existing PBX trunks using DTMF signaling, many of the technical and cost concerns expressed by the comments would be resolved. In addition, some comments contained concerns that entities providing LEC-like service also be required to provide E9-1-1 access. All providers of "dial-tone or its functional equivalent" should be required by the FCC to provide enhanced 9-1-1 interconnection.

The Commission should also require that all new network services, switching, and transport mechanisms be deployed with E9-1-1 as part of the service offering. The existing E9-1-1 systems have generally been "stuck" with 30-year-old technology because new network technologies (e.g., Signaling System 7 and ISDN) have been deployed without consideration of public safety. The public safety community does not have the "market power" to demand these services.[17/] Evolving

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[17/]Harris Corporation comments, at 1, support the position that market forces have not given the PBX caller access to E9-1-1 services. Harris says (and we agree) the market has been hampered by lack of standards. NATA denied on page 7 that market forces have failed to provide the E9-1-1 interface. This is in direct opposition to the experience of the public safety community and the Washington State PBX Workgroup. Many PBX owners are not "communications literate." This is not a condemnation of the PBX owners but rather a statement that most PBX owners are not in the communications business, rather the PBX is a tool they need to operate their organization. Some large companies have telecommunications staffs, but most PBX owners rely on their telecommunications vendor. Therefore, a telecommunications vendor (such as AT&T) which does not provide an MF interface is not likely to bring the issue up with its customer. Some vendors (such as Northern Telecom) which do provide an MF interface have been promoting the service and have successful installations. In Washington State, most notably King, Pierce, Snohomish, and Thurston counties where there has been an active PBX owner education process going on, many PBX owners have wanted to interconnect their systems only to be stymied by the lack of compatible equipment. In some cases, this can be resolved successfully (continued...)

network infrastructures could provide for a variety of E9-1-1 interfaces to meet the needs of the various PBX systems and users.[18]

G. Implementation Schedule

Many comments requested a delay in the implementation schedule for various reasons. Some of the delays were associated with the ability to clear inventories and the distribution pipeline and some were because not all of the technical details have been worked out. We disagree with these arguments for the following reasons.

1. Given the rapid changes in technology and current practices to reduce or eliminate large inventories, 18 months is more than enough time to clear any existing inventory. Since the 18 month limit is on manufacture and/or importation of equipment for sales in the United States, this limit would have no effect on the sales of

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[17] (...continued)
by using a third party unit such as those provided by Telident and Proctor and Associates. During the PBX workgroup process the Tacoma School District, which has a large Northern Telecom PBX, said they have had problems dialing 9-1-1 and having the emergency responders go to the wrong address. Once they became aware that Northern Telecom was capable of providing the required MF interface they made plans to order and install the equipment. We believe this issue is like fire suppression sprinklers in commercial buildings. Market forces did not drive the widespread implementation of these life and property saving devices; it took clear action by local governments and in many cases insurance agencies and risk managers.

[18] Joint Comments of APCO, NENA, and NASNA, at 28.

equipment already manufactured and in the "distribution pipeline."

2. The technology exists today to implement the interfaces. Some PBX manufacturers such as Northern Telecom can provide the CAMA type MF interface today and have installations in place. PBX's that do not have the capability inherent in their designs for an MF CAMA type interface can be connected to third party equipment supplied by vendors. [19/]

The design and cost impacts of providing enhanced 9-1-1 capability are minimal for the most part. Many PBX manufacturers today can provide multi-frequency CAMA-like trunk capability for a reasonable cost. The use of multi-frequency signaling is well defined through the use of available "off-the-shelf" component parts. In addition, there are "third-party" providers of interface electronics that can provide the signaling conversion and trunk interfaces with little or no design changes in the PBX. Therefore, the Commission's proposed 18-month implementation schedule is reasonable and should be adopted. The Commission should also allow compliance to be demonstrated by either "stand-alone" capabilities within the PBX or through third-party interfaces to provide the required functions. This capability must be clearly demonstrated as

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[19/] See, e.g., Comments of Telident and Comments of Proctor and Associates.

part the technical requirements outlined in Part 68 of the Commission's rules.

We disagree with the comments that oppose the Commission's proposal that all systems installed 30 days after the effective date of the any PBX rules be labeled to identify clearly the proper dialing procedure to obtain E9-1-1 service and any limitations the PBX may have in identifying the proper location of the telephone.

H. Preemption

Most of the parties agreed with our position on preemption as to the PBX issues in this proceeding.

II. COMPATIBILITY OF WIRELESS SYSTEMS WITH E9-1-1 SYSTEMS

In our initial comments, we took up 16 points relating to compatibility of wireless communications with E9-1-1 networks. The following discussion uses that framework to examine the comments of others. We also reply to certain matters not considered in our first-round submission.

Several commenters observed that E9-1-1, and in some cases basic 9-1-1, is not available nationwide. This is true. Despite differences of approach and in resources, the progress of 9-1-1 and E9-1-1 over the past 25 years has been impressive.[20/] The relatively scattered, lesser-inhabited pockets of non-service or non-enhancement are not forgotten or neglected. They will be provided 9-1-1 and E9-1-1 as their legislatures, local governments, safety agencies and serving wire carriers make this happen.

The problem we face in this proceeding derives from the widespread existence of E9-1-1, not its absence. The vast majority of the U.S. population who have grown accustomed to E9-1-1 expect it to work with all telephones regardless of service offering. To fail to adjust to the rapid increases in wireless calling is to risk the investment in the 9-1-1

[20/] Some 75% of wire telephone access lines are equipped with E9-1-1 service. In urban and suburban areas of the country, an estimated three-fourths of the population is covered by some form of 9-1-1 service, 90 to 95% of this enhanced. In rural areas, only 30 to 35% of the land area may be covered by 9-1-1 service, but most of that service is enhanced. See also, Exhibit A to Comments of Oregon State Police, showing that of 195 cities over 100,000 population (1990 Census), only four were without E9-1-1; and three of these were in the planning stage for enhancement.

infrastructure, and to deprive wireless users of valuable emergency services.

Nevertheless, the National Cellular SafeTalk Center -- funded by the cellular industry with the stated aim of teaching young people how to use cellular phones for safety purposes -- asserts: "Before mandating 9-1-1 enhancements, `Goal Number One' should be universal availability of plain, voice-only cellular 9-1-1."[21/] From the standpoint of the public safety community, this is futility itself. It translates: Allow the problems of skyrocketing wireless calling -- no location or number ID, no selective routing -- to multiply by creating more 9-1-1 calls to agencies without proper tools.

Numerous other comments, including those from carriers with both wireline and wireless interests, are less sweeping in their endorsement of delay. Some seek to interpose unnecessary advisory committee or negotiated rulemaking proceedings.[22/] Others simply seek individual exemption in their serving areas if no E9-1-1 capability is available. They use the seemingly accommodating language of "bona fide request for service." That is, until a public safety communications agency can back up its need for wireless compatibility with an E9-1-1 system ready to inter-operate with a given wireless carrier, the carrier should be excused from complying with any relevant FCC rules.

[21/]Comments of National Cellular SafeTalk Center at 3; see also, CTIA Comments at 4-6.

[22/]See pp 42-43, infra.

The basic proposition is fair enough: The benefits of wireless E9-1-1 capabilities will not be fully realized until the serving wireline infrastructure and the PSAP users are prepared to receive and process the information transmitted by the wireless systems. At least two fundamental questions need to be answered: (1) How long should a PSAP equipped for E9-1-1 have to wait for compatibility with wireless carriers previously excused from the FCC's rules? (2) If PSAPs with the technical capabilities exist in any part of a wireless serving area, shouldn't the wireless carrier be subject to the compatibility rules for the entire area?

The answers we expect to those questions, with help from the FCC, are (1) The wireless and wireline carriers should convert at the same time; and (2) yes. The public safety communications and response agencies have waited 12 years for the cellular industry to prepare itself voluntarily for E9-1-1. As the FCC observes (Notice, n.38), that has not happened with cellular and there is little reason to believe that it will occur -- at least not quickly -- with PCS and other developmental mobile radio services.

Yes, wireless E9-1-1 compatibility will require parallel upgrades and/or new installations from wireline carriers and PSAPs as well as from wireless carriers. Public safety organizations recognize that the one, three, and five-year timetables in the proposed rules present formidable challenges to PSAPs and associated public safety systems.

Our views on wireless E9-1-1 compatibility were summarized at pages 6-8 of our initial comments and, are discussed in more detail from page 30 forward. We undertake below to affirm or restate them in light of the submissions of other parties.[23/]

1. Apply the rules to existing and new CMRS.

We do not understand the cellular industry, for the most part, to be opposed to the eventual application of compatibility requirements to existing cellular service. Of course, the timing of compliance remains an issue, and we discuss that further below. With respect to pre-cellular, so-called "conventional" mobile services, it seems that the debate is more about whether an offering is truly commercial or more nearly "private." Congressional amendment of Section 332 of the Communications Act in 1993 has required the Commission to become familiar with the exercise of separating commercial from private radio services. We take the opportunity here to affirm our view that all Commercial Mobile Radio Services (CMRS) should be subject to E9-1-1 compatibility rules, although we do not rule out that their content and timing of the rules might vary as between satellite and terrestrial services. Pending further technological developments, we are satisfied that FCC requirements should apply only to real-time voice services

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[23/]The 16 summary points were not numbered in our initial Comments, but are given numbers here for convenience.

(with the exception of TTY or analogous services for the hearing-impaired).

2. Prohibit non-voice data devices from accessing E9-1-1, for now.

Until a national digital data interface standard is developed, we believe that non-voice services should not only be exempted from E9-1-1 compatibility requirements, but that digital (non-voice) access to 9-1-1 should be prohibited. The reason as stated on page 35 of our Comments: For the occasional successful use of these devices, public safety agencies pay a heavy price in multiple false alarms and the compounded problems they cause. As specified in the Comments, we believe TTY or analogous service to the hearing-impaired is sufficiently voice-like in its features and aims that it should come within the compatibility requirements.

Our position here should not be misconstrued as any predisposition toward industry standards preceding government action. To the contrary, as more fully developed below, we are convinced that government must take the lead where market power is lacking -- as is the case with the public safety community on this issue of E9-1-1 compatibility.[24/] Capable and fair-minded as most industry

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[24/]Representatives of APCO, NENA and NASNA have met with various radiolocation entrepreneurial companies at their business headquarters and have invited spokespersons to association conventions and meetings. Many if not most of these companies were planning to aim for "high-end" personal security markets (such as safety enhancement for corporate (continued...)

standards-setting bodies are (and must be), these bodies are driven by the market in general and by the particular commercial objectives of their several company members.[25] While we believe that the public safety requirement of wireless E9-1-1 compatibility will create a profitable sub-market and spawn other useful commercial applications,[26] we cannot afford to wait for the reverse process -- that is, for commercially-motivated standards-setters to find an economical way to cover public safety needs through secondary applications.

3. Require increasingly specific ALI in the proposed five-year period.

When the Driscoll survey is taken together with the mostly "can-do" comments of some 20 vendors (even allowing for a degree of over-optimistic marketing in their views), it seems plain on this record that the Commission could legislate the proposed one, three and five-year phases of

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[24] (...continued)
executives) or were primarily interested in vehicle-based commercial applications, as opposed to lower-margin consumer applications. This understandable inclination is borne out by the "target applications" reports of the various respondents to the Driscoll survey.

[25] The reality that standards-setting takes place in, and is a part of, the marketplace is reflected in the Comments of Harris DTS (page 2), which acknowledges the useful work of NENA in standardizing addressing formats but then observes that NENA is not a recognized standards body.

[26] In this regard, see KSI's characterization (Comments, 14) of radiolocation commercialization as a prime activity for job-saving "defense conversion."

wireless E9-1-1 compatibility[27] without too much concern that it would be requiring the "impossible" or driving manufacturers or providers out of business.[28] Vendor/ commenters such as Stanford Telecom and KSI (both based in the Virginia suburbs), Terrapin and Associated Group (ART) state in various ways that their technologies are commercially viable now and the Commission's phase-in periods are too long.[29]

The willingness of such vendors to describe their inventions and proposed services at length is in marked contrast to the doubts and nay-saying of most of the common carriers, who tend to state that the FCC's timetable cannot be met. Nevertheless, some of the critics of the schedule are right to point out the vagueness of the second phase for ALI -- "approximate location" -- and the potential for misdirected biasing of development by expressing the location in terms of "distance of the mobile unit from the

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[27]These intervals measured, of course, from the date of adoption of the rules, which is not likely for another year, so that the actual time frames can be thought of as two, four and six years, respectively.

[28]Chrysler Corporation, note 4, supra. The Washington Post for Sunday, February 19, 1995, carried an account of the apprehension of a fugitive computer "hacker" by means of "equipment that pinpoints the origin of cellular telephone calls." "Chipping in to Curb Computer Crime," pages 1,10-11. See also, Communications Daily, February 21, 1995, page 8, reporting that "Sprint Cellular's tracking equipment was instrumental in locating" the suspect hacker.

[29]Stanford Telecom discusses its beta testing of a GPS-based vehicle tracking system in a NYNEX project (Comments, 3), while NYNEX claims nevertheless that it is "premature" to impose ALI requirements, even five or six years from now. (Comments, 12-13)

receiving base station or cell site." The FCC's preference for prescribing performance rather than methods should perhaps cause the agency to re-think whether the pragmatic reliance on the cell site in the first phase necessarily extends to the second phase.[30/]

4. Accept service initialization, restrict dialing to 9-1-1.

We find no reason to revise our acceptance of the need for service initialization and for the probable use of a "Send" key or similar prompt in forwarding a wireless emergency call. (Comments, 38) We remain opposed, however, to use of additional or other dialing digits than 9-1-1. The Commission must also prohibit wireless providers from blocking 9-1-1 calls and forcing users to dial a seven-digit number.

5. Require by rule the PSAP service elements in the JEMS Report.

The 18 elements from the JEMS Report discussed on the record of this proceeding (and listed in summary at our Comments, 37-38) represent a useful extension of the 11 items compiled at Appendix B to the Notice (and repeated at

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[30/]The re-thinking of APCO, NENA and NASNA here is influenced by the PERTECH survey of PSAP employees, who are said to have responded that re-ring/callback capability in three years (as proposed) would be preferable to merely "approximate" location. Comments of PERTECH AMERICA, page 9 (and attached survey). According to numerous vendors, however, it should be possible to achieve both specific location accuracies of some help to emergency responders, as well as re-ring/callback, in the likely four years from now to the proposed deadline.

Appendix D). We participated in the Chicago and Washington JEMS during the summer of 1994, and recognize that the reports from these meetings describe an "evolutionary path" beset by distinctive challenges for industry and public safety communities. The timing of implementation is affected by "economic, operational and technological feasibility."[31/] With respect to location accuracy, the JEMS reports are careful to describe near and long-term objectives (respectively 400 feet in two dimensions, 40 feet in three dimensions) as "goals, not requirements." Id. at 5.

We do not disagree with the need for an evolutionary path. It is needed by wireline carriers and PSAPs[32/] as well as wireless providers of E9-1-1 access. We are firmly persuaded, however, that the pace of evolution is likely to be slower than the public interest demands unless the FCC imposes a schedule that is rigorous without being impossible or commercially self-defeating. The schedule cannot be tied to "commercial availability" of service or product elements (ART Comments, 17), because this would allow industry to continue to dictate the pace in an area where the Commission must lead in the public interest.

We believe that public safety commenters, vendors and even certain carriers have placed on this docket's record

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[31/]Chicago Report, Executive Summary, pages 1-2.

[32/]Just prior to the filing of these Reply Comments, Northern Telecom announced a new PSAP System (relying on technology developed by Harris County, Texas) to accommodate cellular caller location information. Communications Daily, Mar. 8, 1995, at 8.

the technical and economic ingredients for a workable schedule that includes real requirements.[33/] Faced with such a timetable, we believe that industry and its standards-setting bodies can and will work quickly and cooperatively with public safety interests to achieve it. In this regard, we are particularly impressed by the array of network-based solutions that would appear to require little or no change to existing wireless transceivers and would allow upgrade costs to be spread over ultimately large numbers of users.

6. Make E9-1-1 implementation a function of new carrier licensing.

This question of how to enforce any E9-1-1 compatibility rules was not addressed directly by most commenters, but is implicit in the opposing views of those who urge federal requirements, on the one hand, and those who believe contrarily that industry should be left to meet the objectives voluntarily. Under either approach, sooner or later the capabilities will exist, and it seems sensible to oversee their application at the licensing stage rather than enforce solely by *ad hoc* complaint.

7. Specify grade of service and redundancy standards.

We believe that the common wireline standard of one blocked call per 100 attempts should apply throughout the

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[33/] Ameritech states (Comments, 5, n.10) that its cellular services already comply with most aspects of the FCC's proposed Phase One.

E9-1-1 interconnected networks. The implementation could begin with some lesser goal, but the aim is to specify practicable grades of service.

8. Mandate 9-1-1 call priority.

We have based our support for wireless 9-1-1 call priority in cell site queues (Comments, 39-40) on JEMS recommendations.

9. Require user location to within 10 meters.

While this degree of accuracy is a far cry from the 125 meters proposed by the Commission, it is not so different from what individual respondents to the Driscoll survey are forecasting -- Galaxy, for example, claims 10-meter capability -- or from Driscoll's average for network-based location systems of 30-90 meters.

We tend to agree with commenters such as the U.S. Coast Guard, who point out that relatively gross measures may be fine for air-sea rescue units equipped with additional direction-finding equipment able to home on a constantly-emitting signal. The environment most civilian public safety responders work in is different, and greater refinement of location is needed. Our suggestion is taken from the 40-foot (three-dimensional) recommendation in the

JEMS reports, which is quite close to the 10-meter capability we would like to see in six years or less.[34/]

In personal comments, submitted apart from the Driscoll survey placed on the docket record earlier, C.J. Driscoll makes the following important point about a kind of Parkinson's law of timing:

> In general, it is clear that the speed with which wireless 9-1-1 caller location systems are implemented will be determined, in large measure, by the Commission's actions. If the Commission allows five years or more for implementation, it will take that long. System accuracy specifications will also be heavily influenced by the rules enacted by the Commission. (Letter, page 2)

10. Re-ring/callback for both home and "roamer" subscribers.

We have acknowledged limitations on callback of roamers in current systems (Comments, 44). Nevertheless, we find significant record support for the Commission's proposed three-year implementation following the adoption of rules. We recognize the dependence of the timetable on the availability of advanced common channel signaling technology and on the ability of PSAPs to accept numerical ANI of 11 digits or more. We are inclined to agree with those commenters who suggest re-ring/callback may be more valuable than approximate caller location, if a choice were forced between the two requirements. As stated earlier, however,

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[34/] PCIA decries the establishment of any location accuracy deadlines, but acknowledges that the 2001 advent of the five-year ALI requirement "appears achievable" as a goal from the present vantage point. (Comments, 20)

we do not believe that short-term achievement of these capabilities is mutually exclusive.

Deferring to the expertise of others on the subject, we believe that Northern Telecom's Called Party Disconnect Control (Comments, 38) is worth examining closely as an interim solution, together with the related suggestion of Motorola (Comments, 20) that a properly equipped wireless switch might attempt "to re-initiate a call to the calling mobile in response to a re-ring signal from the PSAP."

11. Modify existing CCS systems to accommodate E9-1-1.

In its discussion of callback and other three-year proposed requirements, Northern Telecom suggests that "basic common channel signaling [CCS] capabilities should be implementable." (Comments, 58) The wireless ANI, selective routing and additional features dependent on advanced signaling represent an "aggressive" deadline at three years, according to Northern Telecom, but other commenters share the view that it is achievable.

As we pointed out earlier (Comments, 47), existing CCS networks have the required E9-1-1 features: "What are missing are standards, software and industry incentives to provide the necessary functions." This is why we cannot accept the proposition that FCC regulations must await standards development, but believe instead that rules must precede and inspire faster standards work. Given the relatively low level of market power possessed by public safety communicators and responders, we believe the FCC must

supply the force for change and upgrade that has dissipated with the decentralization of public switched telephone service delivery.

12. Require wireless TTY compatibility.

We do not find on the record thus far any significant opposition to this requirement in particular, as differentiated from general resistance to any governmental mandates.

13. Establish labeling of non-compliant equipment.

We have no objection in principle to making sure that (1) chosen methods of consumer information -- and we have recognized not only labels but other means (Comments, 51) -- not confuse users who have no access to E9-1-1 in their areas, and (2) the responsibility rests with persons (not necessarily manufacturers) controlling the placement of the equipment or service with the ultimate consumer. The content of the label need not be pejorative. Surely a warning that 9-1-1 centers will not automatically know a caller's location is not judgmental. On the other hand, the message implies a gap that can and ought to be filled, which is precisely what we are saying about wireless E9-1-1 incompatibilities at present.

14. Mandate subscriber education in accord with local and federal rules.

The non-uniform state of 9-1-1 and E9-1-1 deployment nationally makes crucial here a degree of state and local freedom to meet specific circumstances. Necessarily, some informational obligations will apply to wireline as well as wireless carriers, and must be taken up by PSAPs as well.

15. Require wireline priority access for 9-1-1 calls.

The record thus far, as we read it, tends to dispute the wisdom and timing of wireless priority access, without much discussion of the parallel consideration for wire networks. Nevertheless, prioritization occurs in the fixed telephone network by deliberate segregation of the 9-1-1 paths. That is, the trunk connections between central offices and PSAPs are dedicated to a singular purpose and do not carry normal switched traffic. If the wireline network evolves to a CCS based architecture where fewer facilities are dedicated to 9-1-1, priority access and call queuing should be required.

16. Provide methods for ongoing public safety participation in standards-setting.

Earlier, we quoted Harris DTS on the point that while NENA database standards have been well received, NENA is not a recognized standards body. There are at least two answers to this: NENA and other public safety bodies could seek such status, but the process of accreditation is too time-consuming to be of much immediate help. Second, even if not

recognized, NENA and APCO and NASNA and almost anyone else are free to submit proposals to existing standards-setters. We believe the process of working with industry is better with a public/private partnership than with an adversarial relationship. However, public safety has a government mandate to provide for protection of life and property. Therefore, some issues are less negotiable than other. We think the JEMS have been a useful model, and we urge the continuance of something like this during and after the implementation.

Our support of the JEMs model as a means for the public safety community to be involved in the ongoing work of setting standards and otherwise implementing the phased rules for wireless E9-1-1 compatibility should not be misconstrued as any basis for slowing down the regulatory timetable. We cannot support the suggestions of CTIA (Comments, 17), ALLTEL Mobile (Comments, 1), and others that a formal committee under the Federal Advisory Committee Act or some less-defined "industry board" be created. Nor do we support the use of negotiated rulemaking at this stage of the proceeding, as suggested by Northern Telecom.

The Commission has proposed specific performance requirements and a set of deadlines for meeting them. The proposals have elicited a comprehensive factual record on the technical, economic, and policy issues involved. While the agency could have sought the help of an Advisory Committee to attempt to establish a "negotiated" proposed

rule[35] it chose not to do so. By implication, one of the reasons for going directly to rulemaking last September was the press of time.[36]

This is not the advanced television systems (ATS) case cited by CTIA, where the FCC started in 1987 with a Notice of Inquiry and included among its possible solutions the direct establishment of a single national technical standard. Nor is it like the World Radio-communications Conference (WRC) process, where the Commission routinely starts early to solicit industry views on U.S. positions to be taken at international meetings. It is more like the reduced orbital spacing matter CTIA refers to, in that the policy goal of two-degree satellite spacing already had been adopted, with a time frame, and the task of the Advisory Committee there was to consider best methods for implementation.[37]

In sum, we expect the factual record here to support in substantial measure the proposed performance requirements, which we anticipate will inform and energize the private standards-setting process. Should the Commission see a need for formal or informal advice during the implementation of

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[35] 5 U.S.C.§§561-570.

[36] See, e.g., ¶34 of the Notice, referring to a hope of "designing in" wireless E9-1-1 capabilities to PCS and, at note 38, to the failure of cellular and other mobile services to implement such capabilities voluntarily, even as they are enjoying huge growth spurts.

[37] Of course, the performance requirements in Docket 94-102 are much more articulated than was the general aim of two-degree satellite separation in 10 years. Reduced Orbital Spacing, 102 FCC 2d 390 (1985).

its rules, we are confident it can choose an effective method that will include the valuable resources of the public safety community.

CONCLUSIONS

We continue to believe that it is technically and economically feasible to implement improved interfaces from both PBXs and wireless systems. Many of those commenting believe in and honestly support improved E9-1-1 compatibility. There are others, however, who pay lip service to the concept but in reality do not want anything to impede their ability sell whatever they want with little regard to end users. Many of the comments gave us hope that the industry wants to provide a better interface to E9-1-1. However, others renewed our belief that the price to pay for an increasingly unregulated environment is that specific regulations will be required where necessary to protect life, property, and the safety of citizens. This is one of the primary functions of government. Without these and other steps, the 9-1-1 network may degenerate into a network that provides a marginal method for accessing emergency services providers.

Therefore, for the reasons stated above and in our initial comments, the Commission should establish appropriate regulations to ensure that all telephone users have full access to Enhanced 9-1-1 services.

Respectfully submitted,

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