CC 94-102 / WC 05-196 / PS 07-114 / PS 10-255

Before the Federal Communications Commission

In re
Implementation of the
Middle Class Tax Relief and Job Creation Act of 2012
Provisions Concerning
Multi-Line Telephone Systems

ON PUBLIC NOTICE

REPLY COMMENTS OF THE NATIONAL EMERGENCY NUMBER ASSOCIATION

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The National Emergency Number Association ("NENA") respectfully submits the following comments in reply to those comments filed in response to the *Public Notice* adopted by the Commission on May 21st, 2012, in these proceedings.

REPLY

NENA is pleased at the overwhelmingly-positive comments received by the Commission in response to its *Public Notice* in these dockets. As the record now amply demonstrates, it *is* feasible for manufacturers of Multi-Line Telephone Systems ("MLTS") to include within those systems the ability to identify an emergency response location with sufficient precision to allow effective emergency response. In short, the question is no longer "can they?" but "shall they?," and "by when?"

I. It is clearly feasible for manufacturers to include E9-1-1 location capabilities in MLTS.

The record developed in these proceedings is remarkably consistent with respect to the narrow question that Congress directed the Commission to answer: It is unquestionably feasible for manufacturers of MLTS to include within those systems the capability to identify the location of a 9-1-1 caller with sufficient precision to support an effective response. NENA concedes that this is not the entire picture: Verizon, AT&T, and the VoN coalition all rightly identify additional considerations that the Commission must take into account in future rulemakings.[1] None of those considerations, however, changes the fundamental conclusion that MLTS E9-1-1 location is technically feasible for manufacturers. As Verizon correctly notes, "MLTS systems with precise E911 location capability are now widely available…."[2] Indeed, the California Public Utilities Commission concluded that: "[f]or the last ten years, major equipment manufacturers have built E9-1-1 capabilities into new models and PBX upgrades. It is very rare to find a PBX in use that cannot be programmed to deliver the caller ID needed to retrieve caller location information."[3]

It should be unsurprising, then, that every comment filed in opposition to an MLTS mandate focuses not on the technical feasibility of such a mandate for manufacturers, but on some other supposed difficulty. AT&T, for example, suggests that the costs for MTLS managers or 9-1-1 system service providers will be prohibitive, even though

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[1] *E.g.*, Verizon and Verizon Wireless, *Comments* at 5; AT&T, *Comments* at 2-6; VoN Coalition, *Comments* at 3.

[2] Verizon and Verizon Wireless, *Comments* at 3.

[3] Intrado, *Comments* at 3. *Accord* AT&T, *Comments* at 6. The CPUC statement is slightly inaccurate: In the MLTS context, the "Caller ID" that most frequently dereferences location information is an Emergency Location Identification Number ("ELIN") or Emergency Service Routing Key ("ESRK").

Verizon states that it already makes such services available on a commercial basis.[4] Likewise, the VoN coalition and TIA focus on the difficulty of crafting of rules that will encompass every novel or peculiar MLTS implementation, no matter how niche the market.[5]

II. If further standards work is required, only a mandatory deadline will ensure its completion.

In the initial comment round, NENA and Intrado noted that existing standards are sufficient to enable MLTS to provide precise E9-1-1 location information to Public Safety Answering Points ("PSAPs").[6] NENA also identified several standards that enable E9-1-1 location provisioning through MLTS using legacy TDM and modern SIP/IP architectures.[7] Others, however, make the case that additional standards development work is still necessary. The proponents of this view fall generally into two camps: those who conflate the need to make policy decisions with a need for additional technical standards development, and those who allude vaguely to the need for further technical standards development without identifying what further work is needed. Even if policy considerations occasionally do cross into technical realms, and even if there are further standards that must be developed to enable *some* E9-1-1 location capabilities for *some* MLTS,

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[4] Verizon, *Comments* at 2.

[5] VoN Coalition, *Comments* at 2-3; TIA, *Comments* at 12. For example, in 2002, the DECT Forum noted that "not even DECT is bought to replace fixed access, it is a complement for those who really need the local mobility." DECT Forum, *Positioning of DECT in Relation to Other Radio Access Technologies* 13 (Jul. 30, 2002)

(*available at:* http://www.dect.org/userfiles/file/General/DECT%20Background/DECT_Positioning.pdf) (last accessed Aug. 6, 2012).

[6] Intrado, *Comments* at 4; NENA, *Comments* at 15.

[7] NENA, *Comments* at 13 fn.30 and 15 fns.33-34.

however, neither camp offers any assurance that supposedly-needed standards work will ever be completed.[8]

A. The maximum permissible size of an Emergency Response Location is a question of policy, not a matter for technical standards.

In the first camp, Verizon notes that details such as the maximum acceptable size of emergency response locations within an MLTS implementation have not been set on a nation-wide basis, and argues that further work is required in this area. Once the technical capability to provide emergency response location designation for each station within an MLTS is established, however, the maximum permissible size of an ERL is irrelevant to the system itself.

Once an MLTS mandate is in place, a particular jurisdiction could decide that cubicle-level information is helpful, or that NENA's own 40,000 ft^2 recommendation is appropriate in particular cases. As NENA's model legislation suggests, decisions about ERL boundaries are highly subjective and intertwined with other factors.[9] As a practical matter, the desirable size of ERLs depends on the environment of the MLTS serving them. Residential MLTS, for example, require ERLs that represent individual residential addresses, whereas a similarly-sized business application may require fewer ERLs, demarcated by floors or floor-segments. In some larger instances, such as a large floor populated with many cubicles, ERLs may need to be laid out by quadrants or by rooms. Due to these

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[8] TIA, for example, notes that its TR-41 working group is "open to discussing further areas where standards development is needed for MLTS location accuracy," but makes no commitment to work toward completing any standards that may be "discussed." TIA, *Comments* at 14.

[9] NENA Data Technical Committee (Multi-Line Telephone Systems Model Legislation Working Group), *NENA Technical Requirements Document on Model Legislation E9-1-1 of Multi-Line Telephone Systems* at 15-19 (v.2 Feb. 5, 2011).

variations and local needs, a maximum size ERL is probably not amenable to standardization (though best practices may be beneficial). While it will be important for NENA's stakeholders from the public sector, industry, insurance, and MLTS-operator cohorts to study the implications of various arrangements carefully, the output of such a process is unlikely to be a formal standard, but rather an advisory or "information" document. Consequently, NENA does not believe that "standards" work is required in this area in order to support the imposition of an MLTS mandate. To the contrary, only policy questions – that need not be made *ex ante* – remain, and, unlike supposed standards needed to enable particular technical mechanisms for location identification, those questions need not be answered before an MLTS E9-1-1 location mandate can be imposed.

B. Platform limitations should be accommodated by final rules, but should not delay their proposal.

In only one case does a commenter identify a specific standard development effort that would be beneficial to the MLTS community if a location mandate were imposed: TIA correctly notes that location determination mechanisms for WiFi- and DECT-based devices are not yet standardized.[10] Yet TIA neither quantifies the prevalence of WiFi- and DECT-based devices in MLTS, nor explains why the lack of standards for these specific products should delay the imposition of a location capability mandate for the broader MLTS market. Although little public data is available, NENA believes that the number of WiFi and DECT-based MLTS devices is relatively small when compared with the size of the overall MLTS market. In addition, to the extent that such truly mobile devices are used, NENA believes that the difficulties in locating them precisely within a campus environment can be mitigated through education, labeling, and special perfor-

[10] *Id.* at 12.

mance requirements. For example, the Commission could require MLTS which support WiFi or DECT connections to calling devices establish a default Emergency Response Location. While this is not a perfect solution – and others should certainly be explored – it illustrates the fallacy of the choice presented by TIA: The Commission need not delay the imposition of a *general* location capability requirement merely because some few *specific* cases warrant different treatment.

To overcome TIA's objections, NENA encourages the Commission to pose further questions about precisely the sort of differences that may warrant differing treatment under final rules, and to consider establishing different rules for different categories of MLTS. If even such a liberal regime as this proves insufficient, the Commission could also consider a waiver or forbearance regime under which technologies that truly *cannot* meet even a basic location capability mandate. Assuming such cases are identified with specificity, NENA might itself support the grant of a waiver or forbearance. But a debate over whether exceptions may be required is premature: The question at hand is whether the Commission could craft *rules* that are feasible for manufacturers to comply with, and the answer to that question is clearly "yes."

C. No further delay is warranted.

NENA has worked diligently over the last two decades to lead open, consensus-based standards processes – that included industry stakeholders – to set needed standards.[11] Not all standards bodies have been so active, or so open, however: The last version of TIA-689-A was published in 2003, and NENA is unable to locate *any* MLTS-related E9-1-1 standards work undertaken by TIA or

[11]NENA's i2 standard, which specifies automatic location identification mechanisms for many IP-based MLTS, for example, was last updated in 2010. NENA: The 9-1-1 Association, *NENA Interim VoIP Architecture for E9-1-1 Services*, (*available at:* http://www.nena.org/?page=Interim_VoIP_i2).

ATIS since that time.[12] TIA's position, in particular, would cast the Commission as character worthy of Samuel Beckett: condemned to await the uncertain coming of an unknown and vaguely-purposed protagonist, played here by unspecified but allegedly critical standards. It is difficult to understand, then, why, after almost 20 years, the Commission should continue to "abstain,"[13] or "wait and see."[14] The Commission has abstained, it has waited, and surely by now it has seen that little or nothing will happen without unambiguous action on its own part. As Avaya correctly notes, industry intransigence will be overcome *only* by a clear and time-bound mandate from the Commission.[15]

III. MLTS using circuit-switched PSTN interfaces cannot be excluded from forward-looking rules.

For many years now, NENA has been a strong proponent of an IP-based future in which the network- or database-centric functionalities of 9-1-1 and E9-1-1 systems are replaced with an application-centric model for Next Generation 9-1-1. But that day is not yet upon us. While it is true that the FCC's own Technical Advisory Committee has proposed a near-term sunset of the Commission's PSTN rules, the date they proposed is still six years in the future.[16] Even then, the sunset of the *rules* does not necessarily mean that the PSTN itself will cease to be. In all likelihood, millions of Americans will continue to receive at least some services – be they voice or data – via existing PSTN facilities for decades to come. Thus, despite NENA's view that regulations on the capabilities of MLTS

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[12]Nor have either developer's processes been particularly conducive to the participation of public safety stakeholders.

[13]TIA, *Comments* at 22;

[14]AT&T, *Comments* at 10.

[15]Avaya, *Comments* at § XIV.

[16]FCC Technical Advisory Committee, *Status of Recommendations Presentation* (Jun. 2011)

should be forward-looking in application, NENA disagrees with the position of TIA and others that non-VoIP MLTS products should be excluded from an E9-1-1 location mandate.

As Verizon explains, services to support TDM-based MLTS E9-1-1 location capabilities already exist.[17] Likewise, MLTS capable of utilizing these features natively or through third-party software solutions also exist.[18] Consequently, NENA believes MLTS E9-1-1 location capabilities can be implemented without requiring the wholesale reengineering AT&T cites as a drawback to applying a mandate to TDM equipment.[19] NENA is particularly concerned that a lack of MLTS requirements for TDM-based MLTS – if not coupled with an outright ban on such systems, something NENA does not support – would provide an exception that would swallow the rule.

If, however, it can be demonstrated that burdensome network changes would be required to support a general MLTS E9-1-1 location mandate, NENA would not oppose rules that allow carriers and E9-1-1 system service providers to offer *only* IP-based provisioning tools after some date certain. This would place the forward-looking burden only on manufacturers and operators of TDM-based MLTS to implement IP-based location registration schemes, and should also allay fears of creating new last-resort obligations for providers of TDM-based E9-1-1 services. With these safeguards, NENA believes that the Commission can impose MLTS E9-1-1 location obligations without creating a substantial loophole that might otherwise delay the transition to all-IP emergency services.

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[17]Verizon, *Comments* at 2. *Cf.* AT&T, *Comments* at ii fn.5.

[18]*E.g.,* Intrado, *Comments* at 3; AT&T, *Comments* at 3.

[19]AT&T, *Comments* at 3-4.

IV. Enforcement of Part 68 rules, if adopted, will be important to the success of MLTS E9-1-1 rules.

NENA agrees with the Administrative Council for Terminal Attachments ("ACTA")[20] and TIA[21] that regulation of MLTS attachments to the PSTN on the basis of E9-1-1 location capabilities must be enforced to be effective. NENA therefore concurs with those commenters that the Commission should consider additional enforcement activities in the Part 68 context as it may find appropriate, and encourages the Commission to fully explore the extent of such activities that may be necessary to ensure the efficacy of an E9-1-1 location requirement for MLTS.

V. Dependency of a MLTS solution on actions by a *user* is secondary – if not irrelevant – to the feasibility of a mandate for *manufacturers.*

Several commenters note that successful implementation of MLTS E9-1-1 location capabilities on an individual-installation basis is contingent on more than the underlying capabilities of the MLTS system in question.[22] It is certainly true that MLTS owners and operators must properly install and maintain those systems to ensure that their residents, students, employees, or enlistees can be located in an emergency. But it is wrong to suggest that because some will fail in this duty many should be denied the opportunity to succeed in it: Without an MLTS location mandate, well-intentioned purchasers of such systems may fall victim to unknown and undisclosed E9-1-1 limitations. Worse, some may succumb to the perverse incentive of systems that appear cheaper because they conceal the costs of litigation and damages that may be occasioned when a user cannot be located in an emergency. Similarly, the absence of a mandate provides a competitive advantage to manufacturers of MLTS that do

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[20]ACTA, *Comments* at 2-3.

[21]TIA, *Comments* at 20.

[22]*E.g.*, VoN Coalition, *Comments* at 3; TIA, *Comments* at 16.

not support E9-1-1 location capabilities and that therefore cost less than those which do. None of these scenarios is in the public interest. Imposition of an E9-1-1 location mandate for MLTS is.

CONCLUSION

The Commission should ignore calls for eternal delay, report to Congress that MLTS location capabilities are feasible, and begin a proceeding to establish a timeframe for mandatory implementation.

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AUGUST 2012