

# NENA

## The 9-1-1 Association

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Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street SW  
Washington, D.C. 20554

April 20<sup>th</sup>, 2011

Dear Ms. Dortch:

Please accept this letter as notice of an oral *ex parte* presentation by employees of the National Emergency Number Association in reference to Docket Number 10-255, *In re Framework for Next Generation 911 Deployment*.

On Tuesday, April 12<sup>th</sup>, I, along with NENA's Government Affairs Director, Trey Forgety, and Technical Issues Director, Roger Hixson, and Operations Issues Director Rick Jones (via teleconference) met with the following FCC personnell: Aaron Garza, John Healy, Stan Scheiner, Patrick Donovan, David Furth, Jerry Stanshine, David Siehl, Tim May (via teleconference), and Henning Schulzrinne. Our discussion covered five topics, described in detail below: Standards Development, NG9-1-1 Branding, Data Collection, FCC Options, Interoperability, and Minimizing Costs. In addition, we supplied the Commission staff with individual copies of the attached exhibits, NENA's Baseline Description of NG9-1-1, and an untitled coverpage.

#### *Standards Development*

In response to a staff question concerning the state of standardization for NG9-1-1, NENA stated that version one of NENA's i3 document, *Detailed Functional and Interface Standards for the NENA i3 Solution*, is undergoing final review by the NENA Board, a processexpected to be concluded soon<sup>e</sup>. The i3 document assumes an IP interface with all Originating Service Providers and the adoption of Location Information Servers in Originating Service Provider and Access Network Provider systems. It does not however, deal with transitional system architecture or address certain data- and operations-related issues. NENA noted, however, that we anticipate completing work on these transitional issues later this year or early next year.

#### *NG9-1-1 Branding*

In response to a staff question concerning minimum standards for what constitutes "NG9-1-1," we distributed the two documents attached at the end of this *Notice* which describe NENA's baseline description of NG9-1-1. We further stated that both NENA and the Commission have a role to play in determining the ultimate architecture of NG9-1-1 systems. Finally, we reiterated our earlier statement that a true "NG" deployment could not yet occur, due to the absence of Location Information Servers (or an alternative location service methodology) in Originating Service Provider and Access Network Provider networks.

#### *Data Collection*

Our discussion of data collection centered on the need for reliable estimates of the costs involved in the transition to NG9-1-1. In particular, we discussed the difficulty of preparing an accurate estimate of transition costs given the lack of information about the disparate internal state of PSAPs. Additionally, we discussed the need for and potential benefits of collecting information about the performance of location-data functions such as the Master Street Address Guide, Automatic Location Identification, Phase II Wireless Location, and User-Provided VoIP Location Data. We expressed our belief that such information would be most useful to state 9-1-1 administrators and any data collection mandate should make state administrators the first-line recipients and aggregators of such data.

#### *FCC Options*

Recognizing that the FCC cannot provide funding or advocate for new laws, NENA stated that two problems could be addressed within the scope of the Commission's authority and traditional role in the 9-1-1 space: the "first-mover" problem, and the location-provision problem. With regard to the first-mover problem, NENA stated that enabling states, regional entities, or other appropriate 9-1-1 authorities to begin building ESInets could prompt other actors take steps needed to enable multimedia origination for NG9-1-1 service requests. With regard to location, NENA reiterated its willingness to consider alternatives to the Location Information Server approach as presented in the draft i3 standard.

#### *Interoperability*

We discussed the need to maintain interoperability between originating services, NG9-1-1 systems, and the public safety wireless broadband network. NENA directed staff's attention to the ongoing symbiotic relationship between standards work at NENA and ATIS, and to the potential for widespread adoption of the IMS standard as important industry developments.

#### *Minimizing Costs*

Finally, we discussed the need for thorough modeling of the fixed costs of NG9-1-1 systems, along with the equally important need for a transition model that equitably allocates costs for legacy and NG system components during such times as these components may coexist. NENA offered to assist the Commission in its already-announced cost modeling effort, to the extent possible.

Should you have any questions, please contact me as below.

Sincerely,



CEO

# Baseline NG9-1-1 Description

NENA standards-based NG9-1-1<sup>(2)</sup> is designed to provide benefits such as automated validation processes, a high degree of future-proofing in its initial ability to support non-voice emergency communications as originating service providers respond to the demands of the calling public, and a high level of interoperability within the NG9-1-1 system and with adjacent and distant NG9-1-1 systems.

The purpose of NENA's Baseline NG9-1-1 Description is not to define a lesser version of NENA NG9-1-1, but rather to provide a high level description of the basic NENA standards-based set of capabilities required to be considered NENA NG9-1-1 during transition. If an IP based 9-1-1 system does not have all the features stated in the NENA Baseline NG9-1-1 Description, then it is considered an alternate, intermediate approach that may evolve into a NENA standards-based NG9-1-1 system over time, but it does not meet the NENA Baseline NG9-1-1 Description.



## NENA Baseline Next Generation 9-1-1 Description

NENA Baseline NG9-1-1 is a description of a basic set of features & functions that constitute a NENA Standards based Next Generation 9-1-1 solution, on the path to an end-state i3 architecture. The i3 architecture components are only one aspect of NG9-1-1. There are more components that make up a complete NG9-1-1 “system”. As future needs are identified, overall NG9-1-1 standards will be updated.

In order to be fully compliant with NENA NG9-1-1 definitions, upon implementation the baseline NG9-1-1 system must include the functions of today’s E9-1-1 system, replicated in IP protocol and structures as defined by NENA NG9-1-1 standards, including all network and PSAP components of the system and a number of capabilities beyond E9-1-1 functions, such as the basic ability to support non-voice multimedia, such as text and video. While these forms of communication may not be immediately available through originating service providers, baseline NG9-1-1 has the system functionality to support multimedia, perform routing, provide for call media logging, and enable PSAP/caller interactive communications (voice & non-voice). Therefore, as originating service provider IP based standards are finalized and aligned with NENA NG9-1-1 standards, disruptive software application or hardware changes are not expected in NG9-1-1 systems.

Additional minimally required components or capabilities of baseline NG9-1-1 include, but are not limited to:

1. ESInet (Emergency Service IP network)
2. GIS data creation to support 3 and 6 below, and associated management tools
3. Publication of Authoritative NG9-1-1 Validation related Databases for use by OSPs and Location DB providers to pre-validate civic addresses (in replacement of MSAG), supported by LVF and LIS functionality<sup>1</sup>
4. Publication of Authoritative NG9-1-1 Routing Data for state and regional levels
5. Support for legacy originating services via gateways (e.g., access to traditional ALLI databases)
6. Geospatial controlled IP software call routing function (ECRF and ESRP)<sup>2</sup>
7. The ability to control call routing based upon a policy routing function (PRF) with standardized methods to define/build and control Policy Rules
8. Additional data acquisition after call delivery to facilitate call processing by calltaker or other public safety entities
9. Support for transfer of calls with accumulated calltaker notes and added data, or an access key to such data, to any authorized entity interconnected by ESInets
10. Ability to interconnect with other NG9-1-1 systems and to interwork with E9-1-1 systems
11. Support for system monitoring/logging/discrepancy reporting necessary to support troubleshooting and ongoing operation and maintenance

The above minimally required components or capabilities of baseline NG9-1-1 encompass architectural, security, data, confidentiality, interconnection with other 9-1-1 systems, and operations aspects of NG9-1-1 service as defined in NENA Standards and related documentation.

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<sup>1</sup> LIS or its equivalent is required to support interactive validation functions, and is especially crucial to support ‘over the top’ IP based originating services

<sup>2</sup> Emergency Call Routing Function (ECRF) and Emergency Service Routing Proxy (ESRP)