

**Before the  
FEDERAL COMMUNICATIONS COMMISSION**

In the Matter of )  
 )  
Framework for Next Generation 911 Deployment ) PS Docket No. 10-255  
 )

**COMMENTS OF DASH CARRIER SERVICES, LLC**

Dash Carrier Services, LLC (“Dash”), through undersigned counsel, hereby submits its comments in response to the Federal Communications Commission’s (“Commission” or “FCC”) Notice of Inquiry<sup>1</sup> in this matter.

Given Dash’s existing Next Generation 9-1-1 (“NG9-1-1”) technology, its participation in the National Emergency Number Association’s (“NENA”) NG9-1-1 Industry Collaboration Event and its proven ability to deliver accurate location information and other 9-1-1 services to service providers of all types, Dash is uniquely prepared for a seamless transition to NG9-1-1. As such, Dash supports the Commission’s and industry’s efforts to date and agrees with the Commission that the deployment of and transition to NG9-1-1 presents multiple opportunities for benefit of consumers, public safety and homeland security. However, Dash cautions the Commission that these opportunities may be reduced and the versatility of the NG9-1-1 system restricted if the Commission attempts to overlay policies, definitions and structures designed for a circuit-switched world onto an IP-based marketplace. The rules the Commission puts in place for NG9-1-1 should be open and flexible and designed to accommodate a multiplicity of applications, providers, technologies and services. Descriptions like “wireline,” “wireless,” “fixed VoIP” or “nomadic VoIP” conjure up out-dated policies. Narrowly defined sub-sets of communications services such as these have no place in the NG9-1-1 environment. The ability of Dash and other innovative 9-1-1 service providers to deliver accurate, real-time location information to Public Safety Answering Points (“PSAPs”)

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<sup>1</sup> *In the Matter of Framework for Next Generation 911 Deployment*, Notice of Inquiry, PS Docket No. 10-255 (rel. Dec, 21, 2010) (“NOI”).

regardless of the underlying technology or application used by an end-user make these distinctions irrelevant. The Commission should continue to work vigilantly to protect end-users but allow IP-based services to evolve by avoiding artificial and unnecessary distinctions rooted in an out-dated communications model.

## **I. BACKGROUND/INTRODUCTION**

Dash provides 9-1-1 call routing and related services to nearly 300 ILEC, CLEC, and VoIP service provider customers that operate in 48 states and the District of Columbia. In order to route and deliver 9-1-1 calls for its customers, Dash manages a nationwide network that connects to nearly all of the 650 selective routers in the country and virtually all of the automatic location identification (“ALI”) databases operated by the 9-1-1 System Service Providers (“SSPs”) and by standalone jurisdictions. Dash’s service enables its customers to meet end user expectations and the current regulatory obligations of the FCC and state public utility commissions for the provision of 9-1-1.

Dash implemented the routing systems it uses today in parallel with NENA’s development of “NENA Functional and Interface Standards for Next Generation 9-1-1 Verizon 1.0 (i3) (“i3 Standards”). As a result, Dash is capable of routing calls consistent with the i3 Standards in addition to being able to deliver calls based on the current E9-1-1 system. Because Dash will interface directly to NG9-1-1 Systems as they are deployed across the country, Dash’s systems do not require legacy or transitional components. Dash designed its systems based in part on systems currently in production and then tested and validated them in the NENA NG9-1-1 Industry Collaboration Event to ensure they are NG9-1-1 compatible. Consequently, Dash’s nearly 300 VoIP and carrier customers and their subscribers will be among the first to get the advantages promised in NG9-1-1.

## II. COMMENTS

### A. Any NG9-1-1 Rules Should Accommodate New Providers, New Technologies and New Solutions, Not Carry Forward Outdated and Increasingly Irrelevant Concepts.

The Commission notes in the NOI that several key features of NG9-1-1 technology differentiate it from legacy 9-1-1 systems, including the fact that NG9-1-1 can be accessed by a variety of end users and devices, is capable of supporting multiple voice and non-voice services, blurs the distinction between mobile, nomadic and fixed services, and may be provided by multiple entities.<sup>2</sup> In other words, NG9-1-1 will promote a technological environment where any device, can be used anywhere, at anytime. If the Commission seeks to promote an open, dynamic NG9-1-1 system that can provide these benefits, it cannot use regulatory definitions and structures developed in and for a different time. In an all IP-based world in which a 9-1-1 service provider treats each call in the same manner and can provide PSAPs with a range of information, concepts like wireline, wireless, mobile, fixed or nomadic will no longer be necessary or relevant. Similarly, structures like the ALI database, 9-1-1 or Centralized Automatic Messaging (“CAMA”) trunks need not exist as they have in the past and, therefore, should not be the focus of current regulation.

Rather than trying to fit new technologies into outdated structures, the Commission should focus on developing forward-looking rules that are competitively and technologically neutral. Attempting to label particular services or technologies in order to then determine how they fit within the traditional 9-1-1 constructs runs counter to the overarching goal of NG9-1-1 and results in inefficiencies and discrimination. For example, in the NOI, the Commission seeks comment on whether NENA’s recommendation that the use of the term “wireline E9-1-1 network” in section 9.3 of the Commission’s rules could preclude the use of an IP-based NG9-1-1. While Dash agrees with NENA’s recommendation, Dash objects to starting the discussion with the existing definition or even trying to distinguish between “wireline” and “IP- based.” The NG91-1 network will not make these distinctions, so the Commission’s rules should not either.

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<sup>2</sup> NOI, at ¶ 21.

Defining current 9-1-1 requirements relative to yesterday's technology leads to artificial regulatory classifications that are increasingly inapplicable. This compartmentalization can lead to inadvertent or overt discrimination when a new technology or solution does not fit neatly into an existing box. For example, many state regulators, PSAPs and carriers try to create a distinction between "fixed" and "nomadic VoIP" for 9-1-1 purposes. This typically appears to be done with an eye toward squeezing "fixed VoIP" into the wireline/ALI model. This traditional approach is a key indicator that those that control access are not receptive to innovative solutions that treat **all** technologies the same. To this group, a solution designed for nomadic VoIP that relies upon real-time location inputs other than ALI and, therefore, enables more accurate location identification,<sup>3</sup> cannot be used for "fixed VoIP", wireline or wireless customers. In other words, the focus is on the label provided to a service rather than its capabilities. If a 9-1-1 solution can provide accurate, real-time location information for a 9-1-1 caller, regardless of the technology the caller uses, and can facilitate provision of other information, such as video or photos, that technology should not be limited to "nomadic VoIP" or a mobile service. Consumers and public safety would be better served by a 9-1-1 solution that provides the same capabilities and same information for a wireline 9-1-1 caller that it does for a wireless 9-1-1 caller or "fixed" or "nomadic VoIP" 9-1-1 caller. Some 9-1-1 service providers, like Dash, have developed 9-1-1 solutions that treat all underlying service models the same. These solutions will work well in a NG9-1-1 system that is also service provider agnostic. As it looks to the future, the Commission should not limit the viability of NG9-1-1 by clinging to outdated concepts.

Some parties seek to drag components of the current 9-1-1 system, such as the existing ALI database or 9-1-1 or CAMA trunks, unnecessarily into the NG9-1-1 discussion. The Commission should recognize that these efforts look backwards rather than forwards. ALI, as it exists today,

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<sup>3</sup> In the NG9-1-1 system location information is provided by the originating service provider using a location Information Server ("LIS"). As the LIS moves out into the originating service provider's network, the provision of 9-1-1 will move away from the ALI model and into the model employed by Dash and other 9-1-1 service providers today.

cannot and will not meet the needs of existing and new service providers in a NG9-1-1 environment. Other systems for addressing location information, such as the LIS central to NENA's NG9-1-1 architecture, will supplant ALI and are capable of providing more accurate, real-time location data than ALI. As the industry transitions to NG9-1-1, location determination will move away from an ALI model and toward V&H coordinates or other geodetic (latitude/longitude/altitude) forms of location identification, which may include civic address information.

In establishing the transition to NG9-1-1, the Commission must ensure that appropriate rules are in place to promote a variety of 9-1-1 options. Service providers should be given the flexibility to select the 9-1-1 solution that best meets their needs and business model rather than being forced to use a particular, regulator-mandated solution. As the Commission noted, in the traditional 9-1-1 system, only a small number of entities participated in the provisioning of 9-1-1 services.<sup>4</sup> In most cases, one of these entities was the ILEC that controlled the selective routers, the ALI database and the facilities over which 9-1-1 calls are carried. As alternative 9-1-1 providers have emerged, many competitive service providers have elected to obtain their 9-1-1 services from providers other than the ILEC. However, competitors have been forced to maintain these legacy systems at the same time. For instance, some ILECs require CLECs to purchase 9-1-1 or CAMA trunks any time the CLEC seeks to deploy interconnection facilities whether or not the CLEC will actually use the trunks. If the CLEC purchases its 9-1-1 services from a VoIP Positioning Center ("VPC") or other provider, this requirement creates an unnecessary expense for the CLEC, and a windfall for the ILEC, without any countervailing public interest benefits. In fact, where the 9-1-1 service provider or VPC has acquired CAMA trunks from the CLEC and can deliver calls for the CLEC, as well as others, over that infrastructure, this model may be more efficient and cost-effective than the ILEC solution, without reducing the reliability of the 9-1-1 network. To make matters worse, the requirement to purchase 9-1-1 trunks from the ILEC imposes burdens on the PSAPs because they have to conduct interoperability testing on each trunk and otherwise be prepared to receive 9-1-1 calls from those

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<sup>4</sup> NOI, at ¶ 50.

trunks regardless of whether the CLEC is actually using them. The more likely result of this discriminatory behavior is that the CLEC elects not to use an alternative 9-1-1 solution and remains bound to the ILEC's outdated model. CLECs, VoIP providers and other competitive service providers should be permitted to use VPCs or other new 9-1-1 solutions and not be required to purchase services that they would not absent regulatory or monopoly mandates to do so.

ALI databases, selective routers, and the 9-1-1 wireline network are creatures of the circuit-switched PSTN. The entities that created and maintain this system have a vested interest in perpetuating its existence. Rather than developing a regulatory life support system to artificially maintain outdated systems, the Commission should move beyond the past and focus on implementing forward-looking rules consistent with the goals of NG9-1-1.

**B. The Commission Should Establish a Standards-Based Regime that Supports and Allows Competitive Providers and Solutions.**

PSAPs, carriers, service providers, and technology companies have already started developing and implementing their NG9-1-1 solutions. If the industry moves forward without clear guidelines and some level of coordination, the path to full, nationwide NG9-1-1 deployment will be uneven, uncoordinated and unpredictable. Carriers, VoIP providers, and their 9-1-1 service providers, such as Dash, will be forced to operate in an uncertain environment. This is costly and inefficient for the companies delivering emergency services to consumers, which ultimately translates into higher costs for consumers.

As discussed above, a regulatory regime that imposes differing levels of regulation upon different services or providers based upon the label assigned to the service is not sustainable in the NG9-1-1 system. At the same time, if the Commission attempts to regulate every possible player in a NG9-1-1 environment, the resulting regulatory system will be cumbersome and difficult to implement. Innovation will stagnate in such an environment. Nonetheless, some guidance is required to ensure an efficient, timely transition to NG9-1-1 and to prevent discrimination by or among providers.

For these reasons, Dash recommends an approach under which the Commission can assign roles, responsibilities and varying degrees of regulatory oversight to each of the types of entities that comprise the full NG9-1-1 architecture. NG9-1-1 promises a wide range of improvements and enhancements to legacy 9-1-1. The Commission should, as part of any new regulations, promote one consistent, nationwide, baseline level of capabilities that all citizens can expect to receive. If local jurisdictions have the financial resources and the staff capacity to provide a higher level of service, they should be free to do so within the limits of their jurisdictional area. The Commission should set the minimum requirements as high as possible without placing requirements on local 9-1-1 authorities that they do not have the resources to meet. The Commission should also provide a clear definition of what services should be required (or allowed) to support 9-1-1. Companies providing communications services, particularly new entrants with innovative service offerings, should not have to guess whether their new service has to provide 9-1-1.

Under this regulatory approach, certain critical roles could be subject to full regulatory compliance, but all others could be managed by the industry through a certification process. Because of their unique expertise, either with 9-1-1 and NG9-1-1 or in the development and implementation of industry standards, the Commission should engage entities like NENA, the Association of Public Safety Communications Officials (“APCO”), and/or the National Institute of Standards and Technologies (“NIST”) to assist in developing appropriate standards and requirements for NG9-1-1. These entities could also facilitate or manage a certification program.

A number of other factors favor a standards-based approach over service or technology-centric regulatory requirements, like those in place today. First, a standards-based regime should not lead to the compartmentalization and inflexibility described above. A standards-based regime would focus on what is required, *e.g.*, what information must be delivered with a 9-1-1 call, not how it will get there or what type of service the caller is using. Second, a standards-based approach is consistent with the any device, anywhere, anytime concept of NG9-1-1. Dash, like some other 9-1-1 service providers, already offers a NG9-1-1 solution that works for all service types, functions within

the existing 9-1-1 architecture and will function in the NG9-1-1 architecture. Limitations on the availability of this technology are tied to anachronistic regulatory definitions and labels. If NG9-1-1 is truly going to be a system that facilitates the use of a variety of applications, service providers and technologies, it must be supported by a regulatory regime that is similarly neutral. Tying future regulation to a particular technology or system that exists at a particular point in time, unnecessarily narrows the universe of alternatives available to an industry that is fundamentally dynamic by nature. Third, a standards-based approach that regulates the results, not the means, promotes the greatest innovation and competition. The very concept of a NG9-1-1 system warrants a regulatory approach that favors innovation, competition, and diversity. A standards-based regulatory regime satisfies these requirements.

In addition to establishing the minimum requirements for NG9-1-1 service providers, the Commission should ensure that as new products or services become subject to the Commission's NG9-1-1 regulations, either because they fall within the definitions of covered services or the service provider voluntarily commits to provide 9-1-1 capability, they receive the same liability protections extended to existing services. Many current technologies, including VoIP services that do not meet the definition of interconnected VoIP in the Commission's rules, may not be subject to the Commission's existing 9-1-1 requirements and, therefore, may not be included in NG9-1-1 regulations. Nonetheless, the providers offering these services may elect, for business, customer relations or other reasons, to provide their subscribers full 9-1-1/NG-9-1-1 capability. If a new entrant can provide the same NG9-1-1 capabilities as existing providers, it should be entitled to the same level of liability protection. These entities should not be penalized for their unregulated status, especially if they pursue a proven NG9-1-1 solution

Likewise, as the Commission notes, multiple parties may be involved in the provision of NG9-1-1. Some of these entities may already have some level of liability protection by virtue of being PSAPs, carriers, or interconnected VoIP providers; however, many will not. If liability protection in the NG9-1-1 network is based upon classifications similar to those relied upon in the legacy 9-1-1

network, innovative solutions providers that do not fit within those definitions may be exposed to greater liability than other entities involved in the same 9-1-1 call. In order for the NG9-1-1 network to work as envisioned, the entities involved in similar functions within the network must have parity in their liability protection as well as their obligations. The Commission must ensure that liability protection in the NG9-1-1 environment extends to all entities appropriately involved in providing NG9-1-1.

### III. CONCLUSION

Dash cautions the Commission not to limit the viability and potential of NG9-1-1 by imposing rigid, wireline-focused rules. Instead, Dash urges the Commission develop a forward-looking, standards-based regulatory regime that promotes the continued development of 9-1-1 solutions that are adaptable to end-users while providing greater location accuracy and increased functionality.

Respectfully submitted,



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