

information from Teleco Inc. (Teleco),¹⁴⁵ a manufacturer of voice processing equipment and distributor of PBXs, and Comdial Corporation (Comdial),¹⁴⁶ a manufacturer of telephone systems, including PBXs and key systems, through MMTA. Comdial indicated that its newer digital telephone systems, which include PBXs, are software controlled and would accommodate the conversion to four digit CICs through system programming with no significant cost to customers. Comdial also noted that the conversion would have "no effect" on the ability of people to dial calls from any Comdial telephone system. In contrast, Teleco Inc. estimated that 80 percent of its telephone systems would require a hardware upgrade to be able to process four digit CICs. MMTA and Comdial also reported that many older PBX systems may need to be upgraded with a replacement to process the expanded CIC format.

42. The information we received indicates also that manufacturers made available much of the software with four digit CIC capability (both modification software to enhance older systems and base software in systems with inherent four digit CIC capability) as part of a package including not only this capability but also the capability to recognize the new, interchangeable numbering plan areas (INPAs).¹⁴⁷ The information we received also indicates that manufacturers engaged in extensive education/marketing campaigns as early as 1993 in which they sought to educate both PBX customers and carriers about the upcoming expansion to four digit CICs, area codes changes and other NANP related changes.¹⁴⁸ The campaigns included for example, mailings to customer base, participation in user group meetings, briefings, seminars, industry fora, and Bellcore Education seminars.

43. To reach the conclusions presented here, we rely on the information received in response to all of our requests. Although some parties express concerns about older systems, it appears that the hardware and software necessary for local network switches and PBXs to process four digit CICs have been on the market for at least two to three years, and in some cases, much longer. Given the availability of this switching equipment, and the high percentage of PBX customers that currently is equipped to implement expansion to four digit CICs, we find that the additional time remaining until January 1, 1998, is sufficient to allow carriers and PBX owners to complete necessary reprogramming and upgrades. The status of conversion and education efforts of equipment manufacturers also show that sufficient notice of the change has been given to carriers and PBX owners.

¹⁴⁵ See Teleco, Inc. Response to FCC Request for Information, dated September 25, 1996 (Teleco September 25, 1996 Filing).

¹⁴⁶ See Comdial Response to FCC Request for Information, dated September 27, 1996 (Comdial September 27, 1996 Filing).

¹⁴⁷ See, e.g., Lucent April 2, 1997 Filing at 1; Mitel April 10, 1997 Filing. INPAs are area codes that use a number other than "1" or "0" as the middle digit. They were introduced into the public switched telephone network in January 1995. See Administration of the North American Numbering Plan, CC Docket No. 92-237, Report and Order, 11 FCC Rcd 2588 (1995) at n.8.

¹⁴⁸ See, e.g., Lucent October 4, 1996 Filing at 2-3; Nortel October 15, 1996 Filing; Mitel April 10, 1997 Filing.

44. We also find that the time remaining until January 1, 1998, is sufficient to allow callers to become accustomed to dialing the extra digits. Callers have already begun to use seven digit CACs to reach carriers assigned four digit CICs. Extending the transition until the end of 1997 should give ample time for carriers to educate callers. Callers subscribing to new carriers who might have only four digit CICs should already be aware of the need to dial seven digit CACs from any phone, whether a residential phone or pay telephone. As with area code changes, it is in the carriers' best interest to emphasize customer education, because callers who know how to reach the carriers' services are more likely to use them.

45. We believe that the supply of unassigned CICs remaining in the 5XXX and 6XXX pool will not outlast a longer transition, because CIC consumption is likely to increase as new carriers enter the telecommunications services market, particularly given that the services authorized for A&B block PCS licensees are expected to become operational during the spring and summer of 1997. We estimate that the remaining unassigned CICs in the 5XXX and 6XXX range should be sufficient to meet carrier demand until January 1, 1998, but perhaps not significantly beyond that date.¹⁴⁹

46. Some commenters request that we grandfather the continued use of three digit CICs already in use when the transition ends. Grandfathering would exempt these CICs from the conversion to four digits. We must deny such requests because grandfathering three digit

¹⁴⁹ According to Bellcore 474 four digit Feature Group D CICs (in the 5XXX and 6XXX range) were already assigned as of February 28, 1997 (See Letter dated March 6, 1997, to Dave Ward, Common Carrier Bureau, from Nancy Fears, Bellcore, NANP Administration; see also Bellcore December 17, 1996 Letter at 2), and according to AT&T, CIC consumption for the six months prior to May 1996, was 16 CICs per month (see AT&T PN Comments at 8). The CIC consumption average between December 1996 and February 1997 was also 16 CICs per month (see March 6, 1997 Nancy Fears Bellcore Letter). If monthly consumption were to continue at this rate between March 1, 1997, and January 1, 1998, 160 CICs would be consumed. We estimate, however, that CIC consumption could increase by an additional 16 CICs per month because the conservation plan modifications allow the assignment of an additional CIC to each applicant who qualifies (totalling 32 CICs per month). Therefore, we estimate, based on the 16-per-month CIC consumption average and the possibility that it could increase due to the conservation plan modifications, that an additional 160 CICs could be assigned between March 1, 1997, and January 1, 1998 (totalling 320 CICs). Finally, the approximately 1,066 carriers who currently hold only one three or four digit CIC may also qualify for an additional CIC under the conservation plan modifications (See Letter dated March 6, 1997, to Dave Ward, Common Carrier Bureau, from Nancy Fears, Bellcore, NANP Administration, stating 1,066 figure). If 75% of current single CIC holders ultimately obtain an additional CIC, we estimate CIC consumption will increase by 800 CICs. In summary, the total estimated CIC consumption figure, without considering CIC demand from unanticipated new competitive entrants beyond the anticipated 16 new entrants per month, is 1,594 CICs. When this figure is subtracted from the 1,969 four digit Feature Group D CICs in the 5XXX and 6XXX range that are available for assignment, 375 CICs remain available for assignment to, for example, new entrants between March 1, 1997, and January 1, 1998. If each new entrant is assigned two CICs, then the remaining 375 CICs can support up to 187.5 new entities during the transition (or 18.75 new entities per month). We find, given the absence of anything contrary in the record, that 375 CICs constitute an adequate supply for growth until January 1, 1998. We note that in the April 30, 1996 Public Notice, we asked commenters to refresh the record on the issue of the transition in light of, among other things, the anticipated increase in carriers entering the market as a result of these amendments to the Act. The record contains no specific forecasts of CIC consumption resulting from the amendments.

Feature Group D CICs would make it impossible to assign four digit Feature Group D CICs other than those in the 5XXX and 6XXX range.¹⁵⁰ For the same reason, we deny OPASTCO's request that the Commission refrain from requiring small companies to modify their switches until a "bona fide" request is submitted, and allow those companies at least eighteen months to comply after receiving such a request.¹⁵¹

47. We require the NANP administrator to notify all CIC assignees of our decision in this Second Report and Order. We find that educating consumers about the change from three digit Feature Group D CICs to four digit Feature Group D CICs should be a joint responsibility of the Commission and the industry. Based on our experience with interchangeable numbering area code changes, which also require equipment upgrades and caller education, we conclude that the remaining time of the transition is reasonable to fulfill this responsibility.¹⁵²

C. Petition for Rulemaking of VarTec Telecom., Inc.

48. VarTec filed a petition for rulemaking on May 11, 1995.¹⁵³ The petition reiterates VarTec's request in its comments to the NPRM that the Commission grandfather existing three digit CICs. To the extent that it restates that request, we dismiss VarTec's petition, without prejudice, as repetitive under Section 1.401(e) of the Commission's rules.¹⁵⁴ To the extent, however, that the petition raises issues related to the NPRM's regulatory flexibility certification, even though VarTec had the opportunity to address regulatory flexibility concerns in its comments to the NPRM, we will treat the petition as an ex parte communication and address the concerns it raises. We will do so because the requirements governing agency treatment of regulatory flexibility issues have become more stringent while this docket has been open.¹⁵⁵

¹⁵⁰ See para. 7, supra.

¹⁵¹ See para. 18, supra.

¹⁵² A recent area code change in California directed the LEC administering the area code change to give 24 months of notice to the affected area. See AirTouch Communications, et al., v. Pacific Bell, Case 94-09-058 Decision 95-08-052 (August 11, 1995), at p. 67. Similarly, in Texas, the LEC had to effectuate the cutover and educate the public in twelve months. See Petition of MCI, et al., Order on Rehearing, Texas PUC Consolidated Docket No. 14447, SOAH Docket No. 473-95-1003 (April 29, 1996), at p. 46.

¹⁵³ See Petition for Rulemaking, CC Docket No. 92-237, filed by VarTec Telecom Inc., May 11, 1995 (VarTec Petition).

¹⁵⁴ See 47 C.F.R. § 1.401(e).

¹⁵⁵ See Final Regulatory Flexibility Analysis, Appendix C.

49. After carefully reviewing the portion of VarTec's petition contesting the certification in the NPRM that the proposed rules would not have a significant economic impact on a substantial number of small entities, we find that VarTec's opposition is equivalent to, and restates, the request for grandfathering appearing in other parts of its petition and in its comments to the NPRM.¹⁵⁶ In addition, this Second Report and Order, which sets a date for the end of the transition, resolves VarTec's uncertainty regarding when the transition would end.

D. Conclusion

50. The Commission, on several occasions, has characterized telephone numbers as a national public resource.¹⁵⁷ CICs facilitate competition by enabling entities to gain access to the telecommunications network and to services and technologies that support economic growth. It is in the public interest that numbering resources not only meet the needs of incumbents, but also accommodate new entrants in the market. Indeed, the 1934 Act, as amended, requires this. We have attempted, therefore, wherever possible, to ensure that new entrants have access to numbering resources on the same basis as incumbents.

51. We conclude that ending the transition on January 1, 1998, will allow equipment upgrades and customer education to occur and also allow us to end the conservation plan as quickly as possible.

E. Procedural Matters

1. Final Regulatory Flexibility Analysis

52. The Commission's Final Regulatory Flexibility Analysis appears in Appendix C.

F. Ordering Clauses

53. Accordingly, IT IS ORDERED, pursuant to Sections 1, 4(i), 201-205, and 251(e)(1) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 201-205, and 251(e)(1), that the Second Report and Order is hereby ADOPTED.

¹⁵⁶ We restate this assessment of VarTec's opposition in the Final Regulatory Flexibility Analysis, Appendix C at para. 7.

¹⁵⁷ See, e.g., NANP Order at para. 4 (stating that telephone numbers are a public resource); The Need to Promote Competition and Efficient Use of Spectrum for Radio Common Carrier Services, Declaratory Ruling, 2 FCC Rcd 2910, 2912 (1987), recon., 4 FCC Rcd 2369 (1989) (stating that NXX codes are a national resource).

54. IT IS FURTHER ORDERED, that Bellcore, as the NANP administrator must notify all CIC assignees of the Commission's decision in this Second Report and Order, consistent with the terms described herein.

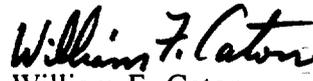
55. IT IS FURTHER ORDERED, that Bellcore, as the NANP administrator must assign CICs in conformity with the Commission's modification to the conservation plan in this Second Report and Order.

56. IT IS FURTHER ORDERED, that the PETITION FOR RULEMAKING filed by VarTec Telecom. Inc. is hereby DISMISSED IN PART and GRANTED IN PART to the extent contained herein.

57. IT IS FURTHER ORDERED, that the Commission directs the Common Carrier Bureau to take further actions modifying the conservation plan in response to changes in CIC consumption under its delegated authority.

58. IT IS FURTHER ORDERED, that this Second Report and Order is effective upon 30 days after publication in the Federal Register.

FEDERAL COMMUNICATIONS COMMISSION


William F. Caton
Acting Secretary

APPENDIX A: LIST OF PARTIES: APRIL 4, 1994 NPRM

Parties Filing Comments (June 7, 1994)

Ad Hoc Telecommunications Users Committee (Ad Hoc)
AirTouch Communications (AirTouch)
Alarm Industry Communications Committee (AICC)
Alliance for Telecommunications Industry Solutions (ATIS)
Allnet Communications Services, Inc. (Allnet)
American Mobile Telecommunications Association, Inc. (AMTA)
American Personal Communications (APC)
American Petroleum Institute (API)
American Public Communications Council (APCC)
Ameritech Operating Companies (Ameritech)
Association for Local Telecommunications Services (ALTS)
AT&T Corp (AT&T)
Bell Atlantic
Bell Communications Research, Inc. (Bellcore)
BellSouth Telecommunications, Inc. (BellSouth)
Canadian Steering Committee on Numbering (CSCN)
Cathay, Hutton & Associates, Inc. (CHA)
Cellular Telecommunications Industry Association (CTIA)
Cincinnati Bell Telephone Company (CBT)
Communications Managers Association (CMA)
Competitive Telecommunications Association (CompTel)
Dean Brothers Publishing Company (Dean Brothers)
GTE Service Corporation (GTE)
GVNW Inc./Management (GVNW)
McCaw Cellular Communications, Inc. (McCaw)
MCI Telecommunications Corporation (MCI)
MFS Communications Company, Inc. (MFS)
Missouri Public Service Commission (MoPSC)
National Association of Regulatory Utility Commissioners (NARUC)
National Communications System (NCS)
National Exchange Carrier Association, Inc. (NECA)
Nextel Communications, Inc. (Nextel)
North American Telecommunications Association (NATA)
NYNEX Corporation (NYNEX)
Organization for the Protection and Advance of Small Telephone Companies (OPASTCO)
Pacific Bell and Nevada Bell (Pacific)
Personal Communications Industry Association (PCIA)
Rock Hill (RHTC), Fort Mill (FMTC) and Lancaster Telephone Companies (LTC)
Southwestern Bell Corporation (SBC)
Sprint Corporation (Sprint)
Stentor Resource Centre Inc. (Stentor)
Telaccess

APPENDIX A (continued)**Parties Filing Comments (June 7, 1994) (continued)**

Tele-Communications Association (TA)
Telco Planning, Inc. (Telco Planning)
Telecommunications Resellers Association (TRA)
Teleport Communications Group Inc. (TCG)
United States Telephone Association (USTA)
US WEST, Inc. (US WEST)
Vanguard Cellular Systems, Inc. (Vanguard)
VarTec Telecom, Inc. (VarTec)

Parties Filing Reply Comments (June 30, 1994)

Ad Hoc
Aeronautical Radio, Inc. (ARINC)
ATIS
Allnet
ALTS
Ameritech
APCC
AT&T
Bell Atlantic
Comptel
CTIA
GTE
McCaw
MCI
MFS
NATA
National Telephone Cooperative Association (NTCA)
New York State Department of Public Service (NYDPS)
Nextel
NYNEX
Pacific
PCIA
SBC
Sprint
TA
TCG
Telco Planning
Telecommunications Services of Trinidad and Tobago Limited (TSTT)
USTA
US WEST

APPENDIX B: LIST OF PARTIES: APRIL 30, 1996 PUBLIC NOTICE

Parties Filing Comments (may 21, 1996)

AT&T
BellSouth
Bell Atlantic
Cincinnati Bell
GTE
MCI
NYNEX
Pacific Telesis
SBC
Telco Planning
US WEST
VarTec

Parties Filing Reply Comments (May 28, 1996)

AT&T
CompTel
GTE
Pacific Telesis
SBC
Sprint
U S WEST

APPENDIX C: FINAL REGULATORY FLEXIBILITY ANALYSIS

1. As required by the Regulatory Flexibility Act (RFA), 5 U.S.C. § 601 *et seq.*, the Commission considered regulatory flexibility issues in the Notice of Proposed Rulemaking (NPRM) in this proceeding, and certified that there was no significant economic impact on a substantial number of small entities.¹ The Commission sought written public comments on the proposals in the NPRM. Although there were no comments filed in response to the certification, as discussed below,² because of parties' concerns about the effect of our actions on small entities, we have reconsidered our certification in the NPRM and decided to undertake a Final Regulatory Flexibility Analysis (FRFA) in conformity with the RFA, as amended by the SBREFA.

A. Need for and Objectives of this Second Report and Order

2. This Second Report and Order addresses issues related to the expansion of Feature Group D carrier identification codes (Feature Group D CICs), and particularly the length of the transition, or permissive dialing period, during which both three and four digit Feature Group D CICs, and five and seven digit CACS, may be used. This Second Report and Order determines that the transition will end January 1, 1998. After that date, only four digit Feature Group D CICs, and seven digit Feature Group D CACS, may be used. The Commission's determinations in this Second Report and Order are consistent with the national telecommunications policy embodied in the 1934 Act, as amended by the Telecommunications Act of 1996, by seeking to promote the pro-competitive, deregulatory markets envisioned by Congress. With respect to the 1996 Act amendments to the 1934 Act, Congress and the Commission have recognized that lowering barriers to entry and promoting competition in the local exchange and long distance marketplace is desirable. Expansion of the number of possible Feature Group D CIC assignments should allow for more new entrants in the telecommunications services market, some of which may be small businesses. The Second Report and Order states that the Commission intends to initiate further proceedings in this docket in which the Commission shall analyze further all issues related to CIC use and assignment.

B. Analysis of Significant Issues Raised in Response to the Certification

3. In the NPRM, the Commission certified that the rules it proposed to adopt in this proceeding would not have a significant economic impact on a substantial number of small entities because "while the rules proposed in this proceeding would apply to

¹ See NPRM at para. 59. We note that the certification was issued prior to enactment of the amendments to the RFA in the Small Business Regulatory Enforcement Fairness Act of 1996 ("SBREFA"), which was enacted as Subtitle II of the Contract With America Advancement Act of 1996 (CWAAA), Pub. L. No. 104-121, 110 Stat. 847 (1996).

² See para. 3, *infra*.

telecommunications corporations of all sizes that are now assigned telephone numbers or that may in the future seek such assignments, the impact on small business entities served by these corporations and on small telecommunications companies is not likely to be significant."³ No comments were submitted in response to the certification. In response to the actions proposed in the NPRM, however, parties did express concern about the possible effects of our actions on small entities. Also, in a Petition for Rulemaking, VarTec contests the Commission's certification and requests that the Commission publish a regulatory flexibility analysis.⁴ Even though VarTec had the opportunity to address regulatory flexibility concerns in its comments to the NPRM, we will treat the petition as an ex parte communication and address these concerns. We will do so because the requirements governing agency treatment of regulatory flexibility issues have become more stringent while this docket has been open. We find that VarTec's regulatory flexibility concerns expressed in its petition merely repeat its request for grandfathering in its comments and other portions of the petition.⁵ However, because of parties' concerns about the effect of our actions on small entities, we have, on our own motion, reconsidered our certification in the NPRM and decided to undertake a FRFA.

4. In addition, we also consider and implement alternatives in this Second Report and Order that seek to benefit competing providers of telephone exchange service and telephone toll service which may include small business entities.⁶ Our determination to modify the conservation plan and end the transition as soon as practicable not only responds to possible hardships, such as costs and timing of conversion to four digit CIC capability, on small business entities but also will promote the competitive objectives of the Act, as amended. For example, in the Second Report and Order, we modify the CIC conservation plan to allow each entity to have two CIC assignments.⁷ The ability to have access to two CICs should be of particular benefit to smaller entities currently entering the telecommunications services market in their effort to compete with established carriers. We also determine that the transition must end as soon as practicable in order, among other things, to enable us to end the conservation plan, which limits the number of CIC assignments per entity, thus posing a particular disadvantage to new entrants, as soon as possible.

5. VarTec, in its Petition, reiterates its request in its comments that IXCs currently using CICs should be "grandfathered" from expansion, suggesting that the new seven digit

³ See NPRM at para. 59.

⁴ See Petition for Rulemaking, CC Docket No. 92-237, filed by VarTec Telecom Inc., May 11, 1995 (VarTec Petition) at 11. VarTec filed its petition prior to enactment of the CWAAA. We note that VarTec is a small business entity.

⁵ See para. 7, infra.

⁶ See para. 12, infra, for a discussion of the definition of small business.

⁷ See Second Report and Order at para. 31.

CACs, rather than replacing the five digit CACs, should "supplant" them.⁸ VarTec asks the Commission, if it is unable to implement grandfathering, to at least set a specific date for the termination of the permissive dialing period.⁹ VarTec offers an extensive overview of its experiences with different LECs when inquiring as to when IXCs would be required by the LECs' system to use four digit Feature Group D CICs.¹⁰ In addition, VarTec explains how a specific compliance date can help smaller IXCs plan for the change to four digit Feature Group D CICs.¹¹

6. In the Second Report and Order we deny requests that the Commission grandfather the continued use of three digit CICs already in use when the transition ends. Grandfathering would exempt these CICs from the conversion to four digits. The Second Report and Order denies such requests because grandfathering three digit Feature Group D CICs would make it impossible to assign four digit Feature Group D CICs other than those in the 5XXX and 6XXX range.¹² For the same reason, the Second Report and Order denies OPASTCO's request that the Commission refrain from requiring small companies to modify their switches until a "bona fide" request is submitted, and allow those companies at least eighteen months to comply after receiving such a request.¹³

7. As we stated in the Second Report and Order, after carefully reviewing the portion of VarTec's petition in which it contested the Commission's certification in the NPRM that the proposed rules would not have a significant economic impact on a substantial number of small entities, we find that VarTec's opposition is equivalent to, and restates, the request for grandfathering appearing in other parts of its petition and in its comments to the NPRM. We note that this Second Report and Order, which sets a date for the end of the transition, resolves VarTec's uncertainty regarding when the transition would end.¹⁴

⁸ See VarTec Petition at 13-14; Vartec Comments at 6.

⁹ See VarTec Petition at 16.

¹⁰ See id. at 6-10.

¹¹ See id. at 25 ("While competition in the interexchange telecommunications market is increasing, failure by the Commission to promulgate clear rules establishing practices and procedures utilized during the Feature Group D CIC expansion would provide larger telecommunications entities an unfair advantage over smaller telecommunications companies.").

¹² See Second Report and Order at para. 46. For an explanation of CICs in the 5XXX and 6XXX range, see id. at para. 7.

¹³ See id. at para. 46.

¹⁴ See id. at para. 49.

8. VarTec also requests that the Commission "establish national network criteria policies" pursuant to guidelines ensuring that end users are able to dial both three and four digit CICs during the permissive dialing period, setting a date by which LECs providing Feature Group D access services must have network facilities upgraded for both three and four digit CICs during the permissive dialing period, and setting a date by which IXCs must convert trunk group configurations to the four digit format.¹⁵ This Second Report and Order addresses each of these concerns.

9. Although no comments to the NPRM addressed the Commission's regulatory flexibility certification, we have reviewed the general comments for issues that might impact small businesses. In addition to VarTec, several other small entities filed comments to the NPRM. For example, GVNW Inc./Management (GVNW) GVNW Inc./Management (GVNW),¹⁶ supporting a six-year exemption from conversion obligations for smaller, rural telephone companies, in addition to the proposed six year permissive dialing period, contends that such an exemption is appropriate for their transition to be cost-effective.¹⁷ GVNW claims that the switches of smaller LECs generally do not have the most recent software upgrades because these companies are not always aware of the current changes because "of a lack of demand for new services offered in software updates."¹⁸ GVNW states that many manufacturers charge LECs for "each level of software update" which, according to GVNW, would lead to much expense in order to modify switches to accept four digit CIC codes.¹⁹ The Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO),²⁰ which represents more than 440 independently owned and operated telephone companies serving rural areas,²¹ supports a six-year transition to ease the economic burdens of switch conversion. OPASTCO suggests that the Commission, as it does with equal access requirements, refrain from requiring small companies to modify their switches until a "bona fide" request is submitted, and allow those companies at least eighteen months to comply after receiving such a request.²² The Alarm Industry Communications Committee (AICC) argues that the six-year period proposed by the Commission is necessary because

¹⁵ See VarTec Petition at 18.

¹⁶ See Second Report and Order at para. 18.

¹⁷ See GVNW Reply Comments at 1.

¹⁸ See GVNW Comments at 3.

¹⁹ See id.

²⁰ OPASTCO was formerly known as the Organization for the Protection and Advancement of Small Telephone Companies.

²¹ See OPASTCO Comments at 1.

²² See Second Report and Order at para. 18; OPASTCO Comments at 5-6.

certain alarm companies will need to engage in significant alarm panel reprogramming in order to implement the change from three to four digit CICs, and five to seven digit CACs.²³ AICC states that the majority of alarm panels employs an alerting device that seizes a telephone line serving protected premises and an autodialer that places a pre-programmed call to the central station over the public switched telephone network.²⁴ According to AICC, alarm panels must be individually reprogrammed, a process that requires an alarm company to arrange appointments with each affected subscriber so that alarm technicians can manually change the dialing pattern in each alarm panel installed within the protected premises.²⁵ AICC states that reprogramming must be completed in a timely fashion to avoid endangering life, safety, and property.²⁶

10. We note that commenters to the NPRM and the Public Notice issued April 30, 1996 (asking for further comments),²⁷ which included carriers of varying sizes, favored different time periods for the transition for Feature Group D CIC expansion. In the Second Report and Order, our modifications to the CIC conservation plan and our determination to end the transition as soon as practicable, thus allowing for a full conversion to four digit Feature Group D CICs, is not only consistent with our statutory obligation in Section 251(e) of the Act to ensure that numbers are "available on an equitable basis,"²⁸ but also responsive to possible hardships on small business entities such as costs and timing of conversion to four digit CIC capability.²⁹ The transition to the use of only four digit CICs also will serve the goal of Section 257 of the Act by reducing barriers to entry of new small carriers and perhaps other small entities.³⁰

11. The Second Report and Order finds that continuing the transition until January 1, 1998, properly balances the competing interests of callers, carriers, and equipment owners.

²³ See Second Report and Order at para. 19, AICC Reply Comments at 3. AICC, representing over 90 percent of the alarm securities provided throughout the United States, is a subcommittee of the Central Station Alarm Association. See AICC Reply Comments at 1.

²⁴ See AICC Reply Comments at 1-2.

²⁵ See id. at 2.

²⁶ See id.

²⁷ Further Comments, Carrier Identification Codes, CC Docket 92-237, Public Notice, DA 96-678 (Common Carrier Bureau, April 30, 1996).

²⁸ See 47 U.S.C. § 251(e).

²⁹ See Second Report and Order at paras. 29-31.

³⁰ See 47 U.S.C. § 257. The Commission issued a Notice of Inquiry in May 1996 to begin implementing Section 257. See In the Matter of Section 257 Proceeding to Identify and Eliminate Market Entry Barriers for Small Businesses, Notice of Inquiry, GN Docket No. 96-113, 11 FCC Rcd. 6280 (1996).

The Commission has balanced the hardships of a short transition, which may burden some carriers (perhaps smaller, rural carriers) and some equipment owners, by requiring them to reprogram and upgrade equipment more quickly than their business plans might have projected, and callers by requiring them to learn new, longer carrier access codes more quickly, against the hardships a long transition may impose upon new entrants. We also considered the burdens on such entities as providers of payphones, alarm companies, and small, rural carriers. The Second Report and Order finds that the decision to keep the transition in place until January 1, 1998, imposes any burdens that may occur equitably among all of the affected parties.³¹ Also, our decision to keep the conservation plan, as modified, in place as long as the transition continues takes into consideration that abolishing the conservation plan during the transition would likely cause rapid depletion of unassigned four digit CICs in the 5XXX and 6XXX range and necessitate a flash-cut conversion to four digit codes. A sudden shift to four digit codes could be a particularly detrimental outcome for smaller carriers and equipment owners who could need to modify or replace their systems to support four digit CICs. A flash-cut conversion would give no warning to those members of the industry who have yet to prepare their equipment, switches, and networks for the conversion and no warning to callers that they may no longer dial five digit CACs, but instead must dial seven digit CACs. For these reasons we find any disadvantages resulting from continuation of the conservation plan to be less burdensome than the harm of a flash-cut conversion.³²

C. Description and Estimates of the Number of Small Entities Affected by this Second Report and Order

12. The RFA defines "small entity" to include the definition of "small business concern" under the Small Business Act, 15 U.S.C. § 632.³³ Under the Small Business Act, a "small business concern" is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) meets any additional criteria established by the Small Business Administration (SBA).³⁴ The SBA has defined companies listed under Standard Industrial Classification (SIC) categories 4812 (radiotelephone communications) and 4813 (telephone communications, except radiotelephone) to be small entities when they have 1500 or fewer employees.³⁵ These standards also apply in determining whether an entity is a small business for purposes of the RFA.

³¹ See Second Report and Order at para. 35.

³² See id. at para. 30.

³³ See 5 U.S.C. § 601(6) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632).

³⁴ See 15 U.S.C. § 632(1)(a).

³⁵ See 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Codes 4812 and 4813 (SIC 4812 and SIC 4813, respectively).

13. Because the small incumbent LECs that would be subject to these rules are either dominant in their field of operations or are not independently owned and operated, consistent with our prior practice, they are excluded from the definition of "small entity" and "small business concerns."³⁶ Accordingly, our use of the terms "small entities" and "small businesses" does not encompass small incumbent LECs.³⁷ Out of an abundance of caution, however, for regulatory flexibility analysis purposes, we will consider small incumbent LECs within this analysis and use the term "small incumbent LECs" to refer to any incumbent LECs that arguably might be defined by SBA as "small business concerns."

14. The decisions made by the Commission in this Second Report and Order may apply to a variety of entities listed below.

15. Local Exchange Carriers. Neither the Commission nor SBA has developed a definition of small entity specifically applicable to providers of local exchange services. The closest applicable definition is that under SBA rules for telephone communications, except radiotelephone, SIC 4813, which defines a small entity as one with 1500 or fewer employees. The most reliable source of information regarding the number of LECs nationwide of which we are aware appears to be the data that we collect annually in connection with the Telecommunications Relay Service (TRS). According to our most recent data, 1,347 companies reported that they were engaged in the provision of local exchange service.³⁸ Although it seems certain that some of these carriers are not independently owned and operated, or have more than 1500 employees, we are unable at this time to estimate with any more certainty the number of LECs that would qualify as small business concerns. Consequently, we estimate that there are fewer than 1,347 small incumbent LECs that may be affected by the decision and rules adopted in this Second Report and Order.

16. Interexchange Carriers. Neither the Commission nor SBA has developed a definition of small entity specifically applicable to providers of interexchange services (IXCs). The closest applicable definition is that under SBA rules for telephone communications, except radiotelephone, SIC 4813. The most reliable source of information regarding the number of IXCs nationwide of which we are aware appears to be the data that we collect annually in connection with TRS. According to our most recent data, 130 companies reported that they were engaged in the provision of interexchange services, and 30 companies reported

³⁶ See Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, First Report and Order, 11 FCC Rcd 15499 (1996) (First Interconnection Order), motion for stay of the FCC's rules pending judicial review denied, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Order, 11 FCC Rcd 11754 (1996), partial stay granted, Iowa Utilities Board v. FCC, No. 96-3321, 1996 WL 589204 (8th Cir. Oct. 15, 1996) (Iowa Utilities Board v. FCC) at paras. 1328-1330 and 1342.

³⁷ See id. at para. 1342.

³⁸ Federal Communications Commission, CCB, Industry Analysis Division, Telecommunications Industry Revenue: TRS Fund Worksheet Data, Tbl. 1 (Average Total Telecommunications Revenue Reported by Class of Carrier) (Dec. 1996) (TRS Worksheet).

they were engaged in "other" toll services.³⁹ Although it seems certain that some of these carriers are not independently owned and operated, or have more than 1500 employees, we are unable at this time to estimate with greater precision the number of IXC's that would qualify as small business concerns under SBA's definition. Consequently, we estimate that there are fewer than 130 small entity IXC's and 30 "other" toll carriers that may be affected by the decision and rules adopted in this Second Report and Order.

17. Wireless Service Providers. Neither the Commission nor SBA has developed a definition of small entity specifically applicable to providers of wireless services. The closest applicable definition is that under SBA rules for radiotelephone communications, SIC 4812, which defines a small entity as one with 1500 or fewer employees. The 1992 Census of Transportation, Communications, and Utilities, conducted by the Bureau of the Census, shows that only 12 radiotelephone firms out of a total of 1,176 such firms that operated during 1992 had 1,000 or more employees.⁴⁰ Therefore, even if all 12 of these large firms were radiotelephone companies, all of the remainder were small businesses under the SBA's definition. We assume that, for purposes of our evaluations and conclusions in the FRFA, all of the current radiotelephone licensees are small entities, as that term is defined by the SBA.

18. Cellular and Mobile Radio Telephone Service. In an effort to further refine our calculation of the number of radiotelephone companies affected by the rules adopted herein, we consider the categories of radiotelephone carriers, Cellular Service Carriers and Mobile Service Carriers. Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to Cellular Service Carriers and to Mobile Service Carriers. The closest applicable definition under SBA rules for both services is for telephone companies other than radiotelephone (wireless) companies. The most reliable source of information regarding the number of Cellular Service Carriers and Mobile Service Carriers nationwide of which we are aware appears to be the data that we collect annually in connection with the TRS. According to our most recent data, 792 companies reported that they are engaged in the provision of cellular services and 138 companies reported that they are engaged in the provision of mobile services.⁴¹ Although it seems certain that some of these carriers are not independently owned and operated, or have more than 1,500 employees, we are unable at this time to estimate with greater precision the number of Cellular Service Carriers and Mobile Service Carriers that would qualify as small business concerns under SBA's definition. Consequently, we estimate that there are fewer than 792 small entity Cellular Service Carriers and fewer than 138 small entity Mobile Service Carriers that might

³⁹ Id. Firms filing TRS Worksheets are asked to select a single category that best describes their operation. As a result, some carriers describes themselves as IXC's, some as resellers, some as OSP's, and some as "other."

⁴⁰ U.S. Bureau of the Census, U.S. Department of Commerce, 1992 Census of Transportation, Communications, and Utilities, UC92-S-1, Subject Series, Establishment and Firm Size, Table 5, Employment Size of Firms: 1992, SIC 4812 (issued May 1995).

⁴¹ See TRS Worksheet.

be affected by the actions and rules adopted in this Second Report and Order. We assume that all of the current rural cellular and mobile licensees are small businesses.

19. Personal Communications Service. The broadband PCS spectrum is divided into six frequency blocks designated A through F and the Commission has held auctions for each block. The Commission defined "small entity" for Blocks C and F as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.⁴² For Block F, an additional classification for "very small business" was added and is defined as an entity that, together with their affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.⁴³ These regulations defining "small entity" in the context of broadband PCS auctions have been approved by the SBA. No small businesses within the SBA-approved definition bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 small and very small business bidders won approximately 40% of the 1,479 licenses for Blocks D, E, and F.⁴⁴ However, licenses for blocks C through F have not been awarded fully, therefore there are few, if any, small businesses currently providing PCS services. Based on this information, we conclude that the number of small broadband PCS licensees will include the 90 winning C Block bidders and the 93 qualifying bidders in the D, E, and F blocks, for a total of 183 small PCS providers as defined by the SBA⁴⁵ and the Commission's auction rules.

20. Paging and Radiotelephone Service, and Private Land Mobile Radio Services, Paging Operations. Neither the Commission nor SBA has developed a definition of small entity specifically applicable to providers paging services. The closest applicable definition is that under SBA rules for radiotelephone communications, SIC 4812, which defines a small entity as one with 1500 or fewer employees. The Commission anticipates that a total of 15,531 non-nationwide geographic area licenses will be granted or auctioned. The geographic area licenses will consist of 3,050 MTA licenses and 12,481 EA licenses. In addition to the 47 Rand McNally MTAs, the Commission is licensing Alaska as a separate MTA and adding three MTAs for the U.S. territories, for a total of 51 MTAs. No auctions of paging licenses have been held yet, and there is no basis to determine the number of licenses that will be awarded to small entities. Because nearly all radiotelephone companies have fewer than 1,000 employees, and no reliable estimate of the number of prospective paging licensees can be

⁴² See Amendment of Parts 20 and 24 of the Commission's Rules -- Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, Report and Order, FCC 96-278, WT Docket No. 96-253, paras. 57-60 (rel. June 24, 1996); See also 47 C.F.R. § 24.720(b).

⁴³ See Amendment of Parts 20 and 24 of the Commission's Rules -- Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, Report and Order, FCC 96-278, WT Docket No. 96-253, para. 60 (1996).

⁴⁴ FCC News, Broadband PCS, D, E and F Block Auction Closes, Mimeo No. 71744 (rel. Jan. 14, 1997).

⁴⁵ See para. 17, supra.

made, we assume, for purposes of this FRFA, that all the 15,531 geographic area paging licenses will be awarded to small entities, as that term is defined by the SBA. We estimate that the approximately 600 current paging carriers could partition or disaggregate a license or take the opportunity to obtain an additional license through partitioning or disaggregation. We estimate that up to 48,393 licensees or potential licensees could take the opportunity to partition or disaggregate a license or obtain a license through partitioning or disaggregation. This estimate is based on the total estimate of paging carriers (approximately 600) and non-nationwide geographic area licenses to be awarded (15,531) and our estimate that each license will probably not be partitioned or disaggregated among more than three parties. Because nearly all radiotelephone companies have fewer than 1,000 employees, and no reliable estimate of the number of future paging licensees can be made, we assume for purposes of this FRFA that all of the licensees will be awarded to small businesses. We believe that it is possible that a significant number of the estimated 48,393 licensees or potential licensees who could take the opportunity to partition or disaggregate a license or who could obtain a license through partitioning or disaggregation will be a small business.

21. Competitive Access Providers. Neither the Commission nor SBA has developed a definition of small entity specifically applicable to providers of competitive access services (CAPs). The closest applicable definition is that under SBA rules for telephone communications, except radiotelephone, SIC 4813, which defines a small entity as one with 1500 or fewer employees. The most reliable source of information regarding the number of CAPs nationwide of which we are aware appears to be the data that we collect annually in connection with TRS. According to our most recent data 57 companies reported that they were engaged in the provision of competitive access services.⁴⁶ Although it seems certain that some of these carriers are not independently owned and operated, or have more than 1500 employees, we are unable at this time to estimate with greater precision the number of CAPs that would qualify as small business concerns under SBA's definition. Consequently, we estimate that there are fewer than 57 small entity CAPs that may be affected by the decision and rules adopted in this Second Report and Order.

22. Operator Service Providers. Neither the Commission nor SBA has developed a definition of small entity specifically applicable to providers of operator services. The closest applicable definition is that under SBA rules for telephone communications, except radiotelephone, SIC 4813. The most reliable source of information regarding the number of operator service providers nationwide of which we are aware appears to be the data that we collect annually in connection with TRS. According to our most recent data 25 companies reported that they were engaged in the provision of operator services.⁴⁷ Although it seems certain that some of these carriers are not independently owned and operated, or have more than 1500 employees, we are unable at this time to estimate with greater precision the number

⁴⁶ See TRS Worksheet.

⁴⁷ Id.

of operator service providers that would qualify as small business concerns under SBA's definition. Consequently, we estimate that there are fewer than 25 small entity operator service providers that may be affected by the decision and rules adopted in this Second Report and Order.

23. Pay Telephone Operators. Neither the Commission nor SBA has developed a definition of small entity specifically applicable to providers of pay telephone operator services. The closest applicable definition is that under SBA rules for telephone communications, except radiotelephone, SIC 4813. The most reliable source of information regarding the number of pay telephone operators nationwide of which we are aware appears to be the data that we collect annually in connection with TRS. According to our most recent data, 271 companies reported that they were engaged in the provision of pay telephone services.⁴⁸ Although it seems certain that some of these carriers are not independently owned and operated, or have more than 1500 employees, we are unable at this time to estimate with greater precision the number of pay telephone operators that would qualify as small business concerns under SBA's definition. Consequently, we estimate that there are fewer than 271 pay telephone operators that may be affected by the decision and rules adopted in this Second Report and Order.

24. Resellers. Neither the Commission nor the SBA has developed a definition of small entity specifically applicable to resellers. The closest applicable definition is that under SBA rules for all telephone communications companies, SIC 4812 and SIC 4813, combined, both of which define a small entity as one with 1500 or fewer employees. The most reliable source of information regarding the number of resellers nationwide of which we are aware appears to be the data that we collect annually in connection with TRS. According to our most recent data, 260 companies reported that they were engaged in the resale of telephone services.⁴⁹ Although it seems certain that some of these carriers are not independently owned and operated, or have more than 1500 employees, we are unable at this time to estimate with greater precision the number of resellers that would qualify as small business concerns under SBA's definition. Consequently, we estimate that there are fewer than 260 small entity resellers that may be affected by the decision and rules adopted in this Second Report and Order.

25. Telecommunications Equipment Manufacturers. The SBA classifies manufacturers of telecommunications equipment in two categories, one for wireless and another for wireline.

26. Wireline Telecommunications Equipment Manufacturers. Neither the Commission nor the SBA has developed a specific definition of small entities applicable to

⁴⁸ Id.

⁴⁹ Id.

manufacturers of wireline telecommunications equipment. Therefore, we will utilize the SBA definition of manufacturers of Telephone and Telegraph Apparatus. According to the SBA's regulations, a small entity must have 1000 or fewer employees in order to qualify as a small business concern.⁵⁰ Census Bureau data indicates that there are 479 U.S. firms that manufacture telephone and telegraph equipment, and that 436 of these firms have fewer than 1000 employees and would be classified as small entities.⁵¹ The Census Bureau category is very broad, and specific figures are not available as to how many of these firms are manufacturers of wireline telecommunications equipment that would be subject to these rules or how many are independently owned and operated. Consequently, we estimate that there are fewer than 436 small manufacturers of wireline telecommunications equipment.

27. Wireless Telecommunications Equipment Manufacturers. Neither the Commission nor the SBA has developed a specific definition of small entities applicable to manufacturers of wireless telecommunications equipment. Therefore, we will utilize the SBA definition of manufacturers of Radio and Television Broadcasting and Communications Equipment.⁵² According to the SBA's regulations, a small entity must have 750 or fewer employees in order to qualify as a small business concern.⁵³ Census Bureau data indicates that there are 858 U.S. firms that manufacture radio and television broadcasting and communications equipment, and that 778 of these firms have fewer than 750 employees and would be classified as small entities.⁵⁴ The Census Bureau category is very broad, and specific figures are not available as to how many of these firms are manufacturers of wireless telecommunications equipment or how many are independently owned and operated. Consequently, we estimate that there are fewer than 778 small manufacturers of wireless telecommunications equipment.

28. Fire and Burglar Equipment Manufacturers. The Commission has not developed a definition of small entities applicable to manufacturers of fire and burglar alarm equipment. We will utilize the SBA classification of such manufacturers under Communications Equipment Not Elsewhere Classified. This definition provides that a small entity is an alarm equipment manufacturer employing 750 or less persons.⁵⁵ Census Bureau

⁵⁰ 13 C.F.R. § 121.201, SIC 3661.

⁵¹ U.S. Dept. of Commerce, 1992 Census of Transportation, Communications and Utilities, Table 1D, (issued May 1995), SIC 3661.

⁵² This category excludes establishments primarily engaged in the manufacturing of household audio and visual equipment which is categorized as SIC 3651.

⁵³ 13 C.F.R. § 121.201, SIC 3663.

⁵⁴ U.S. Dept. of Commerce, 1992 Census of Transportation, Communications and Utilities, Table 1D, (issued May 1995), SIC 3663.

⁵⁵ 13 C.F.R. § 121.201, SIC 3669.

data indicates that there are 498 U.S. firms that manufacture alarm equipment, and that 469 of these firms have fewer than 750 employees and would be classified as small entities.⁵⁶ The Census Bureau category is very broad, and includes manufacturers of other equipment such as traffic signalling and intercommunications equipment. Specific figures are not available as to how many of these firms produce alarm equipment or how many are independently owned and operated. Consequently, we estimate that there are fewer than 469 small manufacturers of alarm equipment that may be affected by the decision and rules adopted in this Second Report and Order.

29. Alarm Service Providers. The SBA has developed a definition of alarm service providers (SIC 7382) which are entities that are primarily engaged in the monitoring and maintenance of security systems devices, such as burglar and fire alarms.⁵⁷ According to the SBA, a small security system provider must have \$9 million or less in annual receipts.⁵⁸ Census Bureau data reports that there were 2,190 security system service providers with \$7.499 million or less in annual receipts and 2,200 with less than \$9.999 million in annual receipts.⁵⁹ Therefore, we tentatively conclude that there are approximately 2,190 small security system service providers that may be affected by the decision and rules adopted in this Second Report and Order.

D. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements of the Rules

30. Bell Communications Research (Bellcore) Bellcore, as the NANP administrator, is required to notify all CIC assignees of the decision in this Second Report and Order, consistent with the terms described therein. Furthermore, Bellcore, as the NANP administrator must assign CICs in conformity with the Commission's modification to the conservation plan in this Second Report and Order. There are no specific reporting, recordkeeping or other compliance requirements imposed by this Second Report and Order on other entities.

⁵⁶ U.S. Dept. of Commerce, 1992 Census of Transportation, Communications and Utilities, Table 1D, (issued May 1995), SIC 3669.

⁵⁷ Standard Industrial Classification Manual, (SIC) 7382, Executive Office of the President, Office of Management and Budget (1987).

⁵⁸ 13 C.F.R. § 121.201, SIC 7382.

⁵⁹ 1992 Economic Census Industry and Enterprise Receipts Size Report, Table 2D, SIC 7382 (U.S. Bureau of the Census data under contract to the Office of Advocacy of the U.S. Small Business Administration).

E. Significant Alternatives Minimizing Impact on Small Entities and Consistent with Stated Objectives

31. As noted above, by keeping the conservation plan, as modified, in place as long as the transition continues, and by setting a date to end the transition, we avoid a flash-cut conversion that could be detrimental in particular to smaller carriers and equipment owners that could need to modify or replace their systems to support four digit CICs.⁶⁰ We considered various alternatives, such as reclamation of unused CICs. In the Second Report and Order, we conclude that VarTec's suggestion that we reclaim three digit Feature Group D CICs as an alternative to replacing them with four digit Feature Group D CICs is not a plausible long-term solution. Although reclamation of three digit CICs may provide some short-term relief, the total number of available three digit Feature Group D CICs would continue to be less than one thousand.⁶¹

32. In determining to end the transition on January 1, 1998, we considered all arguments raised by parties and, as stated above, this determination carefully balances the competing interests of callers, carriers, and equipment owners.

F. Report to Congress

33. The Commission shall send a copy of this Final Regulatory Flexibility Analysis, along with this Second Report and Order, in a report to Congress pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996, 5 U.S.C. § 801(a)(1)(A). A copy of this FRFA will also be published in the Federal Register.

⁶⁰ See Second Report and Order at para. 30.

⁶¹ See id. at para. 28. According to Bellcore, the three digit Feature Group D CIC format can only provide the industry with 969 CICs. See Letter from Nancy K. Fears, NANP Administration, to Octavia Florence of the Common Carrier Bureau, Dated July 9, 1996. Therefore, a maximum of 969 three digit CICs are available for all members of the industry, and reclamation will not increase this number. See Second Report and Order at footnote 108.