

Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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[JAN 28 1993]

In the Matter of)
)
Amendment of the)
Commissions' Rules to Define)
Effective Means for Interworking)
of Customer Premise Equipment and)
Public Enhanced 9-1-1 Systems)

RM-8143

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

COMMENTS OF THE
NORTH AMERICAN TELECOMMUNICATIONS ASSOCIATION

The North American Telecommunications Association ("NATA") hereby submits comments in response to the Commission's Public Notice, Report No. 1922, released December 29, 1992, on the Petition for Rule Making of Adcomm Engineering Company. Adcomm requests amendments to Part 68 of the Commission's Rules to address issues concerning the availability of location information for E911 service.

STATEMENT OF INTEREST

NATA is a trade association of more than 600 manufacturers, suppliers, distributors, retailers and users of customer premises equipment ("CPE"). Founded in 1970, NATA exists to promote competitive markets and healthy sales and support channels for users of business and public communications products and services. NATA has actively participated in FCC proceedings affecting CPE markets. NATA supports regulatory policies that promote fair competition in the telecommunications equipment and services distribution marketplace.

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DISCUSSION

Adcomm's petition seeks to address an issue which has arisen as a result of technological improvements in emergency telecommunications service. The advanced form of emergency telecommunications service known as E911 service allows important improvements in the efficiency of emergency service response. With E911 service, the telephone number associated with a line is transmitted to the answering point, which then retrieves from a data base the location address associated with the number transmitted.

The issue that Adcomm seeks to address results from these technological improvements. The introduction of E911 service has tended to create an expectation on the part of emergency personnel that the precise location of an emergency can be pinpointed in every case. However, with the current configuration of the service, the location information available to the emergency answering point can be only as precise as the telephone number information which is transmitted to that point from the local exchange telephone network. Ordinary switched local exchange telephone services do not provide a means for the telephone company to accept the transmission of specific station numbers from PBXs and other customer premises communications systems. Therefore, CPE does not routinely transmit such information, and the information transmitted to the E911 answering point by the telephone company on E911 calls from a multiline CPE customer is generally limited to the billing number established for that customer by the telephone company. As Adcomm points out, the result is that the

E911 technology does not by itself necessarily provide a reliable indication of the location of an emergency in those cases where more than one address is served by the same local exchange line(s).

I. NATA'S BASIC CONCERNS

NATA believes the FCC should lead an industry effort to address the issue raised in Adcomm's petition. However, we have serious concerns about the approach to the issue that is advocated by Adcomm.

The thrust of Adcomm's petition appears to be to require PBXs, as a condition of registration under Part 68, to demonstrate "compatibility" with "E911 emergency service trunks." Proposed section 68.114 of the rules would require such compatibility to be demonstrated for "all registered telephone equipment capable of supporting off-premise telephone stations that may be used for access to public emergency services." Since most PBXs are capable of supporting off-premise telephone stations, the proposed rules would effectively impose a new technical requirement on PBXs generally. In addition, a number of requirements that go beyond equipment design would be imposed on CPE users.

However, the problem that Adcomm seeks to address is not exclusively, or even primarily, a "CPE" problem. It is not attributable to any "defect" in CPE design or to mistakes on the part of CPE manufacturers. Historically, local exchange carriers ("LECs") have not offered PBXs or other CPE the type of interconnection on switched services that would enable CPE systems to transmit station identification information in a format that

would be accepted and processed by the telephone network. Accordingly, there has been no reason for manufacturers to design CPE that would routinely transmit such information to telephone network switches.

Further, the problem is not one of CPE-network "compatibility," as Adcomm suggests. If the issue were "compatibility," then there would have to be some network service, available at a reasonable price, to which the "incompatible" CPE, after appropriate modifications, could interconnect. However, such network services have not been shown to exist. As NATA is informed, the dedicated "E911 emergency service trunks" referred in the petition are just beginning to be offered by local telephone companies, and the rates charged will be substantial. Treating this as a "compatibility" problem suggests there is a relatively simple CPE "fix". There is not. Thousands of customers are affected, and the costs of "fixing" both CPE and network services appear to be very high.

NATA is collecting information about this issue and exploring possible solutions, as are other industry groups. There are a number of possible technical approaches, and a variety of views as to the scope of the problem and appropriate solutions. In NATA's view, while it is important to move ahead with improvements of emergency service capabilities, it is also important to avoid adopting regulatory requirements that may prematurely "lock in" the industry to extremely costly solutions and that could impose

unreasonable burdens on one industry sector -- such as PBX customers and their suppliers.

As an initial matter, therefore, the FCC needs to recognize that this is not a CPE problem -- it is an industry problem. As discussed above, it is obviously desirable to improve the precision with which the location of emergencies can be pinpointed, if that can be done in a cost-effective manner. In addition, there are pending proposals in a number of states and localities that would place obligations on some categories of CPE users to transmit ANI-type signals to the E911 answering point. There is something to be said for developing a uniform industrywide solution. It may be appropriate to incorporate such a solution in FCC rules. However, the FCC should not focus exclusively on CPE design, because CPE design is less than half the problem.

The FCC also needs to consider carefully whether it is not equally important to adopt rules governing the type of interconnection that should be offered by telephone companies to facilitate the cost-effective transmission of appropriate information to the E911 answering point. In this regard, NATA is very concerned about the nature of and costs associated with the "E911 emergency service trunks" referenced in the proposed rules. The proposed rules define such trunks as "analog two-wire or four-wire channels supporting either E&M type 1 or E&M type 3 signaling." See proposed section 68.3. However, the petition provides little detail on the nature of the service that would be provided over such trunks, how much it would cost, and who would pay those costs.

such trunks, how much it would cost, and who would pay those costs. As NATA is informed, the service being contemplated is a dedicated trunk from the customer premises to the E911 answering point. Such dedicated trunks generally are offered at a very substantial charge to the end user. If required to subscribe to such trunks and pay the charges themselves, most PBX customers would face a very burdensome increase in their telecommunications costs.¹ Part 68 rules should not be hurriedly amended to require costly redesign of CPE for the purpose of interfacing with a special telephone company service, especially if that special telephone company service itself imposes unnecessary high costs on the PBX user.

In examining the issues raised in Adcomm's petition, therefore, the FCC should fully investigate the nature of and costs associated with the telephone company service with which Adcomm proposes PBXs must be designed to be "compatible." The Commission also should investigate whether there are other less costly ways of addressing the issue Adcomm raises. Before imposing any new design rules on equipment manufacturers, it would seem more appropriate to adopt rules to ensure that telephone companies develop and make available the least costly practicable form of

¹ Presumably, similar trunks would not be required for the typical Centrex user, because the automatic identified outward dialing (AIOD) feature of Centrex service already provides a sufficiently precise station identification that can be transmitted to the E911 answering point. Thus, imposition of all the costs of the emergency trunk service, as well as equipment changes, on PBX users would cause a dramatic change in the competitiveness of PBX vis-a-vis Centrex service.

E911 interconnection to all users, and that the costs of such interconnection are fairly distributed.

In short, the FCC should address this matter as an industry problem, not a "CPE" problem. The Commission should convene and lead a forum of interested industry parties, and should direct the industry forum to develop a cost-effective means of E911 interconnection.

II. SPECIFIC PROVISIONS

In addition to these fundamental concerns, NATA has a number of concerns with the specific rule amendments proposed by Adcomm. Proposed section 68.106 describes requirements for customers to provide certain information to the telephone company when they subscribe to "E911 emergency services trunks." Even assuming that the proposed CPE design specifications were appropriately incorporated into FCC rules, NATA does not see why there is any need to incorporate specific customer notification requirements. Unless the FCC decides to require telephone companies to offer PBX users a specific type of E911-related interconnection, there does not appear to be any reason to impose specific notification requirements regarding a service which is otherwise left mostly undefined.

Further, NATA questions the inclusion of proposed section 68.228 in any rules that the FCC decides to adopt. The proposed verification procedures would impose detailed requirements on PBX users in the absence of any corresponding detail as to the type of service with which they may be required to interconnect. Indeed,

the rule proposes to leave the definition of "emergency response locations" -- the types of locations that must be associated with unique 8-digit ANIs -- entirely to the discretion of local authorities. See proposed section 68.3. Thus, the rule would impose new legal burdens on PBX users while leaving it to local authorities to determine the actual extent of the legal obligations thereby imposed.

NATA also questions Section 68.228(c) of the proposed rules, which would impose new training requirements on CPE installation personnel. Part 68 generally leaves it to manufacturers to ensure that those installing equipment are adequately trained to follow correct procedures. NATA does not see a need to depart from that approach here.

Proposed sections 68.320(b) and (c) contain requirements that reference standards published by other bodies. Assuming that equipment design standards for E911 were appropriately included in Part 68, the standards themselves should be stated in the rules, so that there is no question as to the legal requirements with which manufacturers must comply.

Finally, proposed section 68.320(e) states that "the minimum number of (E) 9-1-1 emergency services trunks connecting a private switch to the telephone network shall be one (1)." The section goes on to provide a specific blocking ratio that apparently would require "private switch" owners to subscribe to more than one "emergency services trunk" under some circumstances. Thus, this proposed rule appears to be a requirement for all "private switch"

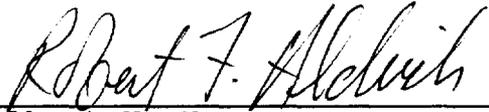
owners to subscribe to at least one, and in some cases more than one, "emergency service trunk." As discussed above, it is not clear to NATA that such a requirement is appropriately imposed on any PBX user as a matter of federal regulation, and it is certainly not appropriate to impose such a requirement on all PBX users, most of whom do not have any off-premise extensions.

CONCLUSION

The FCC needs to consider carefully whether federal regulation is appropriate in this area, and if so, what type of regulation. Equipment design questions are intimately related to questions about the type of telephone company service that should be provided to facilitate E911 interconnection of CPE, the costs associated with such service, and the manner in which such costs should be recovered. The Commission should seek to ensure that, if solutions are adopted at a national, industrywide level, they utilize the most cost-effective approach, and are structured so as to avoid placing unreasonable burdens on CPE users and their suppliers. The

Commission should convene and lead an industry forum of interested parties and direct that forum to develop a cost-effective means of interconnecting E911 service with CPE.

Respectfully submitted,



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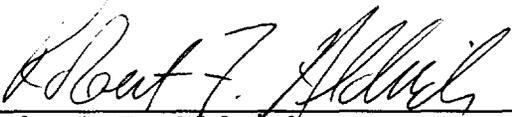
January 28, 1993

Attorneys for North American
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CERTIFICATE OF SERVICE

I HEREBY certify on this 28th day of January, 1993, a true and correct copy of the foregoing Comments of North American Telecommunications Association was mailed first-class to:

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