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

In the Matter of)
)
Revision of the Commission's)
rules to ensure compatibility)
with enhanced 911 emergency)
calling systems)

CC Docket No. 94-102
RM-8143

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FEDERAL COMMUNICATIONS COMMISSION
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COMMENTS OF GE CAPITAL-RESCOM

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SUMMARY

GE Capital-ResCom currently provides residential multi-tenant telecommunications services in twelve states and has approximately 18,000 customers. The Company generally supports the rules proposed by the Commission in the Notice. However, GE Capital-ResCom urges the Commission to carefully balance the need to achieve compatibility with the burdens that are placed on companies before adopting any rules. Companies that are able to provide the desired 911 information should not be unreasonably constrained with stringent compatibility requirements.

Specifically, GE Capital-ResCom supports the Commission's conclusion that callers at PBX stations should have the ability to reach emergency services by dialing 911 without having to dial any additional digits. An educational program is not a satisfactory alternative to this proposal because many users will not remember the necessary access codes and the program would be of no benefit to young children and users who do not speak English.

Contrary to the Commission's proposal, GE Capital-ResCom believes that PBX equipment that is manufactured or imported prior to the implementation of the rules should not be required to be labelled with emergency dialing instructions because of numerous compliance and enforcement problems raised by this proposal. The Commission should instead "grandfather" all existing PBX installations, require the incorporation of PBX 911 for any new equipment installations and require that manufacturers offer PBX 911 implementation as an upgrade option.

The Company supports the Commission's proposal to require that PBX equipment be capable of notifying an on-premises attendant when a 911 call is dialed

but does not believe that it is necessary for the attendant to be "bridged on" to the call to gather this information. GE Capital-ResCom believes that the Commission should not allow the use of artificial SNIs because it will only complicate the coordination and verification of database information and other less burdensome alternatives exist.

The Company agrees with the Commission's proposal to require coordination procedures to ensure accurate and timely transmission of database information by PBX owners to LECs. GE Capital-ResCom endorses the tentative conclusion that a nationwide information protocol standard should be adopted and supports use of the NENA format for all ALI databases. However, the Company believes that it is not necessary to standardize the network data link interfaces because the procedures currently used by the LECs are sufficient. Although standardization would be beneficial, it may delay implementation and/or increase the associated costs.

In order to alleviate the burden on small businesses, GE Capital-ResCom believes that MLTS owners should not be required to supply ANI or ALI if all of the extensions of the MLTS are located at the same address and that address is the ALI for the trunks. As long as the current information in the ALI database is sufficient to direct emergency personnel to the exact location, there is no need to burden the companies with additional requirements. Finally, GE Capital-ResCom believes that the Commission's goal of nationwide compatibility with enhanced 911 systems can best be achieved by preempting state and local regulation in this field. The need to provide dependable and compatible 911 emergency service is so vital to the public health and safety that national uniformity is required.

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To: The Commission

COMMENTS OF GE CAPITAL-RESCOM

GE Capital-ResCom (or the "Company"), through its attorneys, hereby submits its comments in response to the Commission's Notice of Proposed Rule Making on 911 compatibility.¹ GE Capital-ResCom is a joint venture between GE Capital and ResCom, Inc. which provides telecommunications services to multi-family apartment buildings in various states throughout the country pursuant to shared tenant services tariffs. ResCom, Inc. began operations in 1993 and is an outgrowth of a division of R&B Realty group that has operated private telephone systems since 1986.

GE Capital-ResCom currently operates in twelve states and plans to operate in five other states in the near future. The Company has filed reseller tariffs in those states that require tariffs. GE Capital-ResCom has installed over 60 Residential Multi-Tenant Services ("RMTS") telecommunications systems and has approximately 18,000 customers. GE Capital-ResCom also has been involved in various task forces and

¹ Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Notice of Proposed Rule Making, CC Docket No. 94-102 (October 19, 1994) ("Notice").

action committees for implementation of Private Branch Exchange/Automatic Location Identification ("PBX/ALI") or Private Switch/Automatic Location Identification ("PS/ALI").

GE Capital-ResCom generally supports the rules proposed by the Commission in the Notice. In particular, the Company endorses the Commission's efforts to require manufacturers to establish 911 connectivity within the private branch exchanges ("PBXs"). It also supports the Commission's efforts to allow access to the Automatic Location Identification ("ALI") database. Because the Company currently is a wireline provider of telecommunications services, its comments do not address the proposed requirements for wireless providers.² These comments generally discuss areas of disagreement or areas that the Company believes need clarification.

I. GE Capital-ResCom currently operates PBX 911 notification systems that provide rapid and sufficient information to emergency personnel.

GE Capital-ResCom is an innovator in the developing field of PBX 911 notification systems. For example, in Texas, the Company was the first private switch provider to be certified to be in compliance with the Texas Health and Safety Act ("Act"). GE Capital-ResCom has been certified by Greater Harris County 911 and City of Dallas 911 for compliance with the Act and the Company currently has over 15 installations in Texas that conform to the Act's requirements for 911 notification.

² However, GE Capital ResCom is interested in becoming a provider of wireless services if and when those services become available to private switch providers.

The Texas Act requires use of Centralized Automatic Message Accounting ("CAMA") trunking and an ancillary processor to connect the PBX to the CAMA trunks. Database updates are processed using a computer to convert internal database information into the modified National Emergency Number Association ("NENA") format. Updates to the database are conducted on a daily basis.

GE Capital-ResCom also is implementing the CAMA installation at locations in Washington, Arizona, and Minnesota -- states where the tariffs allow connection to CAMA trunking and access to the ALI database. In those locations that do not allow access to the ALI database and/or connection to CAMA trunks, the Company has devised a local notification system. The local notification system displays the building and apartment number of the 911 caller, in real time, on an annunciator panel. The annunciator panel is located where the emergency response agencies can have ready access to it. The local notification system also pages a UL approved security monitoring company. This alpha numeric pager displays a property code and the building and apartment number. The monitoring company personnel then respond by calling the appropriate Public Safety Answering Point ("PSAP") and confirming with the PSAP personnel that they are aware of the building and apartment number of the calling party.

GE Capital-ResCom developed, tested, installed and revised its local notification system at its own expense. The Company chose to develop this local notification system because it recognizes the importance of 911 services to its customers and the

general public. The Commission should recognize the valuable innovation and financial commitment made by companies like GE Capital-ResCom. The Commission should carefully balance the need to achieve compatibility with the burdens that are placed on companies before adopting any compatibility requirements. Companies that are able to provide the desired 911 notification information should be allowed some flexibility and not unreasonably constrained with stringent compatibility requirements.

II. Specific Commission Proposals

A. 911 Availability

GE Capital-ResCom agrees with the Commission's tentative conclusion that a caller at a PBX station having the capability to reach the public switched network should have the ability to reach emergency services by dialing 911 without having to dial any additional digits.³ The Multi-Line Telecommunications System ("MLTS") should recognize 911 as a unique number and provide the appropriate access codes for completion of the call to the PSAP. The media and the police have made "911" widely known as THE emergency response number. Everyone, including children, know to dial "911" in an emergency. The MLTS should be able to recognize this very unique numbering pattern and direct the call appropriately.

³ Notice at ¶ 22.

TSB-103⁴ suggests that user education or notification may be an appropriate alternative to ensure proper dialing by casual users of PBX systems.⁵ Ge Capital-ResCom believes this alternative is not satisfactory or viable. The MLTS should have the capability to recognize 911 and provide the appropriate access codes without the end user dialing any additional digits. In an emergency, even a user that is educated about the access code requirements may forget them. It is unreasonable to require the casual user to remember the access code during the stress of an emergency. Additionally, any education or notification system would be of no benefit to the many non-English speaking end users. Moreover, a significant number of calls to 911 are made by children, for whom an education system is unlikely to be sufficient to overcome their 911 training.

The Commission also proposes that any PBX equipment subject to the proposed requirements that is manufactured or imported prior to the proposed implementation date of the rules be labelled with emergency dialing instructions on the device and on the outside of the packaging in which it is marketed.⁶ This proposal would be impossible to enforce. Who will police the PBX owners for compliance? What will be

⁴ TSB-103 is a Technical Systems Bulletin entitled "PBX and KTS Support of Enhanced 911 Calling Service" issued by the Telecommunications Industry Association in October, 1993.

⁵ Notice at ¶ 22.

⁶ Id. at ¶¶ 22, 31.

the mechanism for notification to the PBX owners? What will be the penalties for non-compliance?

The simplest solution to the compliance issues raised by the Commission is to "grandfather" all existing PBX installations. The incorporation of PBX 911 should be required for any new equipment installations. The Commission also should require that manufacturers of PBX equipment offer PBX 911 implementation as an upgrade option. The option will allow those PBX owners who recognize the importance and the necessity of PBX 911 to have an economical method of upgrading their PBX equipment to conform to proposed rules.

B. Attendant Notification

The Commission proposes to require that PBX equipment be capable of notifying an attendant or other on-premises personnel when a 911 call is dialed.⁷ GE Capital-ResCom supports this proposal but believes that it is not necessary for the attendant to be "bridged on" to the call to gather this information. The on-premises personnel should be aware of the location of the 911 caller by the ALI. The on-premises personnel can be notified by having the "calling party name display" or the originating extension number displayed on a telephone instrument. Additionally, there are computer-based systems that display database information to on-site personnel about a party that has called 911. The local notification system that GE Capital-ResCom uses is an outgrowth of a system that is used to notify on-site personnel of a 911 call. The

⁷ Id. at ¶23.

database contains information about the party calling 911, including the actual location, a graphical description of the location, special information about the caller and hazardous material proximity.

C. ALI Database Maintenance

GE Capital-ResCom supports the Commission's proposal to require coordination procedures to ensure accurate and timely transmission of database information by PBX owners to local exchange carriers ("LECs").⁸ Although the proposals by Adcomm and TSB-103 envision database maintenance as a separate issue from PBX equipment compatibility, GE Capital-ResCom believes that the accuracy and timeliness of the ALI database is as important as the delivery of the ANI to the PSAP. The ANI is only valuable in those situations where a call-back is necessary. The ANI is of little or no value in circumstances where the caller is unable or incapable of describing the location. The most valuable component in those circumstances is the ALI. The Commission should recognize the importance of the ALI and any rules it adopts should include requirements for updating and maintaining the ALI database.

Under the current system, usually one LEC is responsible for the maintenance of the ALI database and other LECs update the database through the responsible LEC. For example, in California, Pacific Bell is responsible for ALI database maintenance. Other LECs, including GTE, Roseville Telephone Company, and Contel submit updates to the ALI databases maintained by Pacific Bell. In the US West region, the

⁸ Id. at ¶ 25.

ALI databases are maintained in a centralized location and the LECs update their respective ALI databases through this central location. There is no reason for the Commission to alter this structure.

The Commission should establish a standardized format for supplying the relevant ALI information that could be incorporated into existing ALI databases. This format could be similar to the one used by LECs to update ALI databases maintained by other LECs. The methods for updating databases are already in place and provide security, verification, correction, data integrity, and validation of the data before it becomes part of the ALI database.

The process of updating the database should utilize automation to the greatest extent possible. With the vast capacity of computers to manipulate and reformat data, automation would be the most efficient and inexpensive method of updating the database. For example, interfaces between PBX databases and other databases such as call accounting databases could be used to update the ALI database. Requiring that the ALI database be updated with any move, addition, or change would be clearly reasonable and the only means of keeping the ALI database current. Updates could be accumulated and "batched" on a daily basis and if there were no changes to the database for a particular day, then no update or communications would be required.

D. Station Number Identification

The Commission has requested comment on a proposal to create an artificial station number identification ("SNI") for each calling station on PBX equipment to

facilitate delivery of caller location identification and to permit call-back by emergency services personnel.⁹ GE Capital-ResCom believes that the use of artificial SNIs will only complicate the coordination and verification of database information. Telephone numbers are a limited and valuable resource that should not be squandered on this type of application when other methods exist.

As an alternative to the artificial SNI, an identifier could be used to indicate that the transmitted number is not an actual telephone number that can be accessed. When the artificial ANI accesses the ALI database, the identifier could be used to locate the correct ALI record. There are fields within the ALI record in which a call-back number can be indicated and retrieved by emergency personnel. Also, in the case of MLTS companies that use direct inward dial ("DID") service, the DID numbers should suffice as the ANI.

Further, because 911 calls are, or can be, dealing with life threatening situations, it is imperative that all 911 calls be completed regardless of the route availability or selection. It is GE Capital-ResCom's opinion that the completion of the 911 call to the PSAP outweighs the lack of specific ALI data.¹⁰ Overflow from the dedicated 911 trunks should be required. The concern about "swamping" a PSAP with

⁹ Id. at ¶ 26.

¹⁰ The limiting of 911 calls to any specific number of trunks or lines defeats the purpose of 911 because it restricts the 911 caller's access to the PSAP. It is better to complete the 911 call to the PSAP without ANI or ALI than it is to restrict the 911 caller and supply the ANI and ALI on all completed calls.

calls from a single location is not unique to PBXs. It can and does occur today with current "non-PBX" single line residential or business services.

Similarly, the MLTS should be able to recognize an off-premise extension and transmit the artificial ANI discussed earlier. This would alert the PSAP attendant that the caller may be at another location other than the primary location displayed. The general-use fields in the NENA format ALI database could be used to indicate a secondary address.

GE Capital-ResCom is opposed to a 911 TIE Trunk Interface requirement because it requires that auxiliary equipment be located both on the premises of the MLTS and in the PSAP Tandem Office. It would also give the LECs the opportunity to charge an excessively high price for this equipment. Although the CAMA implementation utilizes older technology, its ubiquitousness allows for uniformity of access throughout the country. Current cost structures for CAMA trunking also are in place throughout the country.

Moreover, the same argument that is made for TIE Trunk Interface can be made for Integrated Services Digital Network ("ISDN"). ISDN, although the more technologically advanced service, is not universally available throughout the country. It is not universally available even within LEC regions. In some cases it is only available on a central office by central office basis. The development of an ISDN interface may require long lead times and excessive costs to implement. CAMA is

available now. The use of ISDN will only delay the implementation of ANI/ALI on the PBX without any real gain. The current CAMA technology works and works well.

E. Information Protocol Standard

GE Capital-ResCom endorses the Commission's tentative conclusion that a nationwide information protocol standard should be adopted.¹¹ Although the Company cannot comment on the expense of standardizing the ALI database, it believes that it is imperative that the Commission adopt rules requiring a standardized format for the ALI database. The NENA Recommended Format for Data Exchange should become the standard for all ALI databases.

From the PBX owners' perspective, the standardization of the ALI database format will simplify the process of updating multiple ALI databases. For companies with multiple locations and multiple corresponding LECs, the standardization of the database format is as important as the standardization of the equipment coordination. It is unreasonable to expect PBX owners to coordinate with multiple database formats in multiple locations. If numerous companies and PBX owners are required to provide the ANI to the PSAP in a standardized format, then it is equally important that the ALI databases be standardized also. Compliance with the Commission's proposed rules will be facilitated if a uniform protocol standard is adopted, especially if the Commission allows the existing equipment to be "grandfathered."

¹¹ Notice at ¶ 27.

Additionally, GE Capital-ResCom believes that very precise information regarding Commercial facilities should be included in the ALI database to assist the emergency personnel in locating the 911 caller. A floor number should be included in the database for all multi-story commercial buildings. Also suite, room, or other identifiers should become part of the database. However, because companies use unique methods of identifying the occupants of their buildings, a free-form type of identifier may be necessary.

F. Network Interface Standards

The Commission seeks comment on the TSB-103 recommendation that network data link interfaces should be standardized.¹² As discussed above, GE Capital-ResCom believes that the interface procedures currently used by the LECs are sufficient. The Company agrees that standardization of the interfaces would be beneficial. However, standardizing an update protocol may delay the implementation of PBX 911 and/or increase the costs associated with PBX 911. At present, the LECs responsible for updating the ALI database each use different protocols for updating the system. Rather than ask the LECs to agree on one standard protocol, it will be faster, less costly, and less complicated to utilize the existing protocols. GE Capital-ResCom would prefer to implement different protocols to update the ALI database rather than delay implementation while the LECs agree on a standard protocol.

¹² Id. at ¶ 28.

G. Exemption from Proposed Rules

GE Capital-ResCom believes that in order to alleviate the burden on small businesses, MLTS owners should not be required to supply ANI or ALI if all of the extensions of the MLTS are located at the same address and that address is the ALI for the trunks. This exemption will lessen the economic impact on small business owners with small MLTS installations. If this exemption is not provided, the economic and operational burden on the small business owner could be extreme and without any direct benefit. If the current database information in the ALI is sufficient to direct the emergency response personnel to the location of the caller, there is no public interest in requiring the small business owner, who operates in a single location, to comply with ALI and ANI provisions.

H. Preemption

GE Capital-ResCom believes that the Commission's goal of nationwide compatibility with enhanced 911 systems can best be achieved by preempting state and local regulation in this field.¹³ Absent federal preemption, companies will be forced to

¹³ As the Commission notes, it has the authority to preempt state regulation that affects interstate service when it is not possible to separate the interstate and intrastate components of the service, or when state regulation thwarts or impedes a federal policy. See, e.g., Louisiana Public Service Commission v. FCC, 476 U.S. 355, 375 n.4 (1986); Illinois Bell Tel. Co. v. FCC, 833 F.2d 104 (D.C. Cir. 1989). In a situation similar to this proceeding -- when the Commission implemented Part 68 of its rules relating to connection of terminal equipment to the telephone network -- it preempted state regulation of the field. See First Report and Order, 56 FCC 2d 593 (1975), Second Report and Order, 58 FCC 2d 736 (1976), aff'd sub nom. North Carolina Utilities Commission v. FCC, 552 F.2d 1036 (4th Cir. 1977), cert. denied 434 U.S. 874 (1977).

operate under inconsistent and possibly conflicting federal, state and local requirements. A national standard will ensure the earliest possible implementation of enhanced 911 compatibility. A uniform standard will enable manufacturers to design and build PBX equipment without worrying about conflicting or multiple rules and regulations. The need to provide dependable and compatible 911 emergency service is so vital to the public health and safety that national uniformity is required.

III. Conclusion

With the foregoing modifications, GE Capital-ResCom supports adoption of the Commission's proposed rules in this proceeding.

Respectfully submitted,

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