPA codes that will become available in 1995.¹⁸ To accommodate mobile services and new personal communications services (PCS), the NPA codes used for such services would not necessarily be linked to specific geographic areas. Bellcore requested comments on its proposed allocation of new NPA codes and long term goals for the NANP. Comments were received on April 30, 1992.¹⁹

14. Heretofore, assignments of NPA codes (including both geographic area codes and service access codes) have been made by Bellcore.²⁰ Bellcore also assigns the office codes for 800 and 900 service. Bellcore does not assign the office codes within each geographic area code. This function was delegated by AT&T prior to divestiture to the local

granted in part, denied in part, 2 FCC Rcd 2910 (1987), *further recon. granted in part, denied in part*, 4 FCC Rcd 2369 (1989).

⁸ Extra digits dialed at the start of a call (for example, the "0" to indicate that operator assistance is desired) are called prefixes and are not considered part of the numbering plan. Unlike numbering standards, there are no international agreements with respect to dialing arrangements. Dialing arrangements differ from country to country. Within the United States, they differ to some extent from state to state. For example, some states require that the digit "1" be used as a "toll indicator" for intralata toll calls.

⁹ This is scheduled to change in 1995. See the discussion of interchangeable codes in paragraph 10 below.

¹⁰ The digits 0 and 1 are used as prefixes to identify certain types of long distance calls and cannot therefore be used as the initial digits in either area codes or local numbers.

¹¹ This is the maximum number of combinations when there are 8 possibilities for the first digit, 2 for the second, and 10 for the third: $2 \times 8 \times 10 = 160$.

¹² The code was assigned for use with teletypewriter service (TWX) and an Integrated Services Digital Network (ISDN). The administrator is seeking to reclaim this code for use as a geographic area code.

¹³ Two codes were in prior years used by long distance carriers for routing calls to Mexico which is not part of World Zone 1 or the NANP. By translating these digits in the carrier switches, calls to Mexico could be completed using 10 digit dialing that resembled long distance dialing in the U.S. These codes were discontinued to permit the reassignment of these codes as geo-

graphic area codes. Subsequently, 706 was assigned to Georgia and 905 was assigned to Ontario.

¹⁴ By way of comparison, 3 area codes were placed in service in 1991, 4 are scheduled for 1992, and 1 for 1993. These dates refer to the dates that permissive dialing begins rather than the earlier dates when codes are assigned or the later dates when use of the new codes are mandatory. Permissive dialing refers to a transition period when either the old number or the new number can be dialed to reach the same location.

¹⁵ Ameritech comments, p 5.

¹⁶ Telocator comments, p 9; McCaw comments, p 10.

¹⁷ This matter is currently being considered by the Commission. See, The Use of N11 Codes and Other Abbreviated Dialing Arrangements, CC Docket No. 92-105, 57 Fed. Reg. 22681 (1992).

¹⁸ Bell Communications Research, North American Numbering Plan Administrator's Proposal of the future of numbering in World Zone 1, January 2, 1992.

¹⁹ Copies are available in the public reference room maintained by the Industry Analysis Division.

²⁰ After a decision is made to split an area code into two parts, the FCC and Bellcore have traditionally left the drawing of boundaries up to the local telephone companies and the state public utility commission. These local boundaries, particularly where a suburb wishes to continue to be included in the same area code as a metropolitan center, can be matters of intense local controversy. They also require extensive knowledge of local calling patterns and local office arrangements.

exchange carriers providing most of the service within each geographic area code. In most cases this is a Bell Operating Company although there are exceptions.²¹

15. So long as only traditional local telephone companies used office codes, the system generally worked smoothly. New entrants, however, complained that they had difficulty obtaining codes and that the local administrators were less willing to assign codes to their uses than to the LECs' own uses.²² In June 1991, the Chief of the FCC's Common Carrier Bureau asked Bellcore to undertake the development of guidelines for the assignment of office codes within geographic NPAs.²³ Bellcore released draft guidelines in February 1992 and established a schedule of comments and conferences aimed at reporting results to the FCC later this year.²⁴

16. The NANPA also assigns the carrier identification codes (CICs) used to reach (or "access") the services of long distance carriers. In equal access areas, these codes can be used to reach alternative long distance carriers by dialing 10XXX (where "XXX" is an alternative carrier's CIC). These codes can also be used to reach a long distance carrier by dialing 950-0XXX or 950-1XXX (where "XXX" again represents a carrier's CIC code). As the supply of CIC codes approaches exhaustion, the current three-digit format of these codes is being altered to four-digits. The CICs used for 950 dialing will become four digits in 1993. For technical reasons, expanding the number of CICs used to reach long distance carriers by dialing 10XXX is much more complicated and not anticipated until 1995. Even if postponed until that date, the proposal remains complicated and expensive. This is discussed in more detail in paragraphs 35-37 below.

17. In addition to these efforts to develop guidelines and plan the use of NPA codes and office codes, the NANP administrators are involved in a variety of other activities, often in diverse forums. For example, Working Group II of

the CCITT is considering recommendations regarding the numbering scheme to be used for Personal Communications Services (PCS). Similarly, a workshop of the Industry Carriers Compatibility Forum is considering uniform assignment of *XX vertical service codes and the question of whether these codes should also be expanded.²⁵ Bellcore also assigns Signalling System 7 network codes using assignment guidelines developed by Committee T1.²⁶

18. As the previous discussion illustrates, the administration of the NANP involves far more than simple assignment of area codes. It requires a staff at Bellcore and a large number of employees at the LECs who deal with the administration of office codes. Further, over time the process has become contentious as more parties have sought codes.²⁷

II. THE NARUC PETITION

19. NARUC petitioned the Commission to begin a wide ranging inquiry into the administration of the NANP.²⁸ NARUC's petition raises numerous issues: costs to ratepayers; the effects of new numbering schemes on existing equipment and dialing patterns; the possible competitive advantages to the Regional Bell Operating Companies of having Bellcore as the NANP administrator; and the effect on independent telephone companies and strategies for dealing with new services such as PCS. Twenty five parties filed comments on the NARUC petition and thirteen filed reply comments.²⁹

20. Virtually all parties urge us to undertake a proceeding, although there are wide differences of opinion on the scope.³⁰ Some commenters urge a narrow and carefully defined inquiry. These parties generally suggest that we examine the administration of the NANP to ensure that it is unbiased and reasonable, but, at the same time, refrain from examining specific issues that might delay the devel-

²¹ GTE serves as administrator for area codes 808 and 813; Southern New England Telephone serves as administrator for 203; Alascom serves as administrator for 907; Cincinnati Bell for 513; Telecom Canada for 15 area codes used in Canada; and Bellcore itself serves as the administrator of 809 which covers Bermuda and the Caribbean.

²² See, e.g., formal complaints filed in *Offshore Telephone Co. v. South Central Bell Tel. Co.*, 6 FCC Rcd 7481 (Com.Car.Bur.1991); *Missouri RSA No. 7 v. Southwestern Bell Tel. Co.*, 6 FCC Rcd 7185 (Com.Car.Bur.1991).

²³ Letter from Richard M. Firestone, Chief, Common Carrier Bureau, Federal Communications Commission to Mr. Thomas Saunders, Vice President, Bell Communications Research, June 21, 1991.

²⁴ Bellcore has supplied copies of all comments and they are available in the public reference room maintained by the Industry Analysis Division.

²⁵ Vertical service codes are used by local exchange carriers for such services as call forwarding. To the extent that there is any uniformity, it appears to result from informal agreements among LECs. Some of the codes are published in the Local Exchange Routing Guide (LERG). The LERG, published by Bellcore, contains information which enables local telephone companies and long distance carriers to route traffic through the switched telephone network by identifying the physical location and routing information needed to reach each geographic location. Because the signalling is not used to route calls from one carrier to another, *XX need not be uniform among carriers. However, there may be some advantages in switch design and reducing customer confusion to be achieved from uniform usage. These codes could also be used to provide

abbreviated dialing for enhanced service providers or other users.

²⁶ Signalling System 7 network codes identify the components within the SS7 network. In effect, they represent part of a network address used to route messages to and from the holder of the code. Committee T1 (Telecommunications) is an industry standards setting body sponsored by the Exchange Carrier Standards Association. It is accredited by the American National Standards Institute. The mission of Committee T1 (Telecommunications) is to develop technical standards and reports supporting the interconnection and interoperability of telecommunications networks at interfaces with end-user systems, carriers, information and enhanced-services providers, and customer premises equipment.

²⁷ UTI argues that any Commission proceeding should be a policy and appeals forum to resolve such matters, and that technical issues be left to industry forums to resolve. Reply comments, pp. 1-3.

²⁸ National Association of Regulatory Utility Commissioners, Petition for Notice of Inquiry Addressing Administration of the North American Numbering Plan, September 26, 1991.

²⁹ See Appendix A. Comments were filed on December 20, 1991, and reply comments were filed on January 17, 1992. All comments are available in the public reference room maintained by the Industry Analysis Division.

³⁰ Only Ameritech and USTA oppose a proceeding of any kind. US West opposes a NOI in its comments, but supports an inquiry into Bellcore's role as NANPA in its reply comments. Only BellSouth says that the NOI should lead to a Notice of Proposed Rulemaking.

opment of solutions to pressing problems already being addressed.³¹ Other commenters urge the broadest possible examination of the issues.³² Several parties raise additional issues.³³

21. After reviewing the comments, we agree that an inquiry should be undertaken. We shall begin with a broad inquiry into the administration of the NANP and will defer consideration of a number of narrower issues.

III. NOI PHASE ONE: OVERALL ADMINISTRATION OF THE NANP

22. Phase one of this NOI will focus on who should administer the NANP and how the administration might be improved.

23. We note that the numbering plan has been administered over a long period of time with considerable skill and foresight.³⁴ Indeed, it is no exaggeration to say that the North American Numbering Plan is the envy of the rest of the world. Country codes are not needed for international calls within World Zone 1. The NANP provides a uniform dialing scheme applicable to eighteen countries, more than a thousand local exchange carriers, several hundred long distance carriers, and more than a hundred million end users.

24. Many numbering plan issues predictably take a long time to resolve. It takes years to design switches and software to accommodate a nationwide change in the numbering plan. Adequate long range planning is essential to minimize the investment costs needed to make changes. From this standpoint, the administration of the numbering plan by the Bell System and, subsequently, Bellcore, seems to have served the nation well.³⁵ For example, the concept of interchangeable codes and the basic plans to make that change were laid out as early as 1962--many years before their implementation.

25. Many parties, however, believe that administration of the NANP by Bellcore involves an inherent conflict of interest: some codes are required both by Bellcore's owners (the Bell Operating Companies) and their competitors. Some parties believe that Bellcore's staff must inevitably be

influenced by the views of its owners. For example, MCI argues that Bellcore has demonstrated "a clear propensity to favor its owners when contention arises over limited resources."³⁶ Allnet contends that having Bellcore as administrator raises antitrust questions.³⁷

26. The litany of complaints is perhaps longest among those associated with mobile services. Some cellular carriers note that each cellular telephone within an area code must be physically altered when that area code is changed. Despite these adverse effects, they claim to have little participation in the decision to alter area codes.³⁸ Other stated problems include difficulty in obtaining NXX codes, inefficient routing, and the fact that NXX code requests from cellular carriers are handled by BOC marketing personnel while similar requests from wireline carriers are not.³⁹ In short, some cellular carriers believe the NANP "is administered from a narrow, wireline perspective that affords mobile service providers little meaningful opportunity to have any say in the decision-making process."⁴⁰

27. Bellcore replies that the NANPA is semi-autonomous and does not discriminate in favor of Bellcore's owners.⁴¹

28. We invite comments on the advisability of transferring NANP administration to an administrator other than Bellcore. Conceptually, the NANP administration could be done by others.⁴² We seek comments generally on the costs and benefits of an internationally integrated numbering plan and integrated centralized administration.

29. Regardless of whether we conclude that Bellcore should remain as administrator of the NANP, we believe that the plan must be administered as efficiently as possible. Accordingly, we seek comment on the following technical administrative issues including how to provide the most effective oversight.⁴³

30. AT&T notes that the present industry methods of dealing with numbering issues through industry consensus is satisfactory except that, in the event of deadlock within the industry, no mechanism exists for making a decision. In the absence of a process to make decisions, disputes can lead either to no resolution at all or to unnecessary delay.⁴⁴

³¹ UTI comments, pp 1-2. Centel comments p 2. SNET comments, p 4. USTA likewise urges us to exclude those issues which are "already being implemented by carriers and that are well into planning cycles". USTA comments, p 4.

³² AT&T reply comments, pp 3-4. NARUC reply comments, p 6.

³³ The Florida PSC suggests including consideration of sustaining universal service, impacts on international communications, and minimizing the costs of manufacturing equipment needed to upgrade the NANP. Florida PSC comments, p 3. MCI suggests broadening the inquiry to consider alternative numbering schemes and the effects of new numbering plans on competition. MCI comments, p 8. MFS urges us to examine the feasibility and cost of implementing local number portability along the lines adopted in the 800 database proceeding. MFS comments, p 6.

³⁴ USTA offers a stout defense of Bellcore's activities as NANPA. Comments, pp 1-3.

³⁵ Bellcore notes that the NANPA works with domestic and international standards setting bodies such as the Industry Carriers Compatibility Forum to gain consensus on numbering issues.

³⁶ MCI comments p 5. MCI cites the assignment of CIC codes. Others cited the assignment of NXX codes. See, e.g., Telocator comments, pp 4-6. CompTel cites favoritism to AT&T over

other IXCs in assigning CIID codes. CompTel reply comments, pp 6-8.

³⁷ Allnet comments, p 1. NYNEX says these concerns are unfounded. Reply comments, p 6.

³⁸ McCaw comments, pp 4-5; CTIA reply comments, pp 5-6.

³⁹ McCaw comments, p 8; Telocator comments, p 2.

⁴⁰ Telocator comments, p 2. See also, McCaw comments, p 3; Locate reply comments, pp 6-7.

⁴¹ Bellcore argues that the NANPA operates in a "fish bowl", resolving problems in forums that include all facets of the industry. Bellcore adds that these forums provide both an opportunity to gain a consensus and an opportunity for other parties to challenge Bellcore's decisions. In Bellcore's view, the absence of complaints indicates the fairness of the current process. Comments, pp 3-5. We note that even some of the strongest critics give Bellcore credit for being more responsive in recent times. See, for example, Telocator comments, p 10.

⁴² MFS comments, p 8; Telocator comments, p 3.

⁴³ GTE argues that "a well-documented and equitable process for assigning numbering resources is more critical than who administers the process." Comments, p 8. McCaw supports an inquiry to make the NANP administration process more open, public, and accountable. Reply comments, p 8.

⁴⁴ AT&T comments, p 3.

31. Although the FCC has indicated that it stands ready to resolve formal complaints, this process can be lengthy and better adapted to resolving legal disputes than complex technical questions. Further, formal complaints tend to be filed at a late stage in a dispute while the long planning horizons required with respect to numbering plan issues mean that early involvement by decision makers is often needed. We seek comments on whether the mediation or arbitration techniques as provided by alternative dispute resolution and negotiated rulemaking can be fruitfully applied to situations where the industry is unable to achieve consensus.⁴⁵

32. Bellcore suggests that an advisory council be established to advise it on issues relative to the administration and design of the NANP.⁴⁶ We ask, if the NANPA remains at Bellcore for the foreseeable future, what advisory or oversight bodies, if any, should be established? Should formal structural separation be applied between the NANPA and the rest of Bellcore? How should the FCC oversee Bellcore or any other entity charged with plan administration?

33. A subject closely related to who should administer the NANP is how the costs of administration should be financed. The costs of the NANP are, in effect, paid by Bellcore's owners and their customers. It is at least questionable whether we can continue to expect these costs to be incurred by private firms without compensation. Still other costs are incurred by the local exchange carriers who administer individual NPA codes.

34. When office codes are assigned within an NPA, charges are normally imposed on the recipient. In turn, there are certain costs of administering office codes--if nothing more than configuring switches and keeping track of line numbers. Entities that are assigned office codes frequently charge for setting aside blocks of numbers. To the extent that charges are imposed for office codes or numbering functions within office codes these appear to be either tariffed at the state level or contractually negotiated.

35. While some respondents⁴⁷ suggest we address these costs, we decline to do so in this proceeding. In this initial review of the NANP we will only consider how the costs of national administration should be handled, including issues relating to the costs of area code administration performed by the NANPA. We will defer any questions related to the costs of office code administration.

IV. PHASE TWO: FEATURE GROUP D ACCESS CODES

36. As described in paragraph 15 above, each long distance carrier has a carrier identification code (CIC) issued by the NANPA. Currently, the same code is used for both Feature Group B access (by dialing 950-0XXX or

950-1XXX) and for Feature Group D access (by dialing 10XXX). Almost all available codes have been assigned and the industry has agreed upon plans to expand the codes to four digits.

37. Beginning in 1993, carriers will have different codes for Feature Group B (FGB) and Feature Group D (FGD) access. At that same time, FGB codes will be expanded to 4 digits. The change to 4-digit FGB codes is relatively simple and inexpensive. The expansion of FGD codes is more complex. In fact, the format agreed upon for implementation in 1995 would replace 10XXX dialing with 101XXXX. This would require dialing extra digits, require carriers to retrain their customers and, according to commenters, will be technically difficult and expensive.⁴⁸ It would also result in the access code having the same number of digits as other local telephone numbers. This raises the question of whether special access codes remain worthwhile if they are no shorter than other seven digit numbers.

38. In the past, rather than rationing codes or taking other approaches, the number of codes has been expanded as exhaustion approached.⁴⁹ Because 10XXX dialing will accommodate 1,000 long distance carriers or other purchasers of access, we inquire as to whether it is worthwhile to move from 10XXX to 101XXXX access. Given the long planning horizon involved--related to the number of years needed to convert and/or replace switches--planning for any reconsideration of the desirability of making the change for Feature Group D access needs to be done immediately. In light of these concerns, we ask the following questions:

1. What are the costs and technical issues associated with converting FGD CIC codes to a 4-digit format?
2. What are the benefits of doing so and how do these benefits compare with the costs?
3. Are there alternative technical approaches that would allow all long distance carriers and other end users to achieve equal access?
4. If FGD codes are not expanded, what rules should govern the assignment, recall, transfer and use of the FGD codes that will be available?

V. OTHER ISSUES

39. We seek comments on the following two issues. Comments on these issues should be included with other comments in Phase 1 of this proceeding.

40. *PCS numbering.* The numbering schemes used for Personal Communications Services are important and are the subject of both domestic and international discussions.

⁴⁵ US West comments, pp 5-6.

⁴⁶ North American Numbering Plan Administrator's Proposal on the Future of Numbering in World Zone 1, p 27.

⁴⁷ GTE comments, p 10; Pacific Telesis comments, p 9; US West comments, pp 6-8.

⁴⁸ Bell Atlantic reply comments, pp 2-3.

⁴⁹ In 1986, when ruling on a dispute arising from Pacific Bell's refusal to provide FGB access to First Data Resources, the Common Carrier Bureau required Pacific Bell to provide access, citing the principle that "interstate access services should be made available on a non-discriminatory basis and, as far as possible, without distinction between end user and [interex-

change carrier] customers." The Bureau was not convinced that code exhaustion was either imminent or inevitable and did "not believe that the possible scarcity of codes in the future justifies treating [interexchange carrier] and end user customers of interstate access services differently." (Memorandum Opinion and Order, In the Matter of Petition of First Data Resources, Inc Regarding the Availability of Feature Group B Access Service to End Users, released May 28, 1986, paragraph 13.) The Order did not, however, foreclose the possibility of revisiting the issue in the event that the availability of "numbers should in the future prove to be inadequate or in real jeopardy." (Paragraph 17)

Although this issue is now being considered in other forums,⁵⁰ we seek comment on what actions should be taken by this Commission to foster such services.

41. *Local number portability.* Competitive access providers argue that the inability of customers to change carriers without changing telephone numbers provides a barrier to local competition. They urge us to investigate local number portability.⁵¹ We seek comments on the costs and feasibility of local number portability. We also seek information on the lessons learned from the experience of implementing number portability for 800 services.

42. NARUC and commenting parties have also raised numerous other issues that we decline to address at this time. Some of the issues are already being considered in other forums, some are not yet ripe for consideration, and some are so close to implementation that the costs of reconsideration and potential delay seem to outweigh the benefits of their inclusion. We summarize these issues below and inquire generally as to which of these issues should be addressed in future Commission proceedings and which should be left to other forums.

43. *Implementation of interchangeable area codes.* As noted in paragraph 10 above, the nation's current stock of area codes is rapidly approaching exhaustion and an interchangeable format is scheduled for 1995.⁵² A number of other approaches could have been taken to solve the problem of area code exhaustion and might have been selected if that decision had been made many years ago. For example, area codes might have been lengthened to four or more digits while retaining the distinctive 0 or 1 as the second digit. Alternatively, local telephone numbers might have been lengthened to eight or more digits so that each existing area code would accommodate more local numbers. Instead, for at least 20 years the industry, and switch manufacturers, have worked toward interchangeable codes.⁵³ Some 30 of the nation's area codes have already converted to using office codes with the new format.⁵⁴ The remaining NPAs are scheduled to have this capability by 1995.⁵⁵ Although NARUC asks us to examine alternatives, the commenters are virtually unanimous in urging us not to reopen this issue. Most of those comments stress the long lead times, costs, and the problem of creating uncertainty by doing so.⁵⁶ Accordingly, we believe it is far too late to consider alternatives and will not reopen the issue.

44. *Allocation of interchangeable NPA codes.* As noted in paragraph 12 above, the NANPA is now taking comments on proposals on how the new stock of codes should be allocated. We will not simultaneously attempt to examine that issue.

45. *Allocation of office codes.* As noted in paragraph 14 above, the NANPA is now engaged, at the request of the Common Carrier Bureau, in an effort to achieve consensus on guidelines for the assignment of office codes within geographic area codes. Their effort, which began in 1991, will not be completed until later this year. We will not consider the issue of office code assignments until after the current effort is complete.

46. *Four digit codes for Feature Group B access.* These are scheduled for implementation in 1993, the cost is relatively small, and the industry is well along toward implementation. Further, all parties raising the issue urge us not to reconsider and delay and we will not do so.⁵⁷

47. *Classification of costs for the purposes of price caps.* Several carriers suggest that we should consider making certain numbering plan costs exogenous for the purpose of price caps.⁵⁸ Others suggest that this is simply an attempt to relitigate price caps in this proceeding and urge us to dismiss the suggestions.⁵⁹ We decline to expand the large number of issues already under consideration by including the reclassification of costs for price caps. It is too early to tell whether this issue needs to be readdressed. If and when it needs to be readdressed, we will do so in another proceeding.

48. *Allocation of service codes.* This matter is currently being considered in CC Docket No. 92-105.

49. *Reporting requirements.* NARUC has suggested that additional reporting requirements be imposed for monitoring numbering plan issues. GTE argues that a variety of reports received by the Commission's Industry Analysis Division provide sufficient information and that no further reporting requirements should be imposed.⁶⁰ Others cite the Central Office Code Utilization Survey (COCUS) provided annually to Bellcore in arguing that no further reports are needed.⁶¹ We agree that at this point the need for further reports has not been established.

50. *A variety of tangential issues in other proceedings.* These include matters dealing with 800 service and calling cards. While the issues involved in those matters sometimes touch upon numbering issues, they will not be reargued in this proceeding.

PROCEDURAL MATTERS

51. Pursuant to Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. § 1.415, 1.419, all interested parties may file comments on the matters raised in this Notice of Inquiry. Comments on Phase 1, related to the overall administration of the North American Numbering Plan, should be filed by December 28, 1992. Reply comments

⁵⁰ Domestically, PCS numbering is being considered by the Standards Committee T1-Telecommunications of the Exchange Carriers Standards Association. Internationally, the issue is being considered by the CCITT. GTE urges us to leave PCS numbering to CCITT unless the work of that committee shows evidence of results detrimental to US interests. GTE comments, p 6.

⁵¹ MFS comments, pp 6-8. Teleport comments p 2.

⁵² For more discussion of interchangeable codes, see Ameritech comments, pp 5-7, and GTE comments, p 2.

⁵³ According to Ameritech's count, more than 20 manufacturers and vendors are affected by switch upgrades and software modifications.

⁵⁴ NYNEX comments, p 5.

⁵⁵ The original date was July 1, 1995. It was recently moved up

to January 1, 1995. NYNEX comments, p 5.

⁵⁶ GTE comments, pp 2-4; USTA comments, p 4. UTI believes that cross-bar switches will need to be replaced in order to implement interchangeable NPA codes but believes that there are no reasonable alternatives. UTI comments, p 3.

⁵⁷ Ameritech provides a lengthy discussion of CIC history (comments, pp 1-10) and cites the expansion of CIC codes as "a mode of how the industry can resolve its own numbering needs with regulatory oversight and support" (comments, p 10). See also USTA comments, pp 4-5.

⁵⁸ Ameritech comments, pp 11-13.

⁵⁹ MCI reply comments, p 6.

⁶⁰ GTE comments, p 6.

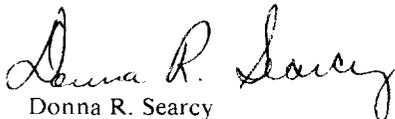
⁶¹ Ameritech comments, pp 17-18.

are due by January 27, 1993. Comments on Phase 2, relating to the expansion of Feature Group D access codes, should be filed by **December 28, 1992**. Reply comments should be filed by **January 27, 1993**. To file formally in this proceeding, participants must file an original and four copies of all comments, reply comments, and supporting comments. If participants wish each Commissioner to have a personal copy of their comments, an original plus nine copies must be filed. Comments and reply comments should be sent to the Office of the Secretary, Federal Communications Commission, Washington, D.C. 20554. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center (Room 239) of the Federal Communications Commission, 1919 M Street, N.W., Washington, D.C. 20554.

52. This proceeding is a notice of inquiry. See 47 C.F.R. Section 1.430. *Ex parte* comments will be permitted. See 47 C.F.R. Section 1.1204(a)(4).

53. Accordingly, IT IS ORDERED, pursuant to Sections 4(i), 4(j), 218, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 154(j), 218, and 403, THAT this *Inquiry* IS HEREBY INSTITUTED and that the Secretary shall cause this Notice to be published in the Federal Register.

FEDERAL COMMUNICATIONS COMMISSION


Donna R. Searcy
Secretary

APPENDIX

COMMENTS FILED ON NARUC PETITION
DA 91-1307

1. Allnet Communications Services, Inc. ("Allnet")
2. American Telephone and Telegraph Company ("AT&T")
3. Ameritech Operating Companies ("Ameritech")
4. Bell Communications Research, Inc. ("Bellcore")
5. South Central Bell Telephone Company and Southern Bell Telephone & Telegraph Company ("BellSouth")
6. Rogers Cantel Inc. ("Cantel")
7. Centel Corporation ("Centel")
8. Public Service Commission of the District of Columbia ("D.C. PSC")
9. Florida Public Service Commission ("Florida PSC")
10. GTE Service Corporation ("GTE")
11. McCaw Cellular Communications, Inc. ("McCaw")
12. MCI Communications Corporation ("MCI")
13. Metropolitan Fiber Systems, Inc. ("MFS")
14. National Telephone Cooperative Association ("NTCA")
15. New England Telephone & Telegraph Company and New York Telephone Company ("NYNEX")
16. Pacific Bell and Nevada Bell ("Pacific Telesis")
17. Rochester Telephone Corporation ("Rochester")
18. Southwestern Bell Telephone Company ("SWBT")
19. Telecom Canada ("Telecom")
20. Telocator
21. Teleport Communications Group ("Teleport")
22. United States Telephone Association ("USTA")
23. United Telecommunications, Inc. ("UTI")
24. Unitel Communications Inc. ("Unitel")
25. U S West Communications, Inc. ("U S West")

REPLY COMMENTS

1. American Telephone and Telegraph Company ("AT&T")
2. Ameritech Operating Companies ("Ameritech")
3. Bell Atlantic Telephone Companies ("BellAtlantic")
4. Bell Communications Research, Inc. ("Bellcore")
5. Cellular Telecommunications Industry Association ("CTIA")
6. Competitive Telecommunications Association ("CompTel")
7. Local Area Telecommunications, Inc. ("Locate")
8. McCaw Cellular Communications, Inc. ("McCaw")
9. MCI Communications Corporation ("MCI")
10. National Association of Regulatory Utility Commissioners ("NARUC")
11. New England Telephone & Telegraph Company and New York Telephone Company ("NYNEX")
12. United Telecommunications, Inc. ("UTI")
13. U S West Communications, Inc. ("U S West")