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

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

ORIGINAL

In the Matter of:)	
)	
Revision of the Commission's)	CC Docket No. 94-102
Rules To Ensure Compatibility)	
With Enhanced 911 Emergency)	
Calling Systems)	

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REPLY COMMENTS OF AT&T CORP.

Mark C. Rosenblum
Kathleen F. Carroll
Ernest A. Gleit
295 North Maple Avenue
Room 3261B3
Basking Ridge, N.J. 07920
(908) 221-3053

Cathleen A. Massey
William Covington
1150 Connecticut Avenue, N.W.
4th Floor
Washington, D.C. 20036
(202) 223-9222

Its Attorneys

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SUMMARY

The record reflects widespread agreement that compatibility between MLTS systems and wireless services, on the one hand, and E911 systems, on the other, is a vitally important goal. It also establishes that manufacturers and service providers are committed to developing the standards and technology to support compatibility, and already have made significant strides in that direction.

At the same time, however, the comments substantiate AT&T's concern that E911 compatibility cannot be rationally achieved through inflexible compliance deadlines and intrusive design requirements, as proposed in the Notice. Such an approach underestimates the magnitude and complexity of the work needed, and risks compelling the deployment of inadequate, unresponsive, and unreliable technology. Moreover, the Commission must recognize that maximizing compatibility will require coordination among service providers, manufacturers, users, LECs, and PSAPs. Accordingly, any rules ultimately adopted must specify the responsibility of each of these participants in the E911 calling process.

MLTS/E911 Compatibility. The traditional Part 68 approach of placing full responsibility for compliance on equipment manufacturers is an inappropriate model for MLTS/E911 compatibility, given the need for upgrades to LEC and PSAP facilities and the wisdom of allowing users to pass

location information using either adjuncts or MLTS equipment. Instead, the Commission should adopt a more flexible approach allowing for compatibility to be achieved in the most cost-effective manner possible. Such an approach should be based on clear definitions that do not impose inadvertent or unwarranted burdens. For example, the Commission should define "emergency response location" in a manner that recognizes that some physical layouts obviate the need for location information to be provided for each calling station.

The information provided to the LEC should be a 10-digit NANP number (the CESID), which may be shared by each calling station within an emergency response location. Wireless PBX systems serving more than one emergency response location should be required to outpulse the CESID of the antenna picking up the 911 call from a wireless station. Access to 911 should be provided to users dialing those digits, although additional access methods, such as 9-911, should also be permitted. (For certain users, however, such as military installations, prisons, and large college campuses, 911 calls should be permitted to be routed to on-site emergency response personnel rather than the local PSAP.) Finally, new MLTS systems should be able to notify an attendant of 911 calls, if one is present, but the Commission should clarify that bridging is not required.

The record does not support adoption of other MLTS-related proposals. Specifically, the Commission should not

adopt a labelling requirement, because labels are inconsistent with the use of adjuncts and can mislead consumers, become outdated, and fail to benefit non-English speaking users. Nor should the Commission mandate use of MF signalling; instead, it should permit the use of more advanced technologies by cross-referencing the appropriate industry standards. The Commission also should decline to require P.01 grade of service on 911 trunks, because engineering to this level makes no sense given the unique nature of 911 calling patterns.

To assure continued progress toward MLTS/E911 compatibility, the Commission should defer resolution of technical issues to an industry-driven process. At the conclusion of that process, the Commission should be able to propose comprehensive, effective, and broadly supported MLTS rules.

Wireless/E911 Compatibility. There is widespread agreement in the record that access to E911 services should be available to subscribers of real-time voice CMRS (except air-to-ground), where such service is available to landline customers and the unique characteristics of wireless transmission do not preclude access. However, there is also virtually unanimous concurrence that the proposed compliance deadlines and design requirements are unrealistic, counterproductive, and inconsistent with the anticipated pace and direction of technology development.

This problem is most serious with respect to automatic location identification. Manufacturers and service providers consistently warned that the Stage 1 proposal to require mobile carriers to provide base station information would preclude provision of the calling number, which likely will be more useful to PSAP providers, and might actually produce misleading information because the serving base station often will not be the one closest to the user. The record also confirms that the Stage 2 proposal to provide 2-dimensional estimates of location would result in the implementation of costly, dead-end technology, and that the Stage 3 proposal to provide location estimates within a 125-meter sphere simply cannot be met within the proposed five-year deadline (with serious doubt that useful elevation information can ever be provided in certain architectures). Similar concerns extend to the other technical proposals, including call priority and use of common channel signalling.

Several public safety organizations nonetheless suggest that the technical proposals are achievable. AT&T shares the desire of these entities to maximize compatibility as soon as practical. Nonetheless, the record offers no basis for their assertions. These commenters seek support from the JEM Report, but that document plainly states that compatibility technology is premature, untested, and must follow an evolutionary path. They also rely on the Driscoll Report, but that survey fails to recognize that none of the candidate

technologies has been field-tested across the multitude of CMRS air interfaces, frequency bands, architectures, and operating environments. Finally, they contend that GPS is a viable solution to ALI, but GPS does not function reliably in urban settings, buildings, and tunnels, and it requires costly and cumbersome modifications to handsets.

The technical challenges to wireless/E911 compatibility can best be overcome by flexible, industry-driven practices rather than Commission mandates. To this end, the Commission should task the industry with resolving technical issues through an informal, collaborative process, with periodic progress reports to the Commission. Such an approach will allow all interested parties to address highly technical issues in a free and open manner, without being constrained by artificial deadlines or the formal procedural requirements that attend negotiated rulemakings and federal advisory committees.

While that technical process is ongoing, the Commission should establish a sound policy framework for the deployment of compatibility-related technology. Specifically, it should decline to adopt labelling requirements for "non-compliant" equipment; establish a reasonable, equitable cost recovery mechanism; extend to wireless service providers the same immunity from liability enjoyed by landline carriers in transmitting 911 calls; and preempt inconsistent state and local technical requirements and zoning restrictions.

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Rules To Ensure Compatibility)
with Enhanced 911 Emergency) RM-8143
Calling Systems)

REPLY COMMENTS

AT&T Corp. ("AT&T") respectfully submits the following reply comments in response to the Commission's Notice of Proposed Rulemaking ("Notice"), FCC 94-237, released October 9, 1994.

The voluminous comments in this proceeding substantiate AT&T's concerns that the approach in the Notice underestimates the magnitude and complexity of the work needed to maximize multi-line telephone systems ("MLTS") and wireless services compatibility with Enhanced 911 Calling, and fails to give proper weight to the need to continue the dedicated efforts of manufacturers, service providers, end users, and public safety agencies to overcome the myriad challenges in an orderly manner. Moreover, commenters supported AT&T's position that any rules adopted by the Commission should clarify the obligations of all affected parties, not just equipment manufacturers and wireless service providers. Part I of these reply comments addresses that point.

The comments of other parties also support the considerable reservations expressed by AT&T regarding the specific proposals

in the Notice for MLTS and wireless services compatibility. Parts II and III, respectively, discuss those matters. Finally, Part IV contains AT&T's views regarding the appropriate next step for the Commission in light of the information provided in the comments.

I. THE COMMISSION SHOULD ADDRESS THE RESPONSIBILITIES OF ALL PARTICIPANTS IN THE ENHANCED 911 CALLING PROCESS.

AT&T's position that the Commission's rules should delineate the responsibilities of all affected parties was echoed by other commenters. Thus, TIA urged that "the real thrust of Federal regulations should be to assign responsibility for the various activities necessary to insure that Enhanced 911 Calling Service will function properly."¹ One indispensable participant in the process of completing a 911 call identified in the comments was Local Exchange Carriers and others providing local service.² If these service providers do not make changes in their networks to accommodate the MLTS and wireless services performance required by new Commission rules, the goal of Enhanced 911 Calling compatibility will not be achieved.³ In the same vein, the need

¹ TIA at 5; Accord Siemens Rolm at 12 (the Notice's "approach is too narrow"); UTC at 2.

² TIA (at 6) and Bell Atlantic (at 6) give the specific example of cable companies. Northern Telecom (at 7) refers generically to competitive local service companies.

³ Nationwide compatibility also will not be achieved if states or localities are permitted to enact requirements inconsistent with the new Commission rules. GE at 13-14; NATA at 14-15;

(continued...)

to address roles and responsibilities regarding the public safety database and the public safety answering points ("PSAPs") was pointed out by the commenters.⁴ All elements of the Enhanced 911 Calling system must work together to provide the improved service the Commission and the commenting parties seek. Finally, several commenters noted that central office based systems such as Centrex provide functionality similar to that provided by MLTS so that compatibility rules should apply there as well.⁵

II. RULES ON MLTS COMPATIBILITY SHOULD ADOPT AT&T'S SUGGESTIONS ON THE PROPOSALS IN THE NOTICE.

AT&T's comments maintained that the conventional structure of Part 68 of the Commission's rules - requirements on equipment and barring manufacture, importation and installation of non-complying equipment - was the wrong vehicle for addressing the multiplicity of issues involved in Enhanced 911 Calling compatibility. The issues discussed by the commenters confirm this position. ICA correctly observed that Part 68 "is not

³(...continued)

TCA at 9-10. To the extent there is no such inconsistency, states and localities can be afforded some flexibility to enact rules meeting their particular operational procedures and requirements.

⁴ AT&T at 12-13; APCO at 20; Ad Hoc. at 10; Bell Atlantic at 2-3; GE at 7; TIA at 5.

⁵ APCO at 24-25; Ad Hoc at fn. 13; Northern Telecom at 5-6. As Redcom put it, "The technical portion so penalizes PBX and private network owners that it could be used as an advertisement for Centrex." Redcom at 6.

sufficiently flexible to accommodate all of the possible variations and user circumstances that will be involved to [sic] attempting to provide emergency information to appropriate government agencies."⁶ OPASTCO pointed out that the proposed bar against manufacture and importation of non-complying equipment could cause equipment compatible with older grandfathered MLTS to become unavailable, thereby necessitating premature and expensive replacement of the entire system.⁷

In addition to urging that any new rules should address the responsibilities of all participants in the Enhanced 911 Calling process, AT&T made a number of specific suggestions regarding the rules for MLTS compatibility proposed in the Notice. Those specified suggestions were supported by other commenters and should be included in any final rules adopted in this proceeding.

A. Definitions.

AT&T's suggestion that new rules would be improved by some specific definitions was supported by other commenters.⁸ Many

⁶ Accord Siemens Rolm ("FCC Part 68 is not the appropriate place" for standardizing database structures and signalling protocols. Rather, standards making bodies should shoulder this task.)

⁷ OPASTCO at 4; In the same vein, UTC (at 5) sought clarification that the proposed rule permitted minor modification to existing systems and the purchase and installation of replacement equipment without having to bring the entire system into compliance,

⁸ TIA's proposed definitions are very similar to AT&T's and AT&T has no objection to using them. TIA at 8-11. Siemens Rolm (at 1) notes that the term "MLTS" should be used instead of "PBX" because the rules should also apply to key systems.

commenters joined AT&T in pointing out that some physical layouts obviated the need for location information for each station.⁹ This fact should be reflected in the definition of "emergency response location." NATA's example of a system with 200 or more stations on a single floor is virtually identical to the one provided by AT&T.¹⁰ On the other hand, GTE's focus on the number of stations, rather than the physical arrangement of the location, is unwise. GTE proposed that systems with less than 15 stations not be required to provide location information for each station.¹¹ The problem with GTE's proposal is shown by Telident's example of a strip motel with 20 units all in a row.¹² This location could be one, several, or possibly even 20, emergency response locations, depending on the configuration of the site.

APCO concedes that because of the physical arrangement of the premises, not all MLTS need Enhanced 911 Calling capability.¹³ Nevertheless, APCO urges that all such

⁹ BellSouth at 7; California at 2-3; NATA at 11; Northern Telecom at 35; Telident at 7; TIA at 9; TCA at 7; UTC at 4; Washington TRACER at 13-14.

¹⁰ NATA at 11; AT&T at 6.

¹¹ GTE at 33-34.

¹² Telident at 7.

¹³ APCO (at 13-15) also notes that the number of stations "is not necessarily a good indicator" of the need for Enhanced 911 Calling capability.

installations be required to have that capability because expansions or lay-out changes may create the need for it.¹⁴ The public interest would not, however, be served by requiring all MLTS owners to install an unnecessary capability upfront because of a remote possibility that it might be needed in the future.

B. Caller Location.

The question of the appropriate definition of "emergency response location," raised by APCO and others, relates directly to the means by which caller location must be provided in those cases in which it is appropriately required. AT&T believes that the operator of an MLTS should have the flexibility to provide a location identifier by using capability built-in to the MLTS or by using adjunct equipment where the MLTS itself does not have this capability. AT&T agrees with Telident that:

for both business and regulatory common sense reasons, it would be inappropriate for Commission to dictate that any electronic solution to this problem must be 'internal' to the MLTS system. The Commission's objective ought to be that such installations should be fixed with a definable electronic outcome, without regard to how a given manufacturer or owner chooses to achieve that outcome.¹⁵

¹⁴ APCO at 15.

¹⁵ Telident at 10; Accord APCO at 27; Proctor at 3; Redcom at 6; Siemens Rolm at 3; TIA at 18-19. These commenters referred to adjunct equipment. The Telocator technology discussed by KML and New Jersey State Police (at 10-11) has many drawbacks but nevertheless may suggest the possibility of other approaches.

As Siemens Rolm explained, requiring compliance by the MLTS itself could be economically disadvantageous to both users and vendors.¹⁶ No commenter opposed this view.

On the other hand, there was disagreement about the characteristics of the location information number. AT&T, Telident and TIA refer to the number used to facilitate Enhanced 911 Calling as the CESID.¹⁷ AT&T accepts TIA's qualification to AT&T's characterization of the CESID as a seven to ten digit number. TIA notes that in the future more than ten digits may be used.¹⁸ This flexibility is intended to accommodate the present inability of many public safety networks to handle more than seven or eight digits.¹⁹

AT&T agrees with APCO and BellSouth that the CESID could be the ten digit North American Numbering Plan ("NANP") number without exhausting the available numbers in the NANP, provided

¹⁶ The same reasoning calls for rejecting GE's position that manufacturers should be required to offer an upgrade option to owners of non-complying grandfathered PBXs. GE at 6. If such owners want such upgrades, the marketplace will offer it in the most efficient way without requiring all of the manufacturers to develop upgrades for their specific equipment.

¹⁷ CESID is an acronym for Caller's Emergency Service Identification. See AT&T at 6; Telident at 1; TIA at 9-10.

¹⁸ TIA at 9-10. For example, the Telocator technology, which is claimed to have the capability of providing geographical information, may provide substantially more than ten digits.

¹⁹ Bell Atlantic (at 7) also recognizes this problem and proposes that the rules permit delivery of seven digits or require PSAPs to upgrade their equipment to accept ten digits.

that a separate CESID is not required for each station.²⁰ On the other hand, AT&T does not share GTE's belief that interchangeable NPA codes could solve the NANP exhaust problem even if a separate CESID were assigned to each station.²¹ Moreover, as GTE concedes, introducing new NPAs into the network creates extra costs.²² There is no need to incur such costs because, as discussed above, there is no universal need for location information on every station in every MLTS system.

There was no disagreement in the comments that providing location information regarding the individual calling 911 from a wireless PBX presents the same challenges as are faced by wireless service providers and thus that rules on that subject are premature. At most, wireless PBX systems serving more than one emergency response location should be required to outpulse the CESID of the antenna picking up the 911 call from a wireless station.²³

C. 911 Availability.

There was a fair degree of confusion in the comments regarding the proposed requirement that MLTS equipment afford access to 911 calling service when the digits 9-1-1 are dialed. The Commission's proposed rule (§ 68.320(c)) correctly mandates

²⁰ APCO at 21; BellSouth at 9.

²¹ GTE at 35.

²² Id.

²³ AT&T at 9; Northern Telecom at 40; TIA at 20.

that such access exist when 9-1-1 is dialed, but does not bar providing such access when other digits, such as 9-9-1-1, are dialed. AT&T and TIA supported this Commission proposal²⁴ based on that reading, while UTC urged that the rule so provide.²⁵ Other parties supported access by dialing 9-1-1 but were not clear whether additional dialing arrangements should be permitted or barred.²⁶ On the other hand, Ameritech and Ad Hoc opposed 9-1-1 access because they read that proposal as barring access also by dialing additional digits.²⁷ Obviously, any final rule should be drafted so as to eliminate any possible confusion.

Two commenters urged that access by other dialing patterns, even the ubiquitous 9-9-1-1, be barred. California provided no reasoning for this position. Northern Telecom based its opposition on the claim that significant development will be required to provide Enhanced 911 Calling service over dedicated trunks when 9-9-1-1 is dialed.²⁸ Whatever the validity of this concern, it is outweighed by the unlikelihood that the multitude

²⁴ AT&T at 10-11; TIA at 12 (noting that there may be special cases in which the proposal would not be implemented).

²⁵ UTC at 4. Texas ACSEC (at 4) suggested rule language to that effect. AT&T agrees with TIA that the possibility of reaching 911 calling service by dialing additional digits refers to additional access digits and does not prevent users from assigning station numbers in the X911 form, such as 6911.

²⁶ APCO at 17-18; GE at 4-5.

²⁷ Ameritech at 4; Ad Hoc at 8.

²⁸ Northern Telecom at 30-31.

of users accustomed to reaching the public network from their work telephone, by dialing an extra digit can be successfully educated not to use it in emergency situations.

Taking the opposite tack, two user commenters, TCA and Washington TRACER, questioned requiring access to 911 calling by dialing 9-1-1 without regard to whether or not such access is also available by dialing other digits.²⁹ Those commenters regarded the expense and potential disruption of permitting access by dialing 9-1-1 as outweighing possible benefits. TCA noted that it would await comments by PBX manufacturers to ascertain if its initial assessment was correct.³⁰ Strikingly, none of the PBX-manufacturer commenters opposed this aspect of the Notice. As discussed above, AT&T and TIA supported the proposal on the basis that also using additional digits was allowed, while Northern opposed access by any means other than dialing 9-1-1. NATA did not address this issue and Ericsson did not discuss PBXs at all. Thus, the Notice is correct that access to 911 service by visitors or others unfamiliar with the normal dialing sequence at the particular location can best be afforded by requiring such access by dialing 9-1-1.

²⁹ TCA at 5; Washington TRACER at 9.

³⁰ TCA at 5.

D. Attendant Notification.

Commenters supported the Commission's proposal that new PBX systems have the capability to notify an attendant if one is present.³¹ There was, however, some confusion as to whether the attendant, if present, must be bridged on to the call. AT&T urged the Commission to clarify that such bridging was not required. Bell Atlantic read the Commission's proposal as "presumably" requiring bridging on the attendant and for that reason opposed it.³² Similarly, GE supported the proposal but not the requirement to bridge on the attendant.³³ The requested clarification would satisfy these commenters.

On the other hand, APCO requested that the attendant notification capability, which it supported, come with an "on or off" switch to satisfy some states which it claimed forbid attendant notification.³⁴ AT&T reads this APCO comment as applying to attendant notification whether or not the attendant was bridged on. The Commission referred to the point in TIA's TSB 103 that some state laws prohibit bridging on an attendant, but did not allege that there were any such laws prohibiting mere

³¹ AT&T at 10-11; NENA-Georgia Chapter; GE at 6; Oregon State Police at 3. Northern Telecom at 32 sought clarification that this proposal does not require an attendant, which is how AT&T reads the rule.

³² Bell Atlantic at 6.

³³ GE at 6.

³⁴ APCO at 19.

notification.³⁵ No commenter other than APCO made any such claim. If APCO can substantiate the validity of this concern, the "on or off" switch proposal is a reasonable way of addressing it.

E. Labelling.

The Commission proposed to require new non-compatible MLTS equipment installed prior to the cut-off date when such installation would be prohibited to be labelled with emergency dialing instructions.³⁶ That proposal was supported by several commenters.³⁷ The Commission and those commenters did not, however, address the concerns of commenters who opposed this proposal. Some areas do not provide Enhanced 911 Calling service and the user will be "completely confused" unless he or she knows this.³⁸ The absence of a label will not distinguish between old grandfathered equipment, which does not comply with the new

³⁵ Notice ¶ 23.

³⁶ Id. ¶ 31.

³⁷ APCO at 29; GTE at 33. New Jersey at 12; Oregon State Police at 3; Texas ACSEC at 4-5.

³⁸ TIA at 15.

requirement, and newly installed equipment, which does.³⁹ Moreover, a labelling requirement does not take into account compliance achieved by use of adjuncts, rather than by the PBX itself.⁴⁰ A labelling requirement would be difficult if not impossible to enforce and, even if it could be enforced, would not benefit the many non-English speaking end users.⁴¹ Finally, because compliance is a function of software and system configuration and can be affected by factors after the equipment left the factory, such as reinstallation after purchase in the "gray" market, a label will be "meaningless at best, and confusing and inaccurate at worst."⁴² Therefore, the labelling proposal should not be adopted.

³⁹ AT&T at 11; NATA at 17. Texas ACSEC (at 12) went beyond supporting labelling of new non-compatible equipment to urge that manufacturers be required to provide labels for equipment in the hands of the consumer. This commenter ignored that manufacturers do not always know the identity of present owners of the equipment and failed to mention the enforcement problem of getting those owners to affix the labels. If anything, this proposal compounds the confusion that the labelling proposal in the Notice will cause.

⁴⁰ TIA at 15. Siemens Rolm (at 3) also recognized this fact and suggested that if labelling is required, the label should identify the adjuncts which will achieve compliance. This makes for a very complicated label. AT&T's proposal (fn. 11) that instructions provide this information is more practical.

⁴¹ GE at 5-6.

⁴² Northern Telecom at 33-34. Accord, NATA at 17.

F. MF Signalling.

The proposal in the Notice (§ 68.320(b)) to specify MF signalling received no support. As AT&T, Northern Telecom and APCO maintained, the rules should permit use of more advanced technologies than MF signalling which are now available or which may emerge in the future.⁴³ MF signaling is now over five years old and will obviously be even older when the new rules become effective. AT&T agrees with Northern Telecom that ISDN is an example of a more advanced technology that should be permitted. ISDN PBXs are available today. "Cross referencing the appropriate industry standards would allow the evolution of signalling technology to be applicable to the E-911 interconnections."⁴⁴

G. P.01 Grade of Service.

Proposed § 68.308(d), requiring the system operator to purchase enough trunks to provide P=0.01 grade of service was supported only by APCO.⁴⁵ TIA explained that engineering to meet grade of service requirements, based on anticipated and measured traffic, is virtually impossible in the 911 calling environment because of the uniqueness of 911 calling patterns. The

⁴³ AT&T at 15; Northern Telecom at 29; APCO at 15-16; accord, TIA at 20.

⁴⁴ Northern Telecom at 29; Texas ACSEC at 4 ("Care must be taken to ensure that the rules do not lock 9-1-1 into obsolete technology.").

⁴⁵ APCO at 39.

likelihood of simultaneous 911 calls not associated with a common disaster is incredibly small while the number of such calls in the event of a disaster is frequently quite large.⁴⁶ TCA concurs that the standard network sizing tables "are wholly irrelevant" in the 911 context.⁴⁷ Ad Hoc described the experience of one of its members operating a 5,000 station facility. No more than one 911 call per calendar quarter is typical at the facility, which certainly does not justify the 50 trunks needed to guarantee $P=0.01$ grade of service.⁴⁸

Proctor's alternative requirement of one Enhanced 911 Calling Service trunk per 10,000 stations with a minimum of two should also be rejected.⁴⁹ That proposal was based on Proctor's observation that most installations it encountered were provisioned that way. Even if many operators choose that approach, it is excessive as a Commission mandate. There should be no grade of service requirement in the Commission's rules.

⁴⁶ TIA at 14-15.

⁴⁷ TCA at 9. For this reason, Redcom (at 5) errs in claiming that a table based on empirical data could be created showing the reasonable number of trunks based on number of stations served.

⁴⁸ Ad Hoc at fn. 12. AT&T (at 15) and Northern Telecom (at 31-32) opposed this grade of service requirement on similar grounds. Bell Atlantic (at 4) and ICA (at 3) pointed out that other technologies may obviate the need for any dedicated trunks.

⁴⁹ Proctor at 27.

H. Exemptions.

Several commenters have persuaded AT&T that the new compatibility rule should leave room for exemptions. The Secretary of Defense explained that some military installations do not interconnect to the local PSAP but respond to emergencies with military police, fire and medical personnel.⁵⁰ The California Department of Corrections pointed out that most outgoing calls from the prisons are restricted and that each prison has an internal system for alerting officers, the prison fire house and the prison medical area.⁵¹ The Maryland Emergency Number Systems Board, with the approval of the county, has permitted a large college campus to route 911 calls from campus telephones to the 24-hour college police department, which relays fire, ambulance and rescue calls to the county PSAP. The rules should contain flexibility to recognize appropriate circumstances such as these in which the general rules need not apply.

III. COMPATIBILITY BETWEEN WIRELESS SERVICES AND E911 SYSTEMS.

The record regarding E911/wireless compatibility reflects sharp divisions between wireless service providers and manufacturers, on the one hand, and emergency service organizations, on the other. AT&T and numerous other parties cautioned that the Commission's proposed compliance deadlines and

⁵⁰ The Secretary of Defense at 10-12.

⁵¹ The California Department of Corrections at 3-4.

design requirements are unrealistic, counterproductive, and inconsistent with the anticipated pace and direction of technology development. In contrast, emergency response organizations generally supported the proposals and, in some cases, even asked the Commission to adopt more stringent requirements and move up the deadlines.

AT&T is committed to developing and implementing compatibility technology as rapidly and efficiently as possible. It is convinced, however, that this goal can best be achieved through flexible, collaborative industry processes rather than rigid regulatory mandates. Accordingly, the most appropriate role for the Commission with respect to technology issues, as detailed in Section III.A below, would be to endorse and oversee continuation of the work begun by the JEM. In addition, as discussed in Section III.B, the Commission should (1) preempt state and local regulation of compatibility and zoning restrictions that interfere with the deployment of compatibility technology; (2) decline to adopt mandatory labelling requirements; and (3) address funding and liability issues in a separate proceeding.