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

In the Matter of	)	
	)	
Revision of the Commission's Rules	)	CC Docket 94-102
to Ensure Compatibility with Enhanced	)	
911 Emergency Calling Systems	)	
	)	
Amendment of Parts 2 and 25 to Implement	)	IB Docket 99-67
the Global Mobile Personal Communications)		
by Satellite (GMPCS) Memorandum	)	
of Understanding and Arrangements; et al.	)	

COMMENTS OF NENA AND NASNA

NENA and NASNA

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SUMMARY

Existing and new wireless services not yet subject to wireless E9-1-1 rules may need to reconcile their exempt status with the command of the Wireless Communications and Public Safety Act of 1999, which makes 9-1-1 "the universal emergency telephone number within the United States." As a matter of policy, we begin with the presumption that every device or service capable of dialing 9-1-1 should also be accessible to return calls from PSAPs and to location of the caller. If there is a reasonable expectation on the part of the caller that he or she can reach emergency assistance, the question becomes not whether, but how, to make that happen

The Commission generally prefers to set performance standards and let those subject to the requirements choose how to fulfill them. In the case of 9-1-1, the agency's guidance should be more directive and its oversight more persistent. NENA and NASNA suggest a "project management" approach in which objectives and timetables are set within a project plan produced by stakeholders with FCC guidance. The means and technical standards for meeting the objectives on time can be negotiated by the stakeholders, but under FCC supervision

We recognize the value in private call centers such as those employed by satellite telephony and telematics services. We look forward to a project plan in which alternatives and time frames can be established to more closely integrate the call centers and the PSAPs to whom the centers are relaying emergency calls. A similar process was employed by NENA and MLTS users and vendors to propose the model state legislation and FCC rule revisions that are under consideration here

Resold wireless service, pre-paid service and disposable phones are examples for applying the presumption of access to 9-1-1 assistance, including caller location and PSAP call-back. We believe the FCC possesses authority under the Communications Act to require 9-1-1 access for these services and equipment, but if there is doubt, Congress should intervene in support of the objectives of the 1999 Act.

Maritime services illustrate a separate system of emergency calling and response that pre-dates the 1999 Act. Nevertheless, the Act and current practice must be reconciled, if possible, without undermining the benefits of the current system. It is possible that the boating public's expectations are related to the current system and not to the requirements of 9-1-1 as applied to terrestrial wire and wireless telephony.

Emerging or non-traditional services, such as those enabled by the internet, illustrate most strongly the utility of a stakeholder-driven, Commission-supervised process by which E9-1-1 can be treated early in the product or service development cycle and not as an afterthought.

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COMMENTS OF NENA AND NASNA

The National Emergency Number Association ("NENA") and the National Association of State Nine One One Administrators ("NASNA") hereby comment on the Further Notice of Proposed Rulemaking in the captioned proceedings.[1] The Commission asks whether its regulations on access to emergency service communications networks and systems should be expanded to include mobile satellite service ("MSS"), telematics services, multi-line telephone systems ("MLTS"), resold cellular and PCS services; pre-paid calling services; "disposable" phones; automated maritime telecommunications systems ("AMTS"); and "emerging voice services and devices." For each proposal, the Notice inquires as to its legal authority to expand the regulations (¶11) and "the abilities of PSAPs [Public Safety Answering Points] to handle calls and information related to those services." (¶15)

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[1] FCC 02-326, released December 20, 2002 ("Notice"); time extended by Public Notice, DA 03-209, released January 27, 2003. The Commission was closed on the due date of February 18, 2003, and these Comments are dated the day following.

We believe the Wireless Communications and Public Safety Act of 1999, P.L. 106-81 (hereafter, "1999 Act"), is both a statutory command and a policy framework for much of the inquiry in these proceedings. There, in Section 3(a), the Congress wrote in part:

> (3) UNIVERSAL EMERGENCY TELEPHONE NUMBER. -- The Commission and any agency or entity to which the Commission has delegated authority under this subsection shall designate 9-1-1 as *the universal emergency telephone number within the United States* for reporting and emergency to appropriate authorities and requesting assistance. The designation shall apply to both wireline and wireless telephone service.[2]

The legislation provided for "appropriate transition periods for areas in which 9-1-1 is not in use," and the FCC has applied the language accordingly to services presently covered by its regulations.[3] By analogy, we believe transitions are appropriate to bring previously excluded or new services within the rules. But these transitions should not be extended indefinitely, and they should point toward integration of the services into "seamless, ubiquitous and reliable" emergency communications systems. 1999 Act, at Section 2(6).

A guiding principle should be: If a device or service creates a reasonable expectation that the user can reach emergency services, the question must be <u>how</u> to provide the assistance, not <u>whether</u> to do so.

The definition of reasonable expectations, of course, will change over time. In the case of cellular and PCS 9-1-1 caller location, the user's expectation arose in large part from his or her experience with wireline ANI and ALI. It may not have been "reasonable" in 1994 or 1996,

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[2] Codified at 47 U.S.C.§251(e)(3), emphasis added.

[3] Implementation of 911 Act, WT Docket No. 00-110, The Use of N11 Codes and Other Abbreviated Dialing Arrangements, CC Docket No. 92-105, *Fifth Report and Order* - CC Docket No. 92-105, *First Report and Order* - WT Docket No. 00-110, *Memorandum Opinion and Order on Reconsider* - CC Docket No. 92-105, WT Docket No. 00-110, FCC 01-351 (released December 11, 2001; Erratum, by Chief, Policy Division, Wireless Telecommunications Bureau, December 20, 2001.

when the original wireless E9-1-1 rules were proposed and adopted, but it became so as the interested parties bent their efforts to comply with the new regulations in the adjusted time frames. With respect to MSS, the users' expectations may be developing, as some carriers begin to provide access to emergency services through call centers.

Introduction

In the terrestrial wireless context, the Commission left technical and operational decisions necessary for implementing E911 to the interested parties, including wireless and wireline carriers, PSAPs, state and local governments, manufacturers and standard-setting groups. This approach stemmed from a Commission belief that it should determine only the capabilities that must be achieved, rather than promulgate extensive technical standards.[4]

A New Process. While in most cases it may be preferable for governments to set performance requirements only -- and not the means of meeting the requirements -- our look at the history of wireless E9-1-1 suggests that the approach may need to be more directive in the future. We believe this to be the gist of the Hatfield Report, as well. We ask that the Commission approach the subjects of this Notice, especially the emerging technologies, with a belief in the benefits of a national plan and in the FCC's own key roles in fostering and implementing the plan.

Of course, the subjects of this Notice will be succeeded by others, as technology and human ingenuity continue to develop new means of communication and information transfer. We would like inventors, developers and manufacturers to begin to think of access to 9-1-1 at the

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[4] Federal law favors private standard-setting, Section 12(a) of the National Technology Transfer and Advancement Act of 1995, 15 U.S.C.§272(b)(3), and we do not mean, in the following discussion, to depart from that presumption. However, we believe that the Commission (and perhaps other agencies) must guide and oversee the process.

outset and not as an afterthought. There is a useful analogy, we think, in the development of the rules implementing Section 255 of the Communications Act concerning access to telecommunications services and equipment by persons with disabilities. The Commission's discussion of when and how innovators should consider access by persons with disabilities is pertinent to innovations affecting emergency calling through 9-1-1:

> The readily achievable obligation imposed by section 255 is both prospective and continuing. While it is appropriate to consider the time needed to incorporate accessibility solutions into new and upgraded products, technological advances that present opportunities for readily achievable accessibility enhancements can occur at any time in a product cycle. A manufacturer's or service provider's obligation to review the accessibility of a product or service, and add accessibility features where readily achievable, is not limited to the initial design stage of a product. We conclude that manufacturers and service providers, at a minimum, must assess whether it is readily achievable to install any accessibility features in a specific product whenever a natural opportunity to review the design of a service or product arises.[5]

In the future, the FCC should set the following objectives and enabling actions:

- What the end result should be in terms of service characteristics;
- the general or specific timeframe for accomplishing the end results;
- a requirement that the major players be identified, and roles defined;
- a requirement that those major parties generate a consensus plan for accomplishment of the above.[6]

The above is quite simply basic project management; in this case, a national project about capabilities for public safety, 9-1-1 services, and their contribution to national security.

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[5] Report and Order and Further Notice of Inquiry, WT Docket 96-198, FCC 99-181, ¶71.

[6] It is true that the original wireless E9-1-1 rules derived in large part from a "Consensus" submitted by CTIA and public safety associations. *E911 First Report and Order*, 11 FCC Rcd 18676 (1996). But that document left many questions unanswered, and proved not to be as consensual as hoped.

Objectives, timeframes, and a project plan, then action. The project plan was missing in the original wireless E9-1-1 effort.

The FCC's requirements should be set with input from interested parties, of course. For instance, there would need to be a negotiated time frame for generating the consensus plan. The characteristics of the project plan probably should include:

- How to provide best level of 9-1-1 service given the starting technology and technical limitations;
- how to improve the service capabilities in the short term;
- how to develop standards, implementation methods, and operations methods among the involved parties that will enable the level of service envisioned in the defined end results statement, in the most effective way.

The project plan will identify and generate the needed technical standards; the FCC doesn't need to do that. The FCC needs to manage the enabling actions. The involved parties should be expected to manage the development project on a national level, and the FCC should oversee that process. The FCC needs to provide the directive influence to set and accomplish such a course of action.

Among the tools that might be useful in the process are negotiated rulemaking, advisory committees, and less formal mechanisms that work because they engender and reinforce consensus. NENA would be pleased to take part in an undertaking of this kind. Our suggestion for a "new process" of project management should be borne in mind as we discuss each of the emerging candidates for application of 9-1-1 regulation. In each case, the stakeholders should work toward consensus under a plan fostered and overseen by the FCC.

Mobile Satellite Systems

As the Notice recounts, a previous consideration of MSS for inclusion in the wireless E9-1-1 rules concluded that the record at the time did not support the action. Accordingly, additional comments were taken in IB Docket No. 99-67, and the Commission now finds that the augmented information "provides a basis for proposing emergency call procedure requirements, in particular the establishment of operator-staffed emergency service bureaus or call centers." Reasoning by analogy from the 1999 Act's provision for transitions to 9-1-1 in geographic areas where the service is not yet available, we also endorse -- for the short term -- the Notice's proposal (¶22) that the integration of MSS begin with national call centers. Such a first step is already in place among several MSS providers and is supported by others. (Notice, ¶¶21-22)

With regard to "the availability and accuracy of PSAP databases, for purposes of MSS call centers" (Notice, ¶24), we note that NENA has developed a National PSAP Registry which is available now.[7] It can be used by MSS carriers who require such a database, and can serve as a check on databases that carriers may have compiled on their own. The Registry does not currently cover Puerto Rico and the U.S. Virgin Islands (Notice, ¶24), but can be expanded to do so.

Although we see MSS call centers as a transitional vehicle preceding further integration into public safety emergency communications systems, they may qualify as PSAPs under the 1999 Act, and we urge the Commission to re-think its passing comment that such intermediaries "are not PSAPs themselves." (Notice, ¶26) The definition at Section 6 of the 1999 Act seems inclusive: "The term 'public safety answering point' or 'PSAP' means a facility that has been designated to receive 9-1-1 calls and route them to emergency service personnel." The key

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[7] http://www.nena9-1-1.org

qualification, as we read the statute, is not the public or private status of the receiving point but whether the received communication is a "9-1-1 call."

We cannot accept the blanket opposition of MSS licensees to ultimate application of the wireless E9-1-1 rules. (Notice, ¶28)[8] We agree with the FCC that the purpose here is determine how long should be the transition period between call center status and further integration, on the assumption that "we anticipate the[] eventual adoption" of MSS enhanced 911 rules. *Id.*[9] As discussed further below and in the Hatfield Report,[10] both technology and policy are driving 9-1-1 systems from their historic local origins toward a national compatibility that will obviate the "gateway" problem now perceived by satellite carriers.[11] The following describes a part of the path toward greater MSS integration into 9-1-1 systems.

If the MSS service can capture and generate the calling party's number to the call center, along with the call itself, then the call center would need to have a telephone system that can store the caller number, and cause that number to be sent out when the caller is transferred into the E9-1-1 network.[12]

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[8] Boeing's reliance on legislative history of the 1999 Act is misplaced, in light of the clear language on the face of the statute. (Notice, ¶46, n.138)

[9] We are generally opposed to triggering E9-1-1 requirements based on subscribership. Such an approach is at odds with that adopted for Tier II and Tier III carriers, where waivers specify a date certain for compliance. Order to Stay, FCC 02-210, released July 26, 2002.

[10] WT Docket 02-46, Public Notice, DA 02-2666, released October 16, 2002.

[11] Notice, ¶29 ("As we observed above in our call center discussion, satellite network architecture, by design, has few public switched interconnection points, making automatic routing of even basic 911 calls to PSAPs difficult.") The public safety community and several telematics vendors have faced the same problem and devised an interim solution. (Exhibit A hereto) If "911" were to become a special "NXX" code (note 13, *infra*), the location and number of switched interconnection points would become irrelevant.

[12] The problem of telephone numbering disparities in the home countries of U.S. visitors is under discussion by the Emergency Services Interconnection Forum ("ESIF"). *See*, http://www.atis.org/, Study Group C, Issue 20.

In traditional systems, forwarding typically involves a 3-port conferencing circuit. In normal operation, a third-party call is originated through second dial tone in a PBX, Centrex, or equivalent system, but the forwarded number is that of the second origination point -- the call center -- rather than that of the original caller. Optimally, the forwarded call would carry with it both the original caller number and that of the call center, so that the PSAP would have both contact numbers as needed. The capability to forward the original caller's number is critical. When that can be done, the call can be handled as if it were the original call made to 9-1-1 instead of to the call center. All the normal 9-1-1 processes then take place, with the call terminating at the PSAP.

The above ignores the physical method by which the call center is connected to the E9-1-1 system. Today, we would need physical trunking from the call center to the Selective Routers, everywhere. With improved capabilities in the public switched telephone network ("PSTN"), a call could be forwarded with its ANI by less expensive and less cumbersome means than dedicated trunk connections.[13] One of the tasks of the stakeholders could be to determine whether and how the PSTN should be redesigned to accomplish 9-1-1 call transfers "out of area."

With regard to any "ancillary terrestrial component" of MSS, now that the Commission has decided to grant satellite carriers this ground segment flexibility,[14] we cannot rationalize the general exemption from wireless E9-1-1 rules for MSS choosing to employ ATC. While limited

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[13] One such means would be to create numbers having "9-1-1" in their "NXX" positions. For example, a call destined for Washington, D.C. response would be routed as (202) 911-1234, where "1234" would be a number identifying the destination PSAP. *See generally*, NENA Technical Reference 03-003, "Internetworking, E9-1-1 Tandem to Tandem," page 8, at http://www.nena9-1-1.org/9-1-1TechStandards/nena_recommended_standards.htm

[14] News release, IB Docket No. 01-185, January 30, 2003.

transition periods may be appropriate depending on the product or service development cycle,[15] the commercial decision to use ATC should, in our view, invoke the public safety obligation to enable 9-1-1 communication via ATC.

Telematics

As with MSS, telematics call centers are performing a useful service.[16] To the extent that telematics service providers choose to offer subscribers the option of connecting directly to the public switched telephone network ("PSTN"), we believe that commercial decision should invoke the public safety obligations of the wireless E9-1-1 rules.[17] When operating in the call center mode, we believe the first objective for telematics providers should be to relay to PSAPs as much of the information -- data and voice -- as becomes available to the call center. The second and longer-term goal should be to integrate such communications more directly into public safety communications networks.

Even if all emergency calls were to be routed through private call centers, there is a way of passing the center's full complement of data to the designated PSAP. A method has been demonstrated in trials involving Greater Harris County (Houston) 9-1-1 authorities and several vendors. It works by allowing the x-y coordinates of the calling vehicle to be provided to a position server. The server uses stored routing instructions to send the call directly to the 9-1-1

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[15] Text at note 5, *supra*.

[16] In a reversal of the usual order, a North Carolina PSAP recently provided the OnStar call center number to a subscriber whose car had been stolen. The call center and the PSAP then collaborated to locate the missing car. *See*, Exhibit C hereto.

[17] Comments of APCO, NENA and NASNA, January 24, 2003, on Petition for Declaratory Ruling of OnStar, Public Notice, DA 02-3565, December 20, 2002.

trunks of the PSAP designated to receive emergency communications from the locale of the troubled vehicle.[18]

The ability of a Houston, Texas PSAP to receive and use Automatic Crash Notification ("ACN") information was tested in a real and potentially deadly accident experienced by a local police patrolman. If details are unavailable by the deadline for these comments, we will supply them in the reply round.

Legal Authority. We agree tentatively with the Commission (Notice, ¶¶76-77) that telematics offerors are capable of being treated as CMRS providers, and will read carefully the comments of others as to whether this legal option should be exercised either to make licensees of the offerors or to apply the wireless E9-1-1 rules to them by some other means. We recognize the resemblance of telematics service, as presently offered, to resale of wireless service, and are not necessarily prepared to sweep all wireless resellers into a category of regulation that may be needed solely to oversee emergency communications fairly and effectively. The ability of a facilities-based wireless carrier to manage its commercial relationships with resellers by contract may not extend as comfortably to telematics arrangements. We look to be educated on that score.

While we are expansive about the reach of the 1999 Act into wire and wireless services not yet covered by federal 9-1-1 regulations, we are not prepared to make of Section 2's Findings and Purposes a wholesale warrant for new FCC authority. The line between the policy objectives of Section 2 and the substantive provisions in Sections 3(a) and 4-6 demands careful placement. The formulation of Section 3(b) as encouragement and support by the FCC to the

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[18] Exhibit A is from a presentation by Intrado to the NENA Annual Conference in Indianapolis, June 2002.

states bears noting. At the same time, the particular mention at Section 2(5) of "prompt notification of emergency services when motor vehicle crashes occur" gives particular weight to Commission exercise of pertinent authority in dealing with ACN.

As to authority over manufacturers, we agree that Sections 1, 4 and 255 of the Communications Act, together with Part 68 of the Rules, are valuable indicators. We note also that Section 303(e) permits the FCC to "regulate the kind of apparatus to be used with respect to its external effects," a phrase that appears to embrace more than the conventional control of interference between and among radio stations and to consumer appliances.[19] Just as Part 68 has been enlarged incrementally to reach situations not strictly associated with network harm[20] -- and would be further enlarged through the proposal of NENA and others respect to identifying and locating MLTS callers[21] -- so we believe that the Communications Act provides a basis for moving beyond interference controls in regulating radio equipment.

Multi-Line Telephone Systems

The Notice refers to "NENA Model Legislation" (¶88) and in the next paragraph to a "Consensus Group Proposal." Interested parties, of course, are welcome to review and comment on the latter, but we respectfully note that it is out of date. Submitted in April of 1997, it was put out for public comment shortly thereafter but never acted upon. Accordingly, a broadly

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[19] *Radio Corp. v. United States*, 341 U.S. 412, 416 (1951) ("[G]iven a justifiable fact situation, the Commission has power under 47 U.S.C. (c), (e), (f), (g) to do precisely what it did in this case, namely to promulgate standards for transmission of color television that result in rejecting all but one of the several proposed systems.") Among the bases of the FCC action upheld in this case were a comparative evaluation of color TV receivers.

[20] See, e.g. Sections 68.112 and 68.316, hearing aid compatibility; Section 68.110(c), competitive availability of inside wire.

[21] See discussion below.

representative "Private Switch Study Group" convened by NENA produced a revised proposal that was placed on the record of Docket 94-102 on July 24, 2001. At Exhibits A and C of that proposal can be found, respectively, suggested revisions to Parts 64 and 68 of the Rules and the Model State Legislation.[22]

Because NENA and APCO were the proponents of these proposals for locating callers from wireline MLTS equipment, we will await the reply round before commenting. As to the issues in wireless PBX extensions, we also will defer our comments to the reply round in hopes that vendors and users of these devices will supply some basic information about the prevalence of these systems and any problems associated with locating wireless callers connecting through the MLTS. Internet protocol ("IP") matters are dealt with in general below.

Legal Authority. Industry participants in the 1996-97 negotiations leading to the now-dated Consensus Group proposal initially were skeptical of the FCC's authority in a matter that involved workplace safety -- suggesting that federal and state OSHA laws should prevail. The public safety representatives disagreed, and it is fair to say, upon reflection, that the legal doubts of some of the negotiators affected the substance of the resulting proposal.

For our part, we acknowledge that Part 68, in its application to equipment attached to the PSTN, was fashioned originally to control harm to the network. Since that initial conception, however, the Commission has promulgated Part 68 rules with other aims. Examples are the provisions on hearing-aid compatibility as well as "inside wiring" regulations that have a dual purpose of not only protecting against harm but also encouraging competition and consumer

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[22] "MLTS Proposal of NENA and APCO" is available on the FCC's Electronic Comment Filing System under date of July 24, 2001. This may be a more convenient means of access than seeking the several elements of the proposal on the NENA web site. The members of the Private Switch Study Group that produced the proposal are listed in Exhibit B hereto.

choice. (note 20, *supra*) Given the Commission's mandate in Section 1 of the Communications Act to "promot[e] safety of life and property through the use of wire and radio communication," we do not find the Private Switch Study Group proposals a legal stretch -- and certainly not as to Part 64's application to common carriers.

The implication in the Model State Legislation element of the proposals is that states would remain free to enact their own MLTS legislation, at least as to wireline equipment. In principle, this recognizes the importance attached by the U.S. Constitution to the role of the states in safeguarding the public safety, health and welfare. Should state actions range so far beyond whatever the FCC does here as to interfere with federal purposes, there will be time enough to consider whether federal regulation should preempt the states.

Resold Cellular and PCS Service

Common to resale, pre-paid calling and use of disposable phones is the basic question of whether the underlying carriers should continue to bear the brunt of 9-1-1 regulation, or whether the FCC has both authority and sound reason to exercise more control over resellers, manufacturers and distributors. If there are sound reasons but questionable authority, Congress may need to act.[23]

Pending careful review of comments in this proceeding, we are inclined to rely on the regulation of facilities-based providers to assure access to 9-1-1 by consumers using resold services. In the case of wireline services, state regulation of resellers may distribute some of this

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[23] Virgin Mobile USA L.L.C. said it has added more than 350,000 net subscribers since it launched its mobile virtual network operator service on Sprint PCS' network in July and is currently reporting more than 2,000 net customer activations per day. *See*, http://rcrnews.com/cgi-bin/search.pl, February 5, 2003.

burden between the facilities-based provider and the reseller. On the wireless side, states are precluded from regulating wireless carrier entry or rates. We defer to other parties to describe more fully whether these restrictions still permit some control of the terms and conditions of wireless resale.

That much having been said, we recognize that facilities-based providers may object to policing their reseller customers and may urge the direct imposition of 9-1-1 obligations on those customers. We will review such comments if and as they are filed. We stand firm in the belief that resold services must provide callback number and location, however that is accomplished and monitored.

Pre-Paid Calling

The same principle applies to pre-paid calling: That those users of the service who dial 9-1-1 must be capable of receiving return calls from PSAPs and capable of location. We recognize that some pre-paid calling is from phones that cannot receive incoming calls, and that bar would include PSAPs attempting to call back a person who has dialed 9-1-1. This is an example of a business developing without regard to the needs of emergency response. We believe that ways can be found to reconnect even with these callers. But if not, the business plan ought to yield to the requirements of public safety and non-returnable calling to PSAPs should cease.

Disposable Phones

As noted above, our general view is that any wireless instrument not capable of being called back or located is not worth the risks to the user or to public safety responders,[24] whatever the "utility of such devices" and whatever the economic burden of compliance with the E9-1-1

[24] The new security risk from terrorists, who reportedly use disposable phones to avoid being traced, adds a further dimension to the problem. *USA Today*, February 11, 2003, front page.

rules. (Notice, ¶105) As with pre-paid service, however, we need to understand whether this principle is feasible and when. Without wishing to stand in the way of commercial ingenuity and profitability, we believe a way needs to be found to make 9-1-1 a pre-production element of the business plan for new devices capable of emergency dialing or alerting. And we are ready to join with other stakeholders, under FCC guidance, to make this happen.

Automated Maritime Telecommunications Systems

As NENA has indicated to the Commission previously, we believe the 1999 Act governs the treatment of AMTS within the United States, not just as to land-based service[25] but as to any communication made from or to vessels on rivers, lakes and coastal waters.[26] To repeat, our aim is not to interfere with time-tested maritime communications systems, only to find a reasonable way to reconcile the 1999 Act with those practices. We have no objection to -- and believe the Act permits -- designating as PSAPs entities such as the Coast Guard, but we believe that Congress has mandated the use of 9-1-1 when those digits can be dialed on the instrument summoning assistance.

Emerging Services and Devices

We touched on this topic in our Comments on the Hatfield Report, and take the liberty of incorporating those views here by reference.[27] Again, we believe our principle should apply even more strongly in the case of emerging services and products, where there is time to plan and build to meet users' "reasonable expectations" of access to 9-1-1 emergency calling and

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[25] Notice, ¶109.

[26] Comments of NENA on Maritel Petition, CC Docket 92-105, November 14, 2000.

[27] Comments of NENA, APCO and NASNA, WT Docket No. 02-46, November 15, 2002, Section IV and Exhibits B and C. Exhibit B was a summary of NENA's "Future Path Plan."

response services.[28] The principle is simply stated: If a device is capable of dialing 9-1-1 or reaching an emergency assistance call center, it should be fitted with the capability to pass a call-back number and a location. The application of the principle admittedly is more difficult.

NENA task forces, study groups and technical committees have been preparing for the advent of "non-traditional" technologies for several years. For example, the Future Models Study Group of NENA's Network Technical Committee has considered the use of XML, or "Extensible Markup Language," an internet specification for web documents, because of

> its ability to allow information of indeterminate length to be transmitted to a PSAP call taker or dispatcher versus the current restriction that requires information to fit the parameters of pre-defined fields.[29]

The computer terminals and related equipment used by PSAPs are natural receivers for XML, but the ALI data bases and other common sources of information are not programmed for such communication. We will continue to work with manufacturers and vendors to build to NENA recommendations in this area.

NENA also has kept abreast of the work of the Internet Engineering Task Force on ENUM -- an IETF protocol that takes a complete, international telephone number and resolves it to a series of URLs using a Domain Name System ("DNS")-based architecture. It represents one

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[28] The use of the term "IP-based telephony," for example, may give rise to a user's assumption that he or she can be identified by call number or other code and can be located.

[29] "NENA Technical Information Document on Future 9-1-1 Models," Issue 6, February 2002, page 10, accessible at http://www.nena9-1-1.org/9-1-1TechStandards/tech_info_docs.htm. Other Technical Information Documents available on the site include "Network Interfaces for E9-1-1 and Emerging Technologies," NENA 07-501, September 11, 2002, and "NENA Review of Non-Traditional Communications to E9-1-1 PSAP Equipment," Issue 1, March 20, 2001. *See also*, NENA 02-010, "Recommended Formats and Protocols for ALI Data Exchange, ALI Response and GIS Mapping," www.nena9-1-1.org/9-1-1TechStandards/nena_recommended_standards.

means of granting a user a single number for wire and wireless telephony, facsimile transmissions and e-mail and other internet transactions.[30]

In this area of new developments, the imperatives of project management --

- What the end result should be in terms of service characteristics;
- the general or specific timeframe for accomplishing the end results;
- a requirement that the major players be identified, and roles defined;
- a requirement that those major parties generate a consensus plan for accomplishment of the above,

-- are even stronger than for existing products and services whose compatibility with 9-1-1 may require costly retrofitting.

CONCLUSION

For the reasons discussed, the Commission should consider, in addition to its legal authority and the status of PSAP readiness for new services and products, the users' reasonable expectations that they will be able to reach a PSAP or call center. Until proven infeasible, we suggest as a working presumption that equipment capable of dialing or signaling 9-1-1, and the service moving that signal, be fitted to allow call-back and location of the user.

Respectfully submitted,

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February 19, 2003

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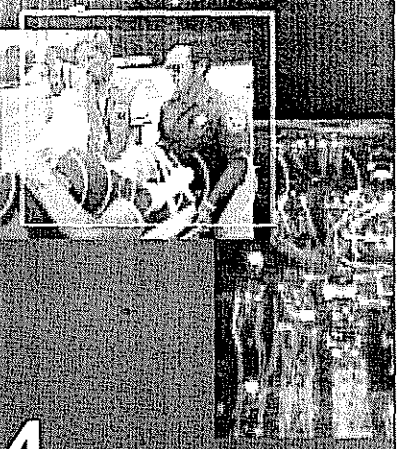
[30] NeuStar, a provider of telephone number clearing services, is planning a public trial of ENUM, and NTIA has recommended that the U.S. consider domestic implementation of the international number protocol. *See*, Letter of Chairman Powell to Ambassador David Gross, Deputy Assistant Secretary of State for Communications and Information Policy, February 13, 2003.

Telematics Helps Save Lives℠

Telematics Solution: Step 1 of 4

- Telematic call initiated either by sensors or occupant starting a 2 step outbound call.
  - 1st step - send out high level crash data.
  - 2nd step - initiate voice call to telematics service provider.
- Telematics service provider receives data and answers the call.
- Voice communications enable the telematics service provider to verify the status of the vehicle occupants and the vehicle data.



Telematics Solution: Step 2 of 4

- Telematics service provider identifies emergency, provides x,y to the Intrado Position Server, and receives routing instructions.
- Telematics service provider uses the routing instructions to send the call to the PSAP 9-1-1 trunks.

Telematics Solution: Step 3 of 4

- The PSAP is now able to talk to both the telematics service provider as well as the vehicle occupant in a 3-way call.
- The PSAP CPE sees the ESQK (similar to a wireless pANI) as ANI and bids ALI.

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Telematics Solution: Step 4 of 4

- The ALI is set to steer the ESQK based ANI bid to the Intrado Position Server.
- The IPS responds to the ALI bid in a standard ALI format.
- ALI format includes specific ACN information including latitude, longitude, crash & vehicle data.
- Callback information includes the TSP callback number and TSP Incident ID.

NENA Private Switch Study Group **Exhibit B**

Anthony Caggiano	Lucent
Barb Jaeger	State of Arizona
Bob Aldrich	MMTA
Bob Chrostowski	MMTA
David White	Federal Express
Deborah Prather	Verizon Midwest
Jim Beutelspacher	State of Minnesota
John Garner	Shelby County (TN) 911 District
John Yearwood	Federal Express
Mary Boyd	Lucent Public Safety Systems (now Intrado)
Norine Lewis	Pacific Bell Telephone
Oenning Bob	State of Washington
Ozery, Nissim	Siemens
Peter Cassidy	Nortel
Steve Sida	SCC Communications (now Intrado)

Exhibit C

Subject: [NC_APCO_NENA] Stolen Vehicle located by using OnStar

Davidson County 911 Shift Supervisor Staci Moore assisted in locating a stolen vehicle by using her knowledge of OnStar that she learned at the National APCO Conference in Charlotte.

When Staci received a call this morning [February 13th] at 10:30 from a subject that advised that his new Chevrolet Truck had been stolen and that it had OnStar. He did not know the number to call so Staci made contact with OnStar and connected the caller with the OnStar call center.

OnStar contacted Staci at 11:19 and advised her that the vehicle had been located and he could give her the cross streets. Staci asked him for the Latitude and Longitude and using our OSSI CAD and integrated mapping system, she entered the information and determined the address and that it was located at the Wal-Mart shopping center.

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