

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of

Revision of the Commission's Rules to
Ensure Compatibility With Enhanced 911
Emergency Calling Systems

CC Docket No. 94-102

REPLY COMMENTS OF VERIZON¹

The commenters who argue that the Commission should require the wireline carriers to upgrade the E911 infrastructure to promote deployment of 911 services by emerging technologies and other services and devices are putting the cart before the horse. Neither the carriers nor the Commission can define the types of network upgrades that may be needed until the Commission determines what type of information each technology must provide to the 911 system. It is only after the Commission defines the responsibilities of service providers and equipment manufacturers to provide 911 capability that the local exchange carriers will be able to determine whether and what type of upgrades to their 911 infrastructure are necessary to meet the new requirements. Verizon participates in several industry forums addressing these issues and it will work with the industry to provide the required support once the user requirements are identified.

While many commenters make broad assertions that the Commission should require new services or technologies to provide the same type of 911 service that customers of wireline telephone services currently enjoy, few have provided any details about the technological or

¹ The Verizon telephone companies ("Verizon") are the affiliated local telephone companies of Verizon Communications Inc. These companies are listed in Attachment A.

economic feasibility of doing so or have addressed how these requirements would be funded. The Commission should identify services or products for which the public has a reasonable expectation of being able to reach 911 or E911 services and for which such access is technically and operationally feasible. The Commission should also conduct a cost/benefit analysis of implementing 911 access for these services or products and address how those costs would be recovered.

The complaints that the existing E911 infrastructure needs to be upgraded are premature. For example, WorldCom complains (at 2) that the existing wireline E911 infrastructure is “antiquated” because it does not support Internet Protocol-based services and that this prevents such services from offering E911 functionality. WorldCom has a “vision” that if the incumbent local exchange carriers built an Internet Protocol-based E911 infrastructure, providers of equipment and services that use the Internet, such as laptop computers, personal digital assistants (“PDAs”), and IP-based services that compete with traditional wireline local exchange carriers, would have an incentive to offer robust E911 capabilities. However, WorldCom does not provide any explanation of how those providers would implement E911 services and what, if anything, they would need from the local exchange carriers. The comments of Net2Phone, a provider of voice over Internet (“VOIP” or “IP telephony”) make it clear that these carriers do not currently have the capability of providing the required location information and that they do not want to have the same responsibilities as traditional wireline carriers to provide E911 services. *See* Net2Phone Reply Comments, 8 (filed Mar. 11, 2003). It does no good to blame the 911 infrastructure of the wireline carriers for the lack of 911 capability when new entrants are not ready to provide 911 services or are not inclined to do so.

Many commenters argue that the Commission should impose E911 service obligations on emerging technologies and on existing services and products that do not currently have that capability. *See, e.g.*, Association of Public-Safety Communications Officials-International, 4 (filed Feb. 19, 2003); Washington State E911, 1-2 (filed Feb. 19, 2003). However, they do not show that such mandates are technically or operationally feasible, or what those mandates would cost the carriers or PSAPs. Nor is there any discussion of how the local exchange carriers' E911 infrastructure would have to be changed to support service providers trying to meet such mandates or how the local exchange carriers would recover the costs of those upgrades.

Until the Commission adopts rules requiring new products or services to provide 911 or E911 dialing capability, it is impossible to determine exactly how, if at all, the existing 911 infrastructure must be modified to accommodate them. Many types of new equipment, such as PDAs and VOIP equipment, do not provide global satellite system ("GPS") based location information necessary for identifying the customer's location. Even if they had such capabilities, it is not clear how such services would identify the public service answering point that would provide 911 service to that location.² Some solutions might require use of centralized call

² For example, wireless carriers who provide E911 service through handsets that have GPS capabilities use a pseudo telephone number associated with the cell site serving a 911 call to identify the PSAP to which the call is routed. *See, e.g.*, Dan N. Hatfield, *A Report on Technical and Operational Issues Impacting the Provision of Wireless Enhanced 911 Services*, WT Docket No. 02-46, 10-11 (filed Oct. 15, 2002). The PSAP then uses the pseudo telephone number to query the automatic location identification ("ALI") database to obtain the X and Y coordinates of the wireless phone, which have been downloaded to the ALI database by the wireless network. While a PDA equipped with GPS capability that used a wireless voice network to dial calls to the 911 network might function in the same way, VOIP equipment with GPS capability might not. The wireless network uses a local switch and cell site locations to route the call to the appropriate PSAP, while VOIP services may not have a switch, or they may use a switch located hundreds or thousands of miles from the handset. Such systems might use the X&Y coordinates to identify the nearest PSAP, but this might introduce unacceptable delay in completing the call to the PSAP while the system queried the ALI database.

centers, while others might use alternative means not yet developed. Until the solution for each type of product or service is developed, it is not clear what kind of E911 infrastructure would be needed to support it.

In many cases, the existing E911 infrastructure is sufficient to support new applications. For example, Verizon already has a service that provides E911 support to private branch exchange (“PBX”) switches and to Centrex customers. *See, e.g.*, Verizon New York Inc., Tariff PSC NY No. 1, Section 19, pp. 16-20. The service, called Private Switch/Automatic Location Identification (“PS/ALI”) is an E911 service that allows a PBX or a Centrex system to send a customer’s automatic number identification (“ANI”) over the Verizon switched network to a PSAP. As for other E911 calls, Verizon uses ANI to route the call to the appropriate PSAP and the PSAP uses the ANI to query the ALI database for the location information. PS/ALI service enables the PBX or Centrex customer to update its information in the ALI database through dial-up access so that the PSAP can determine the exact location and call-back number of each station.

For each type of new service or equipment for which E911 capability is being considered, the key issues are how to route the 911 call to the appropriate PSAP and how to provide the PSAP with the location and telephone number of the calling party. There is insufficient information in the record to adopt specific technical requirements for the provision of E911 services by these services and products. The Commission should encourage the industry to develop a consensus for the methods by which E911 access will be expanded. Verizon currently is participating in three national efforts to focus attention on E911 issues – the Emergency Services Interconnection Forum of the Alliance for Telecommunications Industry Solutions, the Strategic Wireless Action Team of the National Emergency Number Association, and the Expert

Working Committee of the Department of Transportation. Each of these efforts serves to identify barriers and impediments to the seamless roll-out of E911 services, both wireline and wireless. These forums provide a means of identifying issues and developing solutions as new technologies emerge. The Commission should rely on these types of national forums to assist in identifying changes needed in the E911 infrastructure to address new requirements.

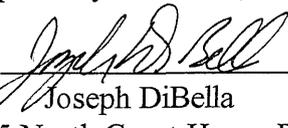
Verizon's E911 infrastructure supports existing requirements for both wireline and wireless carriers in a cost-effective manner and with a high degree of reliability and responsiveness. In considering whether and how the network must be modified to support new requirements placed on emerging technologies and non-traditional means of communications, the Commission should consider not only technical feasibility, but also the cost to all parties – service providers, PSAPs, and infrastructure providers. In addition, as the Commission noted in announcing its Enhanced 911 (E911) Coordination Initiative, it must address several ongoing implementation issues, including PSAP funding and local exchange carrier cost recovery.³

³ *See FCC To Launch E911 Coordination Initiative*, News Release (rel. Mar. 5, 2003) available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-231747A1.pdf; *Hearing on Wireless E911 Before the Subcommittee on Communications, Committee on Commerce, Science, and Transportation, United States Senate*, (Joint Written Statement of Kathleen Q. Abernathy and Jonathan S. Adelstein), at 12 (March 5, 2003) available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-231759A1.pdf.

Although the Commission alone cannot resolve the issue of funding, it can and should address the issues of both cost and cost recovery.

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THE VERIZON TELEPHONE COMPANIES

The Verizon telephone companies are the local exchange carriers affiliated with Verizon Communications Inc. These are:

Contel of the South, Inc. d/b/a Verizon Mid-States
GTE Midwest Incorporated d/b/a Verizon Midwest
GTE Southwest Incorporated d/b/a Verizon Southwest
The Micronesian Telecommunications Corporation
Verizon California Inc.
Verizon Delaware Inc.
Verizon Florida Inc.
Verizon Hawaii Inc.
Verizon Maryland Inc.
Verizon New England Inc.
Verizon New Jersey Inc.
Verizon New York Inc.
Verizon North Inc.
Verizon Northwest Inc.
Verizon Pennsylvania Inc.
Verizon South Inc.
Verizon Virginia Inc.
Verizon Washington, DC Inc.
Verizon West Coast Inc.
Verizon West Virginia Inc.