

STATE OF CALIFORNIA

Public Utilities Commission
San Francisco

M e m o r a n d u m

Date: May 21, 2013

To: The Commission
(Meeting of May 23, 2013)

From: Lynn Sadler, Director
Office of Governmental Affairs (OGA) – Sacramento

**Subject: AB 911 (Bloom) – Telephone Systems: 911
As amended: May 8, 2013**

RECOMMENDED POSITION: SUPPORT

SUMMARY OF BILL

- Beginning January 1, 2019, this bill would require multiline telephone systems (MLTS) operators in areas where public safety answering points (PSAPs) have enhanced 911 capability to maintain and operate the MLTS in such a manner that a 911 telephone call is routed to a PSAP, and to provide either automatic location information (ALI) or automatic number identification (ANI) to the 911 network that connects to a PSAP.
- For an MLTS serving business locations, the MLTS operator would be required to deliver the 911 call with an emergency location identification number which will result in either of the following: (1) An emergency response location which provides a minimum of the building and floor location of the caller, or (2) An ability to direct response through an alternate and adequate means of signaling by the establishments of a private answering point.
- In areas where enhanced 911 service first becomes available after January 1, 2019, MLTS providers would have 12 months from the date enhanced 911 service became available to comply with these provisions.
- Would require an MLTS operator to update the ALI/ANI database as soon as practicable and to annually audit the accuracy of ALI database information.
- Beginning January 1, 2019, would require that an entity that sells an MLTS system to provide, at the time of sale, to the purchaser and to each new user, either a demonstration of how to place an emergency call from a telephone station or provide written instructions at each telephone station that informs an individual how to place

an emergency call from the telephone station. Establishes civil penalties for violation of this requirement.

- Would provide telecommunications service providers immunity from liability for damages incurred as the result of the release of information not in the public record, including, but not limited to, unpublished or unlisted telephone numbers, to a PSAP or to emergency responders, made in connection with an emergency call.

CURRENT LAW

The Warren 911 Emergency Assistance Act (Government Code Section 53100-53120) requires every local public agency to establish and operate a telephone system that automatically connects a person dialing "911" to an established PSAP through normal telephone service facilities.

The Warren Act also prohibits the Public Safety Communications Division in the Department of Technology from delaying the implementation of the enhanced "911" emergency telephone system.

AUTHOR'S PURPOSE

The purpose of this bill is to address a widely acknowledged public safety gap for calls that originate from large hospitals, public schools, large businesses, large chain stores, local government offices, and assisted living facilities and other common MLTS users. This gap can result in delivery of wrong or inaccurate caller location information to the proper PSAP, or misrouting of a call to an entirely wrong public safety answering point (PSAP), sometimes in a different city or region.

MLTS/PBXs are used by most businesses and government entities. The National Emergency Number Association (NENA) estimates that nationwide 70% of PBXs are not E9-1-1 compliant.

AB 911 is sponsored by the California chapter of NENA (CalNENA) and is based on the NENA's model legislation. NENA presented this model legislation for states to enact when the Federal Communications Commission (FCC) declined to adopt national MLTS rules and instead suggested that states address the problem.

DIVISION ANALYSIS (Communications Division)

- AB 911 does address a problem that exists today – the misrouting of 911 calls from multiline telephone systems (MLTS), such as a PBX 9-1-1 call, to the wrong PSAP, and/or the displaying of caller information from such a call to the PSAP that does not show the caller's actual location and telephone number. These problems occur in certain high risk MLTS installations and configurations when the PBX owner/manager does not provision accurate caller location information in the service providers' 9-1-1 database, which results in the PSAP screen displaying the billing or

main address of the PBX owner and the phone number of the PBX trunk or network connection instead of the 9-1-1 caller's actual location and phone number. In some cases where all calls in a large phone system are routed through a central switchboard, the switchboard is physically located far away from where a call originates, and the PSAP may dispatch help to the switchboard's location while the emergency is miles away. The lack of accurate location information results in limited public safety resources being directed to the wrong location, and can be life threatening to the caller.

- The CPUC opened a OIR in 2010 (Rulemaking 10-04-011) to investigate ways to improve public safety access to emergency services from a workplace, public place, residential complex or other business location served by a multi-line telephone system (MLTS) so as to reduce the time needed to find an injured or distressed 9-1-1 caller in multi-unit buildings and large campus facilities. The sponsor of this bill, CalNENA, actively participated in the CPUC proceeding.
- The participants in R.10-04-011 workshop identified high risk MLTS environments such as hospitals, hotels, schools, research centers, and campuses of various institutions. MLTS users include many residences such as college dormitories and assisted living facilities, which serve the most vulnerable segment of the community. In the OIR initiating R.10-04-011, Finding of Fact 9 states that the primary public safety objective of addressing E9-1-1 MLTS requirements is to reduce the time needed to locate an injured or distressed 9-1-1 caller from an extensive workplace comprised of several rooms, floors, or buildings, or from residential units or mobile home spaces served by an STS, and to minimize the time and exposure of first responders to any dangerous conditions.
- Proceeding participants noted that technological advances and industry trends have made MLTS E911 solutions more feasible for all price ranges, as documented in the testimonies of R.10-04-011 participants. Third-party MLTS E911 solutions are also available for under \$5000 either through software or outsourcing. In addition, most MLTS installations and upgrades of the last ten years already include built-in E911 capabilities that could be utilized immediately.
- The California Public Utilities Commission (CPUC) telephone system currently originates calls via a Centrex MLTS and is thus an MLTS operator as defined in AB 911. Therefore the CPUC would have to comply with AB 911 requirements imposed on MLTS operators. By 2019, the commission would have to update the ALI/ANI database to ensure that calls from CPUC telephone stations pass along building address and floor location, and would have to annually audit the accuracy of the ALI database information thereafter.
- Enactment of AB 911 would further the CPUC's long-standing policy commitment to ensure the public has access to reliable and efficient enhanced 911 networks.

- The CPUC also regulates the ILECs that currently provide the majority of 9-1-1 networks in California today and requires these ILECs to tariff 9-1-1 network services.

SAFETY IMPACT

This bill would greatly improve public safety for all MLTS users. E911 service is critical to first responders in situations where a caller is unable to provide their location. AB 911 would help resolve these problems and could lessen emergency response times.

RELIABILITY IMPACT

In the OIR initiating R.10-04-011, CPUC estimates that in California, approximately 9.5 Million employees at some 50,000 businesses and institutions, would have more reliable access to 9-1-1 emergency services if the MLTS operator is required to provision in the 911 network providers database the ALI and ANI for each telephone station covered by the multiline telephone system.

While this bill would improve the reliability of location information accompanying 9-1-1 emergency calls, there is no impact on the reliability of the 9-1-1 network itself.

RATEPAYER IMPACT

The bill would not impact the telephone service rates charged to customers.

FISCAL IMPACT

AB 911 will impact the CPUC only as an operator of an MLTS. There will be some incremental administrative cost to the commission for the maintenance of accurate telephone station information. The CPUC already employs full-time staff dedicated to managing the MLTS. CPUC would have over five years to implement AB 911, which would require one initial and a few periodic tasks. Specifically, CPUC staff would need to:

- Add floor location to existing number assignments, which could be as easy as adding one column to an excel spreadsheet and verifying locations;
- When an assigned number within CPUC changes location, update the spreadsheet with the new floor number; and
- Verify annually that floor numbers are still accurate.

ECONOMIC IMPACT

This bill does not apply to small business customers or those entities where the MLTS is used in a single building that is less than 7,000 square feet. Some examples of large-scale MLTS that would be impacted by this bill are universities, large corporate campuses, hospitals, convention centers and government. There will be some

incremental administrative cost to these entities for the maintenance of accurate telephone station information and some additional costs to manufacturers of the equipment.

LEGAL IMPACT

None.

LEGISLATIVE HISTORY

None known.

PROGRAM BACKGROUND

In April 2010, the Commission issued Rulemaking 10-04-011 with the objective of enhancing Californians' public safety by addressing the California's E911 Private Branch Exchange (PBX)/MLTS public safety communication gap. This bill evolved in tandem with R.10-04-011 in response to concerns raised by the California 9-1-1 office and constituent PSAPs, as well as NENA's model legislation issued February 2011 to require MLTS's to provide a sufficiently precise indication of the caller's location, while avoiding imposition of undue burdens on system manufacturers, providers and operators of MLTS. AB 911 is consistent with the record in R.10-04-011.

OTHER STATES' INFORMATION

Federal Action

The FCC has examined the problems of identifying the location of 9-1-1 callers using PBX/MLTS in several proceedings. In its 2003 E911 *Report and Order and Second Further Notice of Proposed Rulemaking*, the FCC noted the severity of the problem but declined to adopt federal rules to address this issue, stating that state and local governments may be in a better position to devise such rules for their jurisdictions.

On February 22, 2012, the Next Generation 911 Advancement Act of 2012 (Act) was enacted as a part of the Middle Class Tax Relief and Job Creation Act of 2012.¹ The Act recognized that there is still a lack of effective implementation of PBX/MLTS E911, as previously noted in the FCC's E911 *Report and Order*. Section 6504(b) of the Act directed the FCC to once again revisit and examine this public safety issue.

Specifically, Section 6504(b) of the Act directed the FCC to do the following:

- (1) IN GENERAL. Not later than 90 days after the date of enactment of this Act, the Commission shall issue a public notice seeking comment on the feasibility of MLTS manufacturers including within all such systems manufactured or sold after a date certain, to be determined by the

¹ Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96 (2012), Title VI, Subtitle E (Next Generation 911 Advancement Act).

Commission, one or more mechanisms to provide a sufficiently precise indication of a 9-1-1 caller's location, while avoiding the imposition of undue burdens on MLTS manufacturers, providers, and operators.

(2) SPECIFIC REQUIREMENT. The public notice under paragraph (1) shall seek comment on the National Emergency Number Association's "Technical Requirements Document on Model Legislation E9-1-1 for Multi-Line Telephone Systems" (NENA 06-750, Version 2).

On May 12, 2012, the FCC issued a Public Notice seeking public comment on these matters. There has been no further FCC action in this pending proceeding.

State Action

Illinois passed the nation's first PBX/MLTS E9-1-1 law in 1999 and 15 states have followed with similar requirements. E911 regulations have been adopted in at least 12 other states, including Virginia and Massachusetts which have been in effect since July 1, 2009. The regulations in Massachusetts permit primary and regional PSAPs to require the operator of a MLTS to conduct testing to confirm that the MLTS provides the same level of enhanced 911 service that is provided to others in Massachusetts.

SUMMARY OF SUPPORTING ARGUMENTS FOR RECOMMENDATION

The arguments in support of this bill are many. It is a low-cost solution to an existing problem and will greatly enhance the public safety of occupants of the multi-tenant establishments.

SUMMARY OF SUGGESTED AMENDMENTS

None.

STATUS

AB 911 is scheduled to be heard before the Assembly Appropriations Committee on May 24, 2013.

SUPPORT/OPPOSITION

According to the Assembly Utilities and Commerce Committee April 29 staff analysis of AB 911, the following entities support the bill:

- California Chapter of the National Emergency Number Association (CALNENA)
- California Fire Chiefs Association (CFCA)
- California Professional Firefighters (CPF)
- California State Sheriffs' Association (CSSA)
- CPUC Division of Ratepayer Advocates (DRA)

The CPUC's Division of Ratepayer Advocates (DRA) wrote a letter in support of the bill claiming that in the event of an emergency it is critical that responders can geographically locate a caller that may be unable to provide their location. In addition, DRA believes AB 911 would improve public safety efforts by establishing important requirements for enhanced 911 services.

VOTES

April 29, 2013 - Assembly Utilities and Commerce Committee (15-0).

STAFF CONTACTS

Lynn Sadler, Director
Nick Zanjani, Legislative Liaison
Michael Minkus, Legislative Liaison

ls1@cpuc.ca.gov
nkz@cpuc.ca.gov
min@cpuc.ca.gov

BILL LANGUAGE

BILL NUMBER: AB 911 AMENDED
BILL TEXT

AMENDED IN ASSEMBLY MAY 8, 2013
AMENDED IN ASSEMBLY APRIL 24, 2013
AMENDED IN ASSEMBLY MARCH 21, 2013

INTRODUCED BY Assembly Member Bloom

FEBRUARY 22, 2013

An act to add Section 53121 to the Government Code, relating to telephone systems.

LEGISLATIVE COUNSEL'S DIGEST

AB 911, as amended, Bloom. Telephone systems: 911.

The Warren-911-Emergency Assistance Act requires every local public agency to establish and operate a telephone system that automatically connects a person dialing "911" to an established public safety answering point through normal telephone service facilities. Existing law prohibits the Public Safety Communications Division in the Department of Technology from delaying the implementation of the enhanced "911" emergency telephone system, as provided.

This bill would, commencing January 1, 2019, establish various requirements regarding 911 emergency call technology that would be applicable to multiline telephone systems (MLTS), providers of shared ~~telecommunication~~ *voice communications services, as defined*, and businesses with MLTS. The bill would require an MLTS operator, as defined, in an area that has enhanced 911 capability to maintain and operate the MLTS, as specified, to ensure that each emergency call placed from any telephone station on the MLTS is routed to a public safety answering point and provides either automatic location information or automation number identification to the 911 network that connects to the public safety answering point. The bill would provide exemptions for buildings or structures under 7,000 square feet *of workspace* or where enhanced 911 service is not available. The bill would authorize the assessment of civil penalties against an entity that sells an MLTS system in violation of these requirements.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. The Legislature finds and declares all of the following:

(a) There are gaps in public safety protection and accurate caller

location information is vital for 911 emergency calls and the safety of Californians. Problem calls originate from large hospitals, public schools, large businesses, large chain stores, local government offices, and assisted living facilities.

(b) Problems with the current 911 systems include: (1) misrouting a call to an entirely wrong public safety answering point (PSAP), sometimes in a different city or region; (2) delivery of wrong or inaccurate caller location information to the proper PSAP.

(c) Enhancements to the 911 system typically enable the caller's telephone number and service address to be displayed to the PSAP. As a result, when the caller is calling from a single-line telephone or a multiline telephone system (MLTS) serving a compact area, the address associated with the caller's telephone number can be retrieved and usually provides a reasonably precise identification of the caller's location.

(d) Public safety agencies increasingly rely on the enhanced 911 system to provide dependable and precise information about the caller's location and a reliable number to call back in order to reach the caller. However, in some cases 911 emergency calls made from telephones connected to an MLTS may not be precisely located by the 911 system, eliminating some of the benefits of enhanced 911. This lack of adequate location information can be life threatening if the caller cannot supply the correct location.

(e) Related problems occur when the caller is remote from the location supplied to the 911 system. In this instance not only is response delayed but limited public safety resources are dispatched where they are not needed. There may also be considerable disruption in business operations as the response units attempt to locate the caller.

(f) This act will address the issue of MLTS regarding the installation of equipment and software necessary to provide specific location information for a 911 emergency call.

SEC. 2. Section 53121 is added to the Government Code, to read:

53121. (a) A multiline telephone system (MLTS) operator shall maintain and operate the MLTS in such a manner that a telephone call made by dialing the digits "911" and, if applicable, any additional digit that must be dialed in order to permit the user to access the public switch telephone network from any telephone on the MLTS is routed to a public safety answering point (PSAP) and provides automatic location information or automatic number identification to the 911 network that connects to the PSAP.

(b) Enhanced 911 MLTS support service is deemed to be available if all of the following features are operating:

(1) The PSAP can accept emergency location identification number information from the MLTS using generally accepted industry standard interfaces.

(2) The PSAP has customer premise equipment in place to accept and store the emergency response locations information provided by the MLTS.

(3) The PSAP is equipped to utilize the emergency response locations information.

(c) For an MLTS serving business locations, the MLTS operator shall deliver the 911 call with an emergency location identification number which will result in either of the following:

(1) An emergency response location which provides a minimum of the building and floor location of the caller.

(2) An ability to direct response through an alternate and adequate means of signaling by the establishments of a private answering point.

(d) An entity that sells an MLTS system shall provide, at the time of sale, to the purchaser and to each new user, either a demonstration of how to place an emergency call from a telephone station or provide written instructions at each telephone station that informs an individual how to place an emergency call from the telephone station.

(e) (1) Where applicable, an MLTS operator shall arrange to update the automatic location information database with appropriate master street address guide valid address and callback information for each MLTS telephone, such that the location information specifies the emergency response location of the caller. These updates shall be downloaded or made available to the automatic location information database provider as soon as practicable for new MLTS installation, or within one business day of the record of completion of the actual changes for previously installed systems. The information is subject to all federal and state privacy and confidentiality laws.

(2) The MLTS operator shall audit accuracy of information contained in the automatic location information database at least once annually.

(f) An MLTS operator shall be considered to be in compliance with this section when the MLTS complies with the enhanced 911 system generally accepted industry standards as adopted by the Federal Communications Commission. The telecommunication local exchange carriers and Internet service providers are responsible for providing interconnectivity through the use of generally accepted industry standards.

(g) Providers of shared ~~telecommunications~~ *voice communications* services shall ensure that the MLTS is connected to the public switch network such that 911 calls from any telephone result in automatic location information for each emergency response location.

(h) A business providing temporary structures or facilities, regardless of size, with an MLTS shall permit the dialing of 911 and the MLTS operator shall ensure that the MLTS is connected to the public switched telephone network. Where automatic location information records are not provided for each individual station, the MLTS operator of the temporary structure or facility shall provide specific location information of the caller to the PSAP.

(i) (1) An MLTS operator, its employees, or its agents shall not be liable to any person for damages incurred as the result of any act or omission by it, except for gross negligence or intentional, willful, or wanton misconduct, in connection with maintaining or operating the MLTS in a manner required by this section.

(2) A ~~telecommunications~~ *voice communications* service provider, its employees, or agents shall not be liable to any person for damages incurred as the result of the release of information not in the public record, including, but not limited to, unpublished or unlisted telephone numbers, to a PSAP, its employees or agents, or to emergency responders, made in connection with an emergency call.

(j) An MLTS serving multiple buildings or structures with a combined total *workspace* of 7,000 square feet or less shall not be required to provide more than one emergency response

location. An MLTS serving a single building with ~~less than~~ 7,000 square feet of workspace or less shall not be required to provide more than one emergency response location. In the event of a dispute over the total amount of square footage, the State Fire Marshal shall determine whether the exemption applies to the building or structures.

(k) Key Telephone Systems, which serve only small workspace areas, are not required to comply with this section. Other MLTS, such as PBX or Hybrids (systems that incorporate the functionality of both Key Telephone Systems and PBX), shall comply with this section.

(l) This section shall not apply to MLTS operators in areas without enhanced 911 service.

(m) An entity that sells an MLTS system in violation of this section after January 1, 2019, may be assessed a fine from five hundred dollars (\$500) to five thousand dollars (\$5,000) per system sold.

(n) For purposes of this section, "MLTS operator" means the entity responsible for ensuring that a 911 emergency call placed from an MLTS is transmitted and received in accordance with this section, regardless of the type of MLTS technology used to generate the call.

(o) For purposes of this section, "shared voice communications services" means providing telecommunications services and equipment within a user group, including providing connections to the facilities of a local exchange and to interexchange telecommunications companies.

~~—(o)~~

(p) The provisions of this section shall become operative on January 1, 2019. In areas where enhanced 911 service first becomes available after January 1, 2019, MLTS providers shall have 12 months from the date enhanced 911 service became available to comply with these provisions.