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**PUBLIC UTILITIES COMMISSION**505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-329

October 9, 2012

Agenda ID #11652  
Quasi-legislative

TO PARTIES OF RECORD IN RULEMAKING 10-04-011.

This is the proposed decision of Commissioner Timothy Alan Simon. It will not appear on the Commission's agenda sooner than 30 days from the date it is mailed. The Commission may act then, or it may postpone action until later.

When the Commission acts on the proposed decision, it may adopt all or part of it as written, amend or modify it, or set it aside and prepare its own decision. Only when the Commission acts does the decision become binding on the parties.

Parties to the proceeding may file comments on the proposed decision as provided in Article 14 of the Commission's Rules of Practice and Procedure (Rules), accessible on the Commission's website at [www.cpuc.ca.gov](http://www.cpuc.ca.gov). Pursuant to Rule 14.3, opening comments shall not exceed 15 pages.

Comments must be filed pursuant to Rule 1.13 either electronically or in hard copy. Comments should be served on parties to this proceeding in accordance with Rules 1.9 and 1.10. Electronic and hard copies of comments should be sent to ALJ Kim at [kk2@cpuc.ca.gov](mailto:kk2@cpuc.ca.gov) and Commissioner Simon's advisor Lauren Saine at [lauren.saine@cpuc.ca.gov](mailto:lauren.saine@cpuc.ca.gov). The current service list for this proceeding is available on the Commission's website at [www.cpuc.ca.gov](http://www.cpuc.ca.gov).

/s/ KAREN V. CLOPTON  
Karen V. Clopton, Chief  
Administrative Law Judge

KVC:lil

Attachment

Decision **PROPOSED DECISION OF COMMISSIONER SIMON**  
(Mailed 10/9/2012)

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Improve  
Public Safety by Determining Methods for  
Implementing Enhanced 9-1-1 Services for  
Business Customers and for Multi-line  
Telephone System Users.

Rulemaking 10-04-011  
(Filed April 8, 2010)

**DECISION TO EXTEND CRITICAL EMERGENCY ACCESS PROTECTIONS OF  
ENHANCED 9-1-1 PROVISIONING TO BUSINESS CUSTOMERS AND  
MULTI-LINE TELEPHONE SYSTEM USERS IN CALIFORNIA**

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**DECISION TO EXTEND CRITICAL EMERGENCY ACCESS PROTECTIONS OF ENHANCED 9-1-1 PROVISIONING TO BUSINESS CUSTOMERS AND MULTI-LINE TELEPHONE SYSTEM USERS IN CALIFORNIA**

**1. Summary**

At issue in this rulemaking proceeding is the objective of enhancing Californians' public safety by addressing the California's Enhanced 9-1-1 Private Branch Exchange (PBX)<sup>1</sup>/Multi-line Telephone System (MLTS) public safety communication gap. Ultimate end goals are to reduce, where possible, the critical time and effort needed by emergency response personnel to locate an injured or distressed 9-1-1 caller located within an extensive workplace comprised of several rooms, floors, or buildings, or from residential units or mobile home spaces served by a Shared Tenant Service,<sup>2</sup> and to minimize the time and exposure of first responders to any dangerous conditions.

This decision directs the local exchange carriers (LECs) to take certain actions designed to raise customer awareness of the critical Enhanced 9-1-1 PBX/MLTS safety issue that affects many of California's large businesses and other public facilities. Specifically, the decision directs the LECs to: (1) distribute the customer advisory brochure (PBX 9-1-1 Advisory) attached to this decision, as Appendix A, and any applicable updates, or a brochure with the same

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<sup>1</sup> In general, the term MLTS includes PBX and other similar services. Throughout the proceeding, various parties however have interchangeably used references to PBX, MLTS and PBX/MLTS in the context of and in reference to the 9-1-1 caller location issues and problems associated therewith.

<sup>2</sup> LECs categorize as business customers STS providers: "Shared tenant service is a service provided through a PBX-type switch owned and operated by a customer of a telephone corporation," 23 CPUC2d 554, 569 (January 28, 1987). STS providers, for instance, provide telephone service to residents of older multi-tenant apartment buildings, condominiums and mobile home parks.

essential information, to current and prospective customers when those customers initiate services and/or request information on PBX-/MLTS Enhanced 9-1-1; (2) distribute the PBX 9-1-1 Advisory, and any applicable updates, or a brochure with the same essential information, to existing businesses<sup>3</sup> and PBX/MLTS customers; and (3) provide links on their webpages to the Commission's CalPhoneInfo website and specifically the PBX 9-1-1 Advisory, and any applicable updates.

This decision also directs AT&T California to file a tariff for its "Inform 9-1-1" service, and it requires all LECs, to file and/or revise their 9-1-1 tariffs such that their current and prospective business and PBX/MLTS customers are fully informed of options for provisioning accurate caller location information.

This decision further directs the Commission's Communications Division to (1) take all reasonable actions toward continuing the Commission's ongoing leadership role in raising awareness of the critical public safety Enhanced 9-1-1 concern associated with the PBX/MLTS; and (2) place the PBX 9-1-1 Advisory, attached to this decision as Appendix A, on the Commission's CalPhoneInfo website, and thereafter continue to maintain and make any applicable updates to the PBX 9-1-1 Advisory, on the Commission's CalPhoneInfo website, as necessary.

Finally, this decision directs the Commission's Office of Governmental Affairs and the Communications Division to provide aid and otherwise further the introduction and adoption of effective legislation requiring PBX/MLTS owners/operators/lessees to provide Enhanced 9-1-1 services with accurate

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<sup>3</sup> *Id.*

caller location information for their customers, generally consistent with the record in this proceeding and this decision, including Appendix B.<sup>4</sup>

## 2. Background

On April 14, 2010, the Commission issued the Order Instituting Rulemaking (OIR) and initiated this rulemaking to examine potential solutions to a serious public safety gap in the California's 9-1-1 emergency response system, whereby Public Safety Answering Point (PSAP) operators reported receiving inaccurate caller location information originating from Private Branch Exchange (PBX)<sup>5</sup>/multi-line telephone systems (MLTS) often used by business customers<sup>6</sup> of California local exchange carriers (LECs).

The National Emergency Number Association (NENA) defines MLTS as:

...a system comprised of common control unit(s), telephone sets, and control hardware and software. This includes network and premises-based systems, i.e., Centrex and private branch exchange (PBX), Hybrid, and Key Telephone Systems owned or leased by governmental agencies and nonprofit entities, as well as for-profit businesses.<sup>7</sup>

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<sup>4</sup> Appendix B to this decision (NENA Technical Requirements Document on Model Legislation E911 for Multi-Line Telephone Systems, NENA 06-750, Version 3, 2011) can also be found at: [http://www.nena.org/general/custom.asp?page=MLTS\\_Legislation](http://www.nena.org/general/custom.asp?page=MLTS_Legislation).

<sup>5</sup> See *supra* fn. 1.

<sup>6</sup> See *supra* fn. 2. "Shared tenant service is a service provided through a PBX-type switch owned and operated by a customer of a telephone corporation," 23 CPUC2d 554, 569 (January 28, 1987). LECs consider STS providers as business customers.

<sup>7</sup> Industry Common Mechanisms for Enhanced 9-1-1 Caller Location Discovery and Reporting Technical Information Documents, NENA 06-502, Version 1 at 6 (October 25, 2008).

Currently, the California's 9-1-1 emergency response system for our state's residential customers<sup>8</sup> includes the critical emergency access protections of Enhanced 9-1-1 (also commonly referred to as E911)<sup>9</sup> provisioning which ensures delivery of accurate caller location information to the appropriate local PSAP. Business and other PBX/MLTS customers and end-users presently do not enjoy the same protection of Enhanced 9-1-1 with ensured delivery of accurate caller location information to the appropriate local PSAP.

The Commission's vision in the OIR was to find ways to bridge this existing public safety gap and extend the critical emergency access protection of Enhanced 9-1-1 provisioning to the business and other PBX/MLTS customers and end-users in California.

In response to the OIR and in order to construct a meaningful record and ensure this rulemaking considers the views and ideas of all affected stakeholders, Communications Division staff initiated an outreach effort to representative stakeholders in California. Throughout this proceeding, the stakeholders actively participated in a Workshop as well a Technical Workgroup meeting, made presentations and submitted comments, as discussed further in this decision.

### **2.1. Commission's Commitment to Public Safety**

The Commission has long been a steadfast supporter of California's 9-1-1 system and committed to promotion of that 9-1-1 system in the sea of ever changing technological advances to provide critical public safety protection to California's telecommunications consumers. In decision after decision, the Commission does this by carefully balancing the need for regulation to protect

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<sup>8</sup> General Order (GO) 168, as amended by Decision (D.) 06-03-013.



consumers with the need for businesses to be able to explore the market. Nonetheless, the Commission repeatedly has asserted the importance and need for 9-1-1 coverage for all telecommunications consumers.

In D.06-03-013, the Commission unequivocally announced its commitment to public safety, recognized the importance of supporting the 9-1-1 system consistent with the commitment to public safety and extended the 9-1-1 requirements to wireless customers, stating:

[T]he role of government at issue here -- the promotion of public safety -- is independent of the marketplace. Significant public safety considerations justify the extension of 9-1-1 requirements to wireless carriers. For some time, state and local governments have relied on 9-1-1 as the critical communications element in providing police, fire protection and emergency health service. Although the marketplace will likely drive most providers to offer 9-1-1 services, we believe that it is better to adopt these 9-1-1 requirements, rather than create a situation in which the unavailability of 9-1-1 service becomes known only in an emergency.<sup>10</sup>

In D.07-09-018, the Commission, while deregulating the pricing of telecommunications services other than basic residential service for certain incumbent local exchange carriers (ILECs), once again confirmed the importance of such public safety service and underscored public safety service as a necessity. Accordingly, in D.07-09-018, the Commission explicitly excluded 9-1-1 services and ordered that such services must not be detariffed:<sup>11</sup>

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<sup>9</sup> In this decision, Enhanced 9-1-1 is referenced interchangeably as E911.

<sup>10</sup> D.06-03-013 at 67-68.

<sup>11</sup> Detariffing allows a uniform regulatory framework carrier (URF Carrier) to cancel by advice letter a retail tariff currently in effect. In accordance with GO 96-B, URF Carrier

*Footnote continued on next page*

The 9-1-1 system provides the public an important public service that must be available to all phone customers and must not be detariffed.<sup>12</sup>

## **2.2. Enhanced 9-1-1**

Californians have depended on reaching local emergency services by dialing 9-1-1 for decades. The advancement of technology allows the Enhanced 9-1-1 system to automatically deliver a calling party's callback number<sup>13</sup> and calling location<sup>14</sup> along with the voice call to the appropriate local PSAP. This Enhanced 9-1-1 technology significantly improved the PSAPs' ability to effectively and timely deliver critical public safety and emergency response services in countless situations.

In fact, Enhanced 9-1-1 has proven to be an essential emergency response public safety tool in saving lives and providing timely emergency response where the caller is unable (due to a language barrier, disability, or other exigent circumstances of the emergency) to verbally communicate caller's accurate location, including when the voice call is dropped, discontinued and cannot be reestablished.

However, we have learned from the PSAPs that there has been and continues to be a glaring gap in this Enhanced 9-1-1 safety protection such that

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includes any ILEC that is regulated under the Commission's uniform regulatory framework (*See*, D.06-08-030), competitive local exchange carriers (CLECs), and interexchange carriers.

<sup>12</sup> D.07-09-018 at 88.

<sup>13</sup> Through Automatic Numbering Identification (ANI), the PSAPs are able to identify the caller's number and if necessary recontact the location from which the 9-1-1 call was placed.

<sup>14</sup> By Automatic Location Identification (ALI).

large segment of business customers of LECs and other customers and end-users, using the PBX/MLTS, do not currently enjoy the same level of Enhanced 9-1-1 safety protections enjoyed by our state's residential customers.

During the course of this proceeding, the two primary types of MLTS were identified and examined, hosted service and premise-based service. Hosted service is a MLTS owned, operated and managed by a utility or service provider, and when housed at a LEC's local switch, such MLTS is offered and commonly referred to as Centrex. A premise-based MLTS service is the PBX, which is owned, leased or operated by a business, government entity or non-profit organization.<sup>15</sup> A Centrex caller's telephone number and address is automatically created through the LEC's service order process and are delivered to the PSAP's display.<sup>16</sup> The PSAPs therefore did not report nor identify caller location problems associated with 9-1-1 calls originating from Centrex customers and end-users. However, the PSAPs reported serious problems with 9-1-1 calls originating from PBXs.<sup>17</sup>

Thus, in this proceeding, various parties have interchangeably used references to PBX, MLTS and PBX/MLTS in the context of and in reference to the 9-1-1 caller location issues and problems associated therewith.

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<sup>15</sup> Workshop Report at 16.

<sup>16</sup> *Id.* at 19.

<sup>17</sup> *Id.* at 18.

### 2.3. The Gap in Enhanced 9-1-1 Service for MLTS

The OIR identified over 15 million Californians, as of 2007, were employed by private business, nonprofits, and government<sup>18</sup> and millions of other Californians routinely visit those business and other facilities as visitors (e.g., shoppers, students, patients, and other customers). Additionally, on any given day, about one million domestic and international tourists visit California's attractions, businesses, shopping centers, hotels, motels, etc.<sup>19</sup>

LECs serve each of these entities as their business customers,<sup>20</sup> many of which use PBX/MLTS. LECs also serve, as business customers, Shared Tenant Service (STS)<sup>21</sup> providers. STS providers offer telephone service to residents of older multi-tenant apartment buildings, condominiums and mobile home parks.

We found that business, including other non-residential, lines represent about 40 percent of total switched access lines in California<sup>22</sup> and that well over

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<sup>18</sup> California Size of Business -- Number of Businesses by Employment Size, Industry, and County, *Table I: Number of Businesses, Number of Employees, and Third Quarter Payroll by Size of Business*, State of California, Third Quarter, 2007, Labor Market Information Division, California Employment Development Department (<http://labormarketinfo.edd.ca.gov>).

<sup>19</sup> California Travel and Tourism Commission (<http://tourism.visitCalifornia.com/media/uploads/files/editor/California>).

<sup>20</sup> This includes many residences such as college dormitories and assisted living facilities, which serve the most vulnerable segment of the community.

<sup>21</sup> "Shared tenant service is a service provided through a PBX-type switch owned and operated by a customer of a telephone corporation," 23 CPUC2d 554, 569 (January 28, 1987).

<sup>22</sup> OIR, at 4-5; *see also* Article 5 of the Public Utilities Code which requires California LECs to file annual reports which separately identify the number of residential and business access lines. Pursuant to D.08-09-015, URF ILECs must file Federal Communications Commission (FCC) Report 43-08, Operating Data Report including

*Footnote continued on next page*

90% of those lines were multi-line.<sup>23</sup> Avaya, Inc., a party to this proceeding and a manufacturer of PBX/MLTS equipment, estimated that potentially 70% of all PBX/MLTS systems are not currently provisioned to display accurate caller location information to any PSAP.<sup>24</sup>

This estimate by Avaya, Inc. is also consistent with an AT&T California report<sup>25</sup> which showed that a mere 350 of AT&T California's customers with PBX/MLTS phone stations in 2007 had provisioned PS/ALI location information records in AT&T California's Enhanced 9-1-1 database -- compared to the 1.3 million California businesses, governmental entities and non-profits during that same time.

This data is alarming because while AT&T California's Enhanced 9-1-1 network does not serve all of California's PBX/MLTS customers, AT&T California is the largest<sup>26</sup> Enhanced 9-1-1 network provider in the state, serving a

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Table III - Access Lines in Service by Customer. General rate case LECs must file FCC Form M including Schedule S-3, Access Lines in Service by Customer.

<sup>23</sup> OIR, at 4-5: "In 2007, ILECs reported 7,114,082 business switched access lines. Pacific Bell Telephone Company d/b/a AT&T California (AT&T California) and Verizon California Inc. (Verizon) provided service for 98.6 percent of that total.[ ] AT&T California and Verizon reported that 94.6 percent of their business lines were multi-line and 5.4 percent were single-line.

<sup>24</sup> October 2010 Workshop Report, at 9.

<sup>25</sup> September 2007 AT&T California Main Station Report submitted to the California 9-1-1 Emergency Communications Office.

<sup>26</sup> OIR, at 4-5. In 2007, ILECs reported 7,114,082 business switched access lines. Pacific Bell Telephone Company d/b/a AT&T California (AT&T California) and Verizon California Inc. (Verizon) provided service for 98.6 percent of that total. AT&T California and Verizon reported that 94.6 percent of their business lines were multi-line and 5.4 percent were single-line. *See* California LECs Year-2007 Total Company Number of Access Lines and Operating Revenues, Year 2007 Annual Reports.

majority of California's PBX/MLTS customers. These figures suggest that an unacceptably large number of Californian PBX/MLTS customers and end-users may be without the E911 protections afforded to residential customers,<sup>27</sup> despite the recent technological and market-based advances in E911 services.

This means when a party places an emergency 9-1-1 call from a telephone station served by a PBX/MLTS line and the PBX/MLTS owner/operator/lessee has not proactively and voluntarily provisioned or updated the location information records in the Enhanced 9-1-1 database, the PSAP receiving such a 911 call will not be able to timely or accurately identify the particular office, dormitory room, or other detailed location of the caller. In fact, depending on the location of such main PBX/MLTS, such 911 call may even direct a PSAP to an entirely different city or region of the state.

This example illustrates why it is imperative that the PBX/MLTS owner/operator/lessee be made aware of the public safety concerns associated with certain high risk PBX/MLTS settings<sup>28</sup> and the essential role they each play

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<sup>27</sup> See GO 168.

<sup>28</sup> Workshop Report, at 5-6: During the workshop, the PSAPs (1) presented that 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 9-1-1 database, which will result in the PSAP screen displaying the billing or main address and the phone number of the PBX trunk or network connection instead of the 9-1-1 caller's actual location and phone number, and (2) identified some of the High Risk PBX/MLTS Environments, including:

- Multiple or remote buildings and locations served by a central/host PBX with only one address and the main trunk telephone number (TN) stored in the 9-1-1 database.
- Assisted living or medical facility with a phone in each living unit or patient room, but with only the main address and front desk TN provisioned in the 9-1-1 database.

*Footnote continued on next page*

in proactively and accurately provisioning/updating the location information records in the Enhanced 9-1-1 database. It also illustrates the need for legislation to ensure that this significant public safety solution is not left to voluntary adherence by PBX/MLTS customers. Currently, this public safety problem and solution are left to the voluntary participation of the PBX/MLTS owners/operators/lessees.

California PSAPs have informed us during this proceeding that this voluntary approach is not working and that they are continuing to experience inaccurate caller location from PBX/MLTS because many of those PBX/MLTS have not been accurately provisioned with the location information records in the Enhanced 9-1-1 database.

As far back as 1995, AT&T California recognized this gap in public safety in an advice letter to the Commission which established the tariff item through which a private switch owner could voluntarily provision Enhanced 9-1-1 database records for each telephone station location, otherwise known as PS/ALI:

Today, 9-1-1 calls placed from a PBX switch normally carries trunk number identification corresponding to the main address of the complex from which the call is placed, but no information as to the identity and location of the individual caller. This lack of a call back number, Automatic Number Identification (ANI) and the precise location information, Automatic Location Identification

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- Installations that do not provide on-site notification that a 9-1-1 call was made, and therefore the 24/7 attendant or security cannot assist the PSAP during call-back to the main billing number or trunk TN.
  - Installations with no live attendant to answer a PSAP call-back to the main trunk TN.

(ALI) can lead to 9-1-1 calls being routed to the wrong emergency agency, as well as delays in dispatching to the correct address.<sup>29</sup>

To this day, the PBX/MLTS owner/operator/lessee still could voluntarily choose whether to create and update the Enhanced 9-1-1 database records for each of its telephone station location, through PS/ALI. During the Workshop and the Technical Workgroup meeting as well as in comments filed in this proceeding, the California PSAPs and other stakeholders have uniformly confirmed that this problem remains unresolved and that a significant segment of the telecommunications consumer population, PBX/MLTS end-users, continues to fall into this unacceptable public safety gap without the Enhanced 9-1-1 protections.

#### **2.4. NENA Model Legislation and Small Business Exemption**

Founded in 1982, the NENA organization is a not-for-profit national organization<sup>30</sup> comprising of more than 7,000 members and 47 chapters throughout North America - a membership dedicated to saving lives by providing effective and accessible 9-1-1 service for North America. In short, the NENA organization's membership is dedicated to making 9-1-1 and emergency communications work better.

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<sup>29</sup> Advice Letter 17852 (November 6, 1995).

<sup>30</sup> Years ago, the National Telecommunications Information Administration sponsored the first three national 9-1-1 meetings in an effort to create industry awareness of 9-1-1 and collect information on emergency systems already in use. In 1982, the NENA, a not-for-profit corporation, was founded as a result of these meetings and to further the goal of "One Nation - One Number."



As an essential emergency communication tool and a link in the delivery of emergency services, 9-1-1, throughout its evolution, has become recognized as an asset of the North American public. The NENA organization has been connected to 9-1-1 and its evolution every step of the way. From its inception and through assisting and promoting new system installations, to educating managers on the latest technologies and business practices to advocating on a variety of 9-1-1 emergency communications matters before various forums, the NENA organization and its members have been intertwined with 9-1-1 during the growth and development of the 9-1-1 systems in North America.

Today, the NENA organization has become an organization with the unique position to take 9-1-1 to new heights by becoming a leader in E911 implementation and deployment and a staunch supporter of pending legislation before various forums, including the United States Congress, that relates to 9-1-1 system upgrades. As such, within the public safety and the 9-1-1 industry, the NENA organization is widely recognized as the standard-setting organization, and its members are the experts in 9-1-1 telephony.

In this proceeding, the California Chapter of the NENA organization, the California Chapter of the National Emergency Number Association (CALNENA), has appeared, presented and requested that the Commission make a recommendation to the Legislature that it adopt a legislative solution consistent with Appendix B, the NENA Technical Requirements Document on Model Legislation E9-1-1 for Multi-Line Telephone Systems, Version 3, (commonly referred to and referred to herein as "NENA Model Legislation"), and stressed the importance of legislative provisions dealing with penalties for non-compliance and a mechanism for funding the compliance effort.

The NENA organization and the Association of Public-Safety Communications Officials (APCO) jointly developed, along with the nationwide experts in the public safety field as well as the stakeholders, a Model Legislation on E911 for PBX/MLTS. On February 5, 2011, the NENA organization released the NENA Model Legislation. This NENA Model Legislation, version 3, has been submitted to the Congress and also submitted to this Commission by CALNENA to offer a viable blueprint for an E9-1-1 law in California.

Both CALNENA, whose membership includes over 500 California PSAPs and commercial vendors providing 9-1-1 PSAP equipment and services, and the 9-1-1 County Coordinator Task Force (CCTF) support the NENA Model Legislation<sup>31</sup> for PBX/MLTS Enhanced 9-1-1 as a good template for regulations in California. To narrowly and effectively target a solution, the NENA Model Legislation proposes to target the solution to those larger business customers and PBX/MLTS customers and not burden the smaller businesses with an overly broad legislative response. During the Workshop, Avaya, a member of the NENA organization's national technical group that drafted and updated the NENA Model Legislation, explained that as part of the NENA Model Legislation drafting efforts, the PBX/MLTS owners anticipated, discussed, proposed and stressed the need to include small business exemption in E911 legislation to eliminate undue burden to smaller PBX/MLTS owners.<sup>32</sup>

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<sup>31</sup> Workshop Report, at 17.

<sup>32</sup> *Id.* at 9.

In fact, an analysis of the NENA Model Legislation<sup>33</sup> show approximately 95 percent of California businesses fall into the smaller businesses category<sup>34</sup> and therefore would not need to implement E911 PBX/MLTS solutions because their worksites may be small enough for emergency responders to search through readily and quickly.<sup>35</sup> Meanwhile, the remaining 5% of the larger businesses and PBX/MLTS customers, that employ 9,521,366 Californians or 60.5 percent of the California workforce and serve countless visitors, customers, clients and tourists, are the business PBX/MLTS customers and end-users that require this critical E911 emergency services protection.

Thus, the NENA Model Legislation reasonably extends this critical E911 emergency service protection to save countless lives of Californians and tourists. At the same time, the NENA Model Legislation reduces hundreds of millions of dollars in economic costs by exempting approximately 95 percent of California's smaller businesses and PBX/MLTS customers. We find this a prudent and balanced approach that does not burden the California's smaller businesses.

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<sup>33</sup> Appendix B to this Order provides a detailed description of the pertinent NENA recommended provisions.

<sup>34</sup> Workshop Report, at 19: PSAPs did not identify problems with 9-1-1 calls from small businesses at a single location or from a Centrex customer, and the NENA Model Legislation identified the following examples of acceptable exemptions which may be viewed as a proxy for low risk MLTS environments: (a) A contiguous location on one floor of less than 7000 square feet; (b) Key Telephone Systems (since they serve a small number of phone extensions); and (c) On premise interception authorized by law and supported by training.

<sup>35</sup> Some parties caution that the Model Legislation's broad exemption for small workplaces may be overly broad, as written, and should be reviewed and refined to more accurately reflect on-site conditions.

## 2.5. Federal Activities on Enhanced 9-1-1 and NENA Model Legislation

Starting in 1994 and through several proceedings, the Federal Communications Commission (FCC) too has examined the problems of identifying the location of 9-1-1 callers using PBX/MLTS.<sup>36</sup> In its 2003 E911 Report and Order and Second Further Notice of Proposed Rulemaking,<sup>37</sup> the FCC expressed concern “that the lack of effective implementation of MLTS E911 could be an unacceptable gap in the emergency call system....”<sup>38</sup> The FCC also made a number of findings including a finding that said a “variety of technologies and vendors exist currently that make E911 compliance in the MLTS context quite feasible” and that “States are in a unique position to coordinate the disparate elements necessary for MLTS E911 implementation.”<sup>39</sup>

Thereafter, in 2004, the FCC continued to follow the states’ activities responsive to the E911 and PBX/MLTS/caller location issue and queried the

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<sup>36</sup> See *Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 9-1-1 Emergency Calling Systems*, CC Docket No. 94-102, Report and Order and Second Further Notice of Proposed Rulemaking (FNPRM), 18 FCC Record (Rcd) 25340, 25361-62, paras. 49-50 (2003) (*E9-1-1 Report and Order and Second FNPRM*). See also *Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 9-1-1 Emergency Calling Systems*, CC Docket No. 94-102, IB Docket No. 99-67, FNPRM, 17 FCC Rcd 25576, 25605-07, paras. 82-85 (2002) (*E9-1-1 Scope NPRM*); and *Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 9-1-1 Emergency Calling Systems*, CC Docket No. 94-102, Notice of Proposed Rulemaking, 9 FCC Rcd 6170, 6170-73, paras. 1, 8, 11, and 12 (1994).

<sup>37</sup> 18 FCC Rcd 25340 (2003).

<sup>38</sup> *Ibid.*

<sup>39</sup> *Ibid.*

states about the utilization of the NENA Model Legislation<sup>40</sup> on E911 for MLTS developed by the NENA organization and the APCO, while commenting:

[W]e believe that the Model Legislation submitted by NENA and APCO offers the states a valuable blueprint for their own laws [and] we strongly support the approach taken by the model legislation.<sup>41</sup>

At that time however, the FCC declined to adopt federal rules to address this issue, explaining that state and local governments may be in a better position to devise such rules for their jurisdictions.<sup>42</sup> Since then only a few of the states responded to the FCC's public notice<sup>43</sup> and about a third of the states enacted new legislation adopting E911 requirements for PBX/MLTS, bringing the current total to seventeen states with such legislation.<sup>44</sup>

On February 22, 2012, Congress passed the Next Generation 911 Advancement Act of 2012<sup>45</sup> which recognizes that there still continues to be an outstanding public need in the emergency E911 call system and lack of effective

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<sup>40</sup> This FCC reference to NENA Model Legislation is to a prior version of the NENA Model Legislation than the version 3 attached to this decision as Appendix B.

<sup>41</sup> E911 Report and Order and Second FNPRM, 18 FCC Rcd at 25361-62, para. 50 and n. 179.

<sup>42</sup> FCC DA 04-3874, at 2 (December 10, 2004).

<sup>43</sup> Verizon Communications' comments in CC Docket No. 94-102, at 2-4 (February 28, 2005), noted that there was little need for federal rules since competitive E911 solutions were readily available for all MLTS systems from carriers and third parties, and because states were the best venue to address this issue.

<sup>44</sup> See OIR, Appendix D (Alaska, Arkansas, Colorado, Connecticut, Florida, Illinois, Kentucky, Louisiana, Maine, Massachusetts, Minnesota, Mississippi, Texas, Vermont, Virginia, and Washington); and in 2011, Michigan became the seventh state to pass E911 requirements for MLTS.

<sup>45</sup> 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).

implementation of PBX/MLTS E911, as previously noted in the FCC's E911 Scope Report and Order. Specifically, Section 6504(b) of the Next Generation 911 Advancement Act directs the FCC to once again revisit and examine this public safety issue and seek comment on (1) the feasibility of MLTS to provide the precise location of a 911 caller and (2) the NENA Model Legislation.<sup>46</sup> In compliance therewith, on May 21, 2012, the FCC again issued a public notice and request for Comment <sup>47</sup> and once again opened a proceeding. That latest FCC proceeding is currently underway.

### **3. OIR Procedural History**

The OIR directed the LECs to comment on several issues relating to improving public safety by extending the E911 services to business customers and for other PBX/MLTS customers, including:

- (1) LECs' business practice relating to defining and classifying residential and business customers, including assisted living facilities, STS providers, college dormitories, and other end-user premises that are primarily residential in nature;
- (2) LECs' terms of interconnection agreements relating the providing E911 service to all their customers, including business customers;
- (3) LECs' costs of providing E911 service to all of their residential customers in comparison to business customers, if the costs are different and explanations of the differences;
- (4) Whether the LECs offer PS/ALI service, whether such service is tariffed, and if so, how much;
- (5) The availability of E911 service in California, including MLTS E911 solutions services; and

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<sup>46</sup> See Appendix B to this decision.

<sup>47</sup> FCC DA 12-798, at 2 (May 21, 2012).

- (6) Whether the NENA E911 Model Legislation should be adopted in California.

Comments were filed in response to the OIR on May 10, 2010 by: Calaveras Telephone Company, Cal-Ore Telephone Co., Ducor Telephone Company, Foresthill Telephone Co., Happy Valley Telephone Company, Hornitos Telephone Company, Kerman Telephone Company, Pinnacles Telephone Co., The Ponderosa Telephone Company, Sierra Telephone Company, Inc., The Siskiyou Telephone Company, Volcano Telephone Company, and Winterhaven Telephone Company (Small LECs); California Association of Competitive Telecommunications Companies (CALTEL); Citizens Telecommunications Company of California Inc. d/b/a Frontier Communications of California (Frontier); Division of Ratepayer Advocates (DRA); Pacific Bell Telephone Company d/b/a AT&T California (AT&T California); SureWest Telephone and SureWest Televideo (SureWest); Telecommunications Systems, Inc. (TCS); and Verizon California Inc., MCI Communications Services, Inc., d/b/a Verizon Business Services, MCImetro Access Transmission Services, d/b/a Verizon Access Transmission Services, and TTI National, Inc., d/b/a Verizon Business Services (Verizon).

On June 16, 2010, the assigned Commissioner and Administrative Law Judge (ALJ) issued a scoping memo and ruling and ordered workshops to begin a review of the issues raised in the OIR. On July 26 and 27, 2010, the Commission's Communications Division held and led the Workshop, which covered a range of issues with presentations from parties and other entities.<sup>48</sup>

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<sup>48</sup> Other entities that made presentations and/ or handed out materials include CALNENA, the California 9-1-1 Emergency Communications office (9-1-1 Office), the County Coordinators Task Force (CCTF), Avaya, Creative Interconnect

*Footnote continued on next page*

Thereafter, in October 2010, the Commission's Communications Division prepared and submitted a workshop report and recommendations (Workshop Report).

October 20, 2010, the assigned Commissioner and ALJ issued an amended scoping memo ruling and received the Communications Division's October 2010 Workshop Report<sup>49</sup>, including the workshop presentations, into the formal record.

On January 27, 2011, the Communications Division held a Technical Workgroup meeting to examine the business practices of the LECs relating to the provisioning of multi-line services.<sup>50</sup> The Communication Division's Technical Workgroup Summary was submitted for comment to the ALJ.

On May 2, 2011, the ALJ circulated the Technical Workgroup Summary for comment, soliciting comments on a proposed customer advisory brochure, on information to be placed on the CalPhoneInfo website,<sup>51</sup> and on the parties' positions and views concerning the NENA Model Legislation, with the February 5, 2011 updated NENA technical requirements document.

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Communications LLC, Redsky, TCS, 9-1-1 ETC Inc. (911 ETC), California State University, Fullerton, and Facey Medical Foundation. Parties that made presentations include AT&T California, CalTel, Frontier, the Small LECs, SureWest, and Verizon.

<sup>49</sup> On November 22, 2012, DRA and AT&T California filed comments on the Workshop Report.

<sup>46</sup> The Technical Workgroup was attended by additional entities, including the California Cable & Telecommunications Association, Comcast, Cox, Astound, the San Francisco Department of Emergency Management, the Los Angeles Police Department, and Commissioner Simon's advisor, Cristhian Escobar.

<sup>51</sup> The CalPhoneInfo website is a Commission website that provides consumers with important information about telephone services.



On June 1, 2011, comments were filed in response to the May 2, 2011 ruling, by the Small LECs, RedSky Technologies, Inc., Avaya, Inc., CALTEL, City of San Francisco, AT&T California,<sup>52</sup> California Cable and Telecommunications Association (CCTA) and Verizon.

On September 15, 2011, the ALJ issued a ruling seeking comments concerning charges, rates and utilities' costs associated with primary rate interface integrated services digital network (PRI ISDN)<sup>53</sup> trunks and additional charges to deliver the ANI from a PBX on a 9-1-1 call to the 9-1-1 database. Comments, in response to the September 15, 2011 ruling, were filed by Frontier, Time Warner Cable Information Services, LLC, Small LECs, SureWest, Verizon, AT&T California, and Cbeyond Communications, LLC. (Cbeyond).

On March 8, 2012, the Assigned Commissioner and ALJ issued a joint ruling setting a briefing schedule<sup>54</sup> and the parties filed their opening and reply briefs in March and April of 2012. Opening briefs were filed by Cbeyond, Frontier, Small LECs, SureWest, Verizon, AT&T California and DRA. Reply briefs were filed by Verizon, AT&T California and DRA.

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<sup>52</sup> AT&T California (U1001C); AT&T Communications of California, Inc. (U5002C); TCG San Francisco (U5454C); TCG Los Angeles, Inc. (U5462C); TCG San Diego (U5389C); AT&T Advanced Solutions, Inc. (U6346C); and New Cingular Wireless PCS, LLC (U3060C).

<sup>53</sup> According to Newton's Telecom Dictionary, Primary Rate Interface Integrated Services Digital Network (PRI ISDN) is the equivalent of a T1 circuit at total signaling speed of 1.544 Mbps in support of 24 channels.

<sup>54</sup> On April 2, 2012, the ALJ issued a ruling granting DRA's request for extension to file the opening and reply briefs and revised the briefing schedule for all parties, accordingly.

#### 4. Jurisdiction

The Commission must first determine our relevant jurisdiction and authorities. That will set the stage for us to consider what action, if any, could, may, and/or must be undertaken to begin addressing the public safety need identified in this proceeding.

The Commission has primary statutory responsibility for the intrastate rates, services, and operations of entities providing telecommunications services in California under license from the Commission as “telephone corporations.”<sup>55</sup> The Commission’s authority to regulate telephone corporations derives from both the California Constitution,<sup>56</sup> and various sections of the California Public Utilities Code.<sup>57</sup>

Further, Code § 701 also gives the Commission broad authority to regulate utilities in all respects, including with respect to consumer protection matters.

At the same time, we recognize that the Commission’s broad authority to regulate the carriers does not extend to the California’s telecommunications consumers. In particular, the FCC has deregulated the manufacture and distribution of customer premises equipment (CPE), and states have no role whatsoever in overseeing CPE manufacture or distribution.<sup>58</sup> While various statutes may affect the lawful use of telecommunications facilities (e.g.,

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<sup>55</sup> See Public Utilities Code § 234. All statutory references in this decision are to the Public Utilities Code, unless specified otherwise.

<sup>56</sup> See Art. 12, § 3.

<sup>57</sup> Code §§ 216, 233, 234, and 451 are particularly relevant to the discussion here.

<sup>58</sup> CPE manufacturers are required to comply with FCC regulations intended to prevent interference with other types of equipment and/or any potential harm to the interconnected telecommunications network.

prohibitions against use of such equipment for illegal purposes, which can lead to disconnection of service), in general, the Commission cannot compel customers either to install specific facilities or to subscribe to specific services. Therefore, to the extent that private businesses have purchased, installed, and operate CPE on their premises, oversight of that CPE falls to the businesses and not to the Commission.

In addition, we note that primary responsibility for the operation and maintenance of the 911 system may rest with other state agency(ies) such as the Department of General Services, not to the Commission. Thus, we must acknowledge that the Commission's ability to fully effectuate an E9-1-1 solution in California is limited to those actions that fall within the scope of the Commission's authority.

Despite the jurisdictional limitations, in this proceeding, the Commission approached this E9-1-1 issue without hesitation and rallied service providers/carriers to "step up to the plate" and be more proactive about this public safety issue, consistent with the general principles, concepts and actions we set out in our recent decisions, particularly the following passages in D.06-08-013 (Decision Adopting and Issuing Revised General Order 168),<sup>59</sup> that:

- 1) Consumers have a right to expect that providers of voice services utilizing numbers from the North American Numbering Plan and connecting to the Public Switched Telephone Network will offer reliable connections to E911 emergency services and Public Safety Answering Points, and to clear and complete disclosure on access to 911 emergency services through the use of those services<sup>60</sup>; and

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<sup>59</sup> Issued on March 2, 2006.

<sup>60</sup> D.06-08-013, at C-30.

- 2) Consumers have a right to receive clear and complete information about any limitations affecting the services they select, including limitations on bandwidth, applications or devices that may be used in connection with their service.<sup>61</sup>

Ultimately, the stakeholders have come together in the course of this proceeding to present recommendations that are both within and outside the Commission's jurisdiction and regulatory powers to help solve the E9-1-1 concern in California. Below, we review those recommendations and direct those actions, within our authority.

## **5. Issues Before the Commission**

The Scoping Memo Ruling, dated June 16, 2010, identified two issues to be resolved in this proceeding:<sup>62</sup>

- Examine Enhanced 9-1-1 provisioning for single and MLTS used by local exchange business customers; and
- Extend through Commission rules, utility tariffs, contracts and interconnection agreements or a proposal to the state legislature the protections of Enhanced 9-1-1 service to those telephone systems utilizing traditional analog and digital voice telephony or fixed and nomadic Voice over Internet Protocol telephony.

## **6. Workshop and Technical Workgroup**

### **6.1. Workshop**

On July 26 and 27, 2010 the Communications Division held a public Workshop. The Workshop was largely informational in nature and the stakeholders addressed three main subject areas:

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<sup>61</sup> *Id.* at C-2.

<sup>62</sup> Scoping Memo Ruling dated June 16, 2010, at 2.

- 1) Identify the public safety need for accurate caller location information on 9-1-1 calls;
- 2) Describe how public utilities and other service providers work with business customers in implementing best practices for provisioning caller location information needed for timely emergency response; and
- 3) Identify the feasibility and cost to businesses and other property owners of provisioning caller location information needed by PSAPs and field responders.

#### **6.1.1. Confirmation of Continued Public Safety Need for Accurate Caller Location**

Since the issuance of the OIR and throughout the proceeding, including the Workshop, the PSAPs repeatedly confirmed that their primary concern is that inaccurate reporting of PBX/MLTS information to an appropriate PSAP is a major public safety concern that causes delayed response to emergency situations. The PSAPs presented examples of representative problems with 9-1-1 calls originating from PBX/MLTS at large hospitals, public schools, large businesses, chain stores, local government installations, and assisted living facilities -- in all regions of California, within small towns and the state's largest metropolitan areas.

The PSAPs reported that the most common problems are misrouting of PBX/MLTS 9-1-1 calls to an entirely wrong PSAP, sometimes in a different city or region of the state, and delivery of wrong caller location information to the proper PSAP. Both of these problems then lead to misdirecting of emergency response to a location other than the caller's actual location and TN. These examples illustrate that the lack of accurate location information results in:

- limited public safety resources being diverted to the wrong location,

- delayed response to an emergency while correct location must be identified, and
- other life threatening situations.

The PSAPs reported that these problems occur in certain high risk PBX/MLTS installations and configurations when the PBX/MLTS owner/manager does not provision accurate caller location information in the 9-1-1 database, which will result in that the PSAP's screen displaying the billing or main address (as the caller location) and the phone number of the PBX/MLTS trunk or network connection (as the caller location) instead of the 9-1-1 caller's actual location and phone number.

The PSAPs identified the following High Risk PBX/MLTS Environments:

- Multiple or remote buildings and locations served by a central/host PBX/MLTS with only one address and the main trunk TN stored in the 9-1-1 database;
- Assisted living or medical facilities with a phone in each living unit or patient room, but with only the main address and front desk TN provisioned in the 9-1-1 database;
- Installations that do not provide on-site notification that a 9-1-1 call was made, and therefore the 24/7 attendant or security cannot assist the PSAP during call-back to the main billing number or trunk TN; and
- Installations with no live person attendant to answer a PSAP call-back to the main trunk TN.

No other workshop participants presented information or comments contrary to the PSAPs' presentation and confirmation of the continuing public safety need for an accurate caller location in PBX/MLTS setting. To date, this public safety concern remains unresolved.

### **6.1.2. Public Utility Tools, Services and Best Practices for Provisioning PBX/MLTS Phone Station Information in the 9-1-1 Database**

Through the Workshop efforts, we further examined the current tools, services, and practices of the utilities relevant to this rulemaking to help us understand all of the pertinent operational or logistical issues. For instance, AT&T California and Verizon each offer an optional web-based PS/ALI<sup>63</sup> service which permits a PBX/MLTS owner/manager to provision accurate caller location information in the 9-1-1 database. PS/ALI services are available to any PBX/MLTS owner/manager in California including the customers of the competitive LECs and ILECs. The customer would need to contact the dial tone provider to arrange for subscribing to PS/ALI service and the additional services that permit delivery of the 9-1-1, ANI or Calling Party Number<sup>64</sup> (CPN) from the PBX/MLTS phone station to the appropriate PSAP. Third parties observed that AT&T California's PS/ALI one-time tariff rate is very low compared to PS/ALI tariffs in other states.<sup>65</sup>

AT&T California and Verizon correctly noted that there is significant customer role and responsibility to establish, submit and update 9-1-1 database records for PBX/MLTS end-users' phone stations. In addition, the PS/ALI customer is required to purchase additional services including Direct Inward Dial (DID) TNs for end-user phone extensions, and in some cases, circuits for transport of the PBX/MLTS phone station ANI or CPN to the 9-1-1 network.

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<sup>63</sup> See *supra* at 14-15, PS/ALI as explained in detail.

<sup>64</sup> Sometimes erroneously referred to by parties as Caller ID.

<sup>65</sup> Workshop Report, at 6.

The utilities reported that most current PS/ALI customers utilize their existing PRI ISDN<sup>66</sup> circuits to deliver the 9-1-1 voice call with the associated phone station ANI to the local switch, for routing to the appropriate PSAP.<sup>67</sup> AT&T California's PRI ISDN customers who wish to send the phone station ANI with the 9-1-1 voice call are subject to additional non-recurring and recurring monthly charges<sup>68</sup>. Verizon does not charge its PRI ISDN customers for sending the PBX/MLTS 9-1-1 phone station ANI or CPN to the local switch.

Per its Workshop presentation, Verizon revised its PS/ALI tariff to streamline the process, minimize the need for customer legal review of individual case basis contracts, reduce total customer costs, and eliminate utility monthly billing expenses.<sup>69</sup>

Neither utility offers XML<sup>70</sup> formatting for customer transmittals of PS/ALI database records which can serve as a basis for programming automatic data exchange between a customer's computer system and the 9-1-1 database.<sup>71</sup> However, AT&T California notes that the additional fields associated with XML

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<sup>66</sup> PRI ISDN is the equivalent of a T1 circuit in support of 24 channels.

<sup>67</sup> Workshop Report, at 20.

<sup>68</sup> Inform 911 for ISDN PRI as described in AT&T California Guidebook, Part 17, Section 2.

<sup>69</sup> Verizon Advice Letter 12530, 10/24/2010.

<sup>70</sup> According to Newton's Telecom Dictionary, Extensible Markup Language (XML) "allows companies to automatically order from and sell to each other -- without having to have a human in between physically translating between the different systems. The vast bulk of the largest companies in the world use XML for electronic transactions with their customers or suppliers."

<sup>71</sup> As described by the NENA Data Technical Committee in its recommendation for adoption of NENA Version 4 for PS/911 data exchange, NENA-06-003 Private Switch (PS) E911 Database Standard, at 8.



may not be compatible with current PSAP ALI display and CAD configurations.<sup>72</sup>

LECs did not provide examples of written standard operating procedures or Best Practices policies which instruct sales and customer service personnel on how to inform and assist customers regarding PBX/MLTS Enhanced 9-1-1 issues. Several carriers acknowledged that their business processes in this regard need to be improved, and plan to upgrade their internal protocols and information resources to support increased concern from customers about access to emergency services and interest in E911 solutions.<sup>73</sup>

### **6.1.3. Feasibility and Costs to Businesses and Other Property Owners of Provisioning PBX/MLTS E911 Caller Location Information**

The Workshop also yielded important foundational information concerning feasibility and costs to businesses and other property owners of provisioning PBX/MLTS Enhanced 9-1-1 Caller Location Information. PBX/MLTS equipment manufacturer Avaya, Inc. and other third party E911 solution providers identified several current trends that have made solutions more feasible for the PBX/MLTS owner/operator, and presented the following:

- For the last ten years, major equipment manufacturers have built Enhanced 9-1-1 capabilities into new models and PBX/MLTS upgrades. It is very rare to find a PBX/MLTS in use that cannot be easily programmed to deliver the caller ID needed to retrieve caller location information (e.g., Avaya's presentation at the Workshop illustrated that all modern PBXs/MLTSs have built-in capability to send the ANI of the 9-1-1 caller to the 9-1-1 database if the PBX/MLTS operator

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<sup>72</sup> Comments of Pacific Bell to the Workshop Report, November 22, 2010, at 3.

<sup>73</sup> Workshop Report, at 7.

simply activates the option and creates and maintains the phone station records in the 9-1-1 database. The presentation is part of the proceeding record and no party objected to that finding.).

Lower cost PRI ISDN circuits are now more common, and expensive mileage-based Centralized Automatic Message Accounting (CAMA) trunks are no longer required.

- Third party PBX/MLTS Enhanced 9-1-1 solutions are continuing to go down in cost and are available for under \$5000. Small business solutions can be as low as \$1250 for a one-time implementation fee and \$65 to \$100 per month in recurring fees.
- The VoIP PBX/MLTS platform natively provides improved support for 9-1-1 for multi-location customers, and automated solutions can discover and update phone locations as they change which greatly reduces the administrative burden and cost to the business owner of tracking Moves/Adds/Changes in a VoIP installation.
- SIP Trunking is more available from Internet Telephony Service Providers (ITSP) permitting the smallest enterprise VoIP PBX system to send ANI with the 9-1-1 call.

Third party solution providers also offered several case studies involving implementation of PBX/MLTS Enhanced 9-1-1 for California clients. Examples ranged from one time implementations at a single location on a project completed within a month, to major turnkey installations requiring high-value project management and on-going database maintenance for clients with extensive facilities and multi-state locations.

The third party solution providers acknowledged that educating the customer about PBX/MLTS Enhanced 9-1-1 public safety needs must be part of the sales process and that flexibility in approach is needed since most customers do not have everything in place to implement a solution, and utilizing existing customer databases (HR, telephone station lists or phone logs) reduces the burden on the customer. Third party solution providers also indicated that their

customers are adverse to being bothered with maintenance, but the practice of daily maintenance must be emphasized.

The same third party solution providers also emphasized that site audits have proven helpful and therefore are important for developing a plan for maintenance, and establishing a reminder system that emails the PBX/MLTS customer about accurate updates. They noted that for large facilities they served, they effectively provisioned automated on-site notification to customer security or management, utilizing screen pop ups and SMS text messages.

During the Workshop, the California 9-1-1 Office provided copies of representative emails it has received from PBX/MLTS owners, installers and other service providers which revealed that many of those businesses and public agencies wish to provision accurate E911 caller location information, but have experienced difficulties and frustration in getting information from service providers or locating resources on best practices. Specifically, the California 9-1-1 Office presented 13 recent examples of requests it has received from PBX/MLTS customers/users, such as schools, hospitals, network engineers, consultants, counties, medical providers, equipment suppliers, insurance companies, security consultants, solution providers, and Voice Positioning Centers (VPCs) requesting information on PBX/MLTS E911 guidelines, regulations, legal requirements, or best practices.

Facey Medical Foundation, a non-profit, multi-specialty, multi-site healthcare provider group with 150 physicians providing healthcare services to over 150,000 residents of Los Angeles County, also submitted written comment as a PBX/MLTS owner/operator in support of this OIR and the need for extension of E911 emergency communication tools and protection to the PBX/MLTS end-users.

In general, the information presented on behalf of these individual businesses and PBX/MLTS owners/operators/lessees confirmed and echoed the concern noted by the PSAPs in this proceeding of the continuing public safety caller location problems, continued lack of information for the PBX/MLTS owners/operators/lessees, and a need to develop a solution, including regulations, public outreach and proactive customer assistance from telecommunications providers.

California State University Fullerton provided case studies of how PBX/MLTS E911 was provisioned on three Cal State campuses utilizing PS/ALI and campus phone station location databases.

Utilities did not offer information about the views of their MLTS/PBX customers regarding the feasibility and cost of provisioning E911 caller location information.

#### **6.1.4. Workshop Participants' Recommendations**

The Workshop participants reached several conclusions and presented associated recommendations, as detailed in the Workshop Report, and some specifically for the Commission's consideration, as follows:

- (1) The participant from the California's 9-1-1 Office recommended that the Commission should create a reference point on its website with guidelines, educational materials, links to other resources, and a statement of benefits to ensure that the PBX/MLTS end-user has access to 9-1-1 with the accurate location provisioned and displaying at the responding PSAP.
- (2) The PSAPs and other parties emphasized the need for a legal requirement on PBX/MLTS owners with penalties for non-compliance, since carriers and other service providers cannot compel the provisioning of PBX/MLTS caller location:

- Avaya, Inc. estimates that 70% of all PBX/MLTS are not provisioned to display accurate caller location information to the responding PSAP;
  - There are solutions in place for all technologies, and the only allowance should be for older PBX/MLTS that cannot be programmed to deliver phone station caller ID which is very rare;
  - PBX/MLTS owners are often aware of these problems following the passage of a state Enhanced 9-1-1 mandate, but without a penalty there is usually no compliance. In contrast, when Massachusetts passed its PBX/MLTS Enhanced 9-1-1 law with penalties, business owners proactively contacted solution providers to arrange compliance; and
  - In some states, the fire marshal will make some test calls to 9-1-1 during his inspection in order to determine that the correct location is being shown.<sup>74</sup>
- (3) The PSAPs recommend adoption of the NENA Model Legislation for MLTS Enhanced 9-1-1<sup>75</sup> as a good template for regulations. Avaya worked on the national technical group that wrote it, and concluded that because PBX/MLTS owners were part of the effort, the model regulations should not be a burden to PBX/MLTS owners. Several participants agreed that the NENA Model Legislation's 7000 sq. ft. exemption for small workplaces may be too broadly written and should be refined to more accurately reflect on-site conditions. Avaya suggested that a fire safety inspection may offer the best approach for determining small business requirements and acceptable exemptions.

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<sup>74</sup> The Revised Code of Washington (RCW 38.52.505) describes the role of the local fire protection officer in the implementation of Washington Administrative Code Title 118 Chapter 118-68-050: Inspection for compliance with the adequacy of automatic location information displayed at the PSAP when 911 calls are made.

<sup>75</sup> See Appendix B, NENA Technical Requirements Document on Model Legislation E911 for Multi-Line Telephone Systems, NENA 06-750, Version 3, 2011.

## **6.2. Technical Workgroup**

In addition to the Workshop, on January 27, 2011, the Communications Division held a public meeting of a Technical Workgroup to address the Business Practices of Utilities and Local Service Providers related to the provisioning of multi-line services. The Technical Workgroup was tasked (1) to find ways to improve customer information and awareness of the Enhanced 9-1-1 limitations associated with PBX/MLTS phone systems, and (2) to clarify the roles and responsibilities of PBX/MLTS owners, carrier/local service providers, third parties, and government agencies responsible for public safety in meeting this goal. Stakeholders attending in person and via phone and video conference represented the following organizations:

- Service providers: Verizon California, AT&T California, CALTEL, Frontier, SureWest, the Small LECs, Cox, Comcast, Time-Warner, CCTA, and Astound;
- Public safety agencies: CALNENA, San Francisco Dept. of Emergency Management, Los Angeles Police Department, CCTF, and California 9-1-1 Emergency Communications Office (CA 9-1-1 Office); and
- Others: Avaya, 911 ETC, RedSky, DRA, Commissioner Simon's Office, Orange County, and Communications Division.

Discussions of the Technical Workgroup centered on agenda items related to proposals from carriers and Communications Division for a customer advisory and disclosure, the FCC Enhanced 9-1-1 requirements of IP-enabled service providers, and service provider's charges to pass through the phone station ANI on a 9-1-1 call from a PBX/MLTS.

### **6.2.1. Customer Advisory and Disclosure**

In response to Communications Division's request for proposals from service providers on how best to raise customer awareness of the E911 limitations

of PBX/MLTS phone systems, AT&T California, Verizon, Frontier, SureWest, CALTEL, and the Small LECs submitted a proposal as the “Joint Carriers.” The “Joint Carriers” developed and presented a proposed customer advisory brochure that:

- Identified the potential Enhanced 9-1-1 problems and risks associated with a PBX and advised that the customer must act to address the problem;
- Identified various types of available solutions and options, but did not recommend a specific solution in recognition of the different types of customer premise equipment and networks;
- Recommended the development of a plan to educate students and/or employees of phone system limitations, identify options for accessing 9-1-1, work with local public safety agencies, and test and update the plan routinely; and
- Provided links to additional information resources at the Commission and other websites.

Carrier and cable representatives emphasized that a customer advisory brochure should not attempt to be all inclusive, but afford service providers the flexibility to address differences in customer sophistication, PBX/MLTS equipment and communication technologies. Service providers asked the CCTF to review and update the customer advisory brochure by identifying the process by which PBX/MLTS installers and owners/lessees can work with local 9-1-1 county coordinators on testing call routings.

Attendees agreed that such a customer advisory brochure filled an important need for a customer education and advisory document, and generally met Communications Division’s objectives of being competitive and technology neutral, having a targeted message, and minimizing costs and burdens on service providers. However, the “Joint Carriers” argue they should not distribute the customer advisory brochure to current business customers because individual

provider customer databases do not contain sufficient detail to identify the equipment and services of large business customers. Carriers were concerned that a blanket distribution would cause confusion and not target the customers that need the advisory. Instead, they proposed several different channels for customer notification that they would support:

- Prospective customers with a PBX/MLTS would be handed/sent the customer advisory brochure, and carrier personnel would review and discuss the issues and Enhanced 9-1-1 options with the customer;
- Existing customers would be addressed on a case-by-case basis, and focus on customers experiencing misroutes of 9-1-1 calls (where the call goes to the wrong PSAP or there is wrong location information in the 9-1-1 record). Carriers believe that a greater impact results when a representative of public safety meets with the PBX/MLTS customer to explain the misroute problem, present the customer advisory brochure and the need to implement an accurate Enhanced 9-1-1 solution, and discuss potential enforcement and non-compliance actions; and
- Carriers requested that Communications Division host the customer advisory brochure on the Commission's website to maintain version control as technology evolves, and provide an authoritative location for electronic access by all interested parties. The customer advisory brochure would then be viewed as non-advertising and more legitimate, and carriers could then link from individual websites to the Commission's webpage. It was noted that smaller carriers rely on the CalPhoneInfo website.

Public safety attendees pressed for a more comprehensive plan for contacting the installed PBX/MLTS base since they represent the parties who are generating the problem now. DRA noted that telephone and communication system installation companies are subject to the California State License Board



regulations on contractors, which include an education component.<sup>76</sup> Attendees stressed the value of the Commission establishing a single central website providing a uniform message, and serving as a resource center for business customers. The CCTF agreed to review and amend the customer advisory brochure to describe its role in working with customers on testing and misroutes -- subject to reimbursement by the CA 9-1-1 Office. Communications Division has since taken all of the comments of the stakeholders and has prepared the attached revised customer advisory brochure which can be hosted on the Commission's CalPhoneInfo website.<sup>77</sup>

In filed comments, CCTA clarified that it supports the distribution of the attached revised customer advisory brochure, that some cable companies serve large business customers, and that they can provide Enhanced 9-1-1 related information in contract agreements.<sup>78</sup> Cox independently agreed to provide a URL to customers either in the information they plan to send to them or its website (or both), and planned to offer a PS/ALI service at a future date.<sup>79</sup>

The Small LECs were concerned about the burden on small carriers of revising websites to link to a Commission's webpage, but the Communications Division staff noted that only those carriers offering multi-line and network services for PBX/MLTS customers would need to provide a link, thus exempting smaller carriers without such services. Consequently, SureWest and the Small

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<sup>76</sup> <http://www.cslb.ca.gov/GeneralInformation/Library/LicensingClassifications/C-7LowVoltageSystems.asp>.

<sup>77</sup> See Appendix A of this decision.

<sup>78</sup> CCTA Comments, June 1, 2011, at 2-3.

<sup>79</sup> Cox California Telecom, Advice Letter 992, December 13, 2011.

LECs do not object to the link requirement provided that it is limited to their existing “web pages” offering PBX/Enterprise multiline and/or network services”, and that the carriers are not required to create a page simply to provide such a link.<sup>80</sup>

RedSky subsequently offered to create and submitted a statewide neutral and brand-free Enhanced 9-1-1- logo that each service provider can place on their webpage which would link directly to the Commission's webpage. The logo is shown below:



There is considerable value in consistent and uniform delivery of important information to customers concerning this public safety need. Toward meeting that need, the LECs should provide the link, using the above RedSky logo, on their webpage which would link directly to the Commission's webpage and should distribute the attached revised PBX 9-1-1 Advisory brochure, including any updates, or a brochure with the same essential information, to their current and prospective business customers and other PBX/MLTS customers. Beyond that, and based on carriers’ representations that they have improved their internal processes and can now better respond to customer needs, we will allow the service providers the flexibility in determining how best to deliver additional messages/information to their own customers and when it is warranted given the variety of technologies and providers.

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<sup>80</sup> SureWest and Small LECs Comments, June 1, 2011, at 9.

Attendees of the Technical Workgroup meeting offered other examples and opportunities for outreach and education of PBX/MLTS customers. AT&T California presented its webpage designed to educate PBX/MLTS customers about the need for accurate identification of emergency calls and 9-1-1 solutions that provide more refined caller accuracy with PBX/MLTS phone systems.<sup>81</sup> CALTEL provided examples of several competitive LECs' web pages that alerted and advised customers of the Enhanced 9-1-1 limitations of IP-based bundled and managed services, and the need for first responders to have the correct physical location of 9-1-1 calls.<sup>82</sup> Comcast suggested that the Commission's Public Affairs Office should work with the California Chamber of Commerce and broadcast the message to the larger business communities.

CALNENA pressed for a plan that would require existing PBX/MLTS customers to comply with a regulation or law requiring accurate caller location information within five to ten years. The Communications Division generally agrees with CALNENA, but also believes the Legislature would need to create a legal mandate directing PBX owners to employ technology that ensures accurate caller location information. While AT&T California does not disagree with CALNENA and the Communications Division, AT&T California forecasts that with the fast changing communications technology, many customers may not be served by carriers under the Commission's jurisdiction in five or more years due to transition to new technology. Therefore, AT&T California suggests that

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<sup>81</sup> <http://www.business.att.com/enterprise/Service/voice-services/local/911-pbx-solutions/>.

<sup>82</sup> <http://www.xo.com/forms/Campaign/Legal/ManagedServices911/ManagedServices911.aspx>; <http://www.cbeyond.net/business/e911-service.htm>; and <http://www.level3.com/Resource-Library/Brochure/E-911-Direct.aspx>.

perhaps the Commission may wish to withhold action on this issue for the time being.

However, this suggestion is not persuasive when we are facing a present and critically unmet public safety need, including an urgent need to educate Californian businesses, PBX/MLTS users and owners, operators/lessees regarding this significant public safety problem. Regardless of any anticipated technological advancements or regulatory changes, there is a significant public safety concern within the Commission's jurisdiction to take action where appropriate and to educate and ensure the PBX owners/operators/lessees understand the important underlying public safety need and the need to employ attendant technology that ensures accurate caller location information in their communications.

### **6.2.2. Concerns for E911 related Charges**

During the Technical Workgroup meeting, Orange County raised an important issue and questioned AT&T California practice of subjecting customers to additional charges to transmit the phone station ANI of a 9-1-1 call to the 9-1-1 database on a PRI ISDN trunk -- a service AT&T California refers to as "Inform 911."<sup>83</sup> Some parties identified AT&T California's "Inform 911" rate as a cost impediment for large counties in provisioning a PBX/MLTS Enhanced 9-1-1 solution for their employees and citizens meeting at county facilities.<sup>84</sup>

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<sup>83</sup> Inform 911 for ISDN PRI as described in AT&T California Guidebook, Part 17, Section 2. Customers would be required to subscribe to PS/ALI and provision DID numbers for phone stations, as described in the Workshop Report, at 19.

<sup>84</sup> For example, San Bernardino County has over 200 ISDN PRI lines which would be subject to AT&T's "Inform 911" \$140 monthly rate, Workshop Report at 26.

Attendees did not reach any conclusion on this issue as some suggested that trunking services are highly competitive, and Orange County could perhaps provision trunks from alternative providers that do not charge for that service. Others argued that that bundled rates result in lower costs for some of the elements, and this issue should be left for negotiation between customers and service providers.

With the case of Orange County, alternative providers are not available as potential options since Orange County, similar to many state and local/public government agencies, provisions trunks through CALNET2.<sup>85</sup> CALNET2 is a contract available to state and local/public government agencies that limits the party's ability to provision services outside of the contract.

Following the Workgroup meeting, AT&T California's "Inform 911" service was further reviewed and that review is discussed in section 7.3 of this decision.

### **6.2.3. Technical Workgroup Outcomes**

The 2011 Technical Workgroup meeting was successful in identifying actions for improving customer information and awareness, and addressing the lack of public understanding and knowledge of the PBX/MLTS Enhanced 9-1-1 caller location problem. RedSky created and proposed a statewide neutral and brand-free Enhanced 9-1-1- logo for each service provider to place on their webpage to link directly to the Commission's webpage. The Technical Workgroup generated an effective framework for a proposed customer advisory

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<sup>85</sup> <https://ebiznet.sbc.com/calnetinfoii/>.

brochure to increase awareness on this subject.<sup>86</sup> The Technical Workgroup also recommends the Commission's hosting of the proposed advisory brochure on the Commission's website. CALNENA requested that the Commission make a recommendation to the Legislature that it adopt the NENA Model Legislation Enhanced 9-1-1 for PBX/MLTS<sup>87</sup> and add provisions dealing with penalties for non-compliance and a mechanism for funding the compliance effort.

## **7. Discussion and Analysis**

We have examined the record, including the recommendations of the Workshop and Technical Workgroup as well as the comments filed in this proceeding. We are cognizant of the jurisdictional reach of the Commission and the constantly changing technological landscape of the telecommunications industry. We are nonetheless compelled to action by the recommendations from the Workshop, Technical Workgroup and the record of this proceeding that show this critical and unmet public safety need in California.<sup>88</sup>

### **7.1. Critical and Unmet Public Safety Need**

More than 15 years ago, the FCC opened its proceeding<sup>89</sup> to examine and address the serious call delivery problems of 9-1-1 calls originating from PBX/MLTS. Today, California's PSAPs still report serious PBX/MLTS 9-1-1 call misdirection and response unit misdirection problems throughout the state.<sup>90</sup>

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<sup>86</sup> See Appendix A to this decision.

<sup>87</sup> See Appendix B to this decision.

<sup>88</sup> Workshop Report at 5, 17, and 18.

<sup>89</sup> FCC Docket 94-102.

<sup>90</sup> Workshop Report at 18.

As of February 22, 2012, Congress again elevated federal government's recognition of this unresolved public safety concern and passed the Next Generation 911 Advancement Act of 2012. In it, the Congress directed the FCC to once again revisit and examine this public safety issue and seek comment on (1) the feasibility of MLTSs to provide the precise location of a 911 caller and (2) the NENA Model Legislation.

Throughout this proceeding, the PSAPs have reported their troubling and continuing experiences with:

- (1) The misrouting of PBX/MLTS 9-1-1 calls that then needed to be transferred to the correct PSAP;
- (2) The PBX/MLTS 9-1-1 call takers not being provided with the accurate caller location information and resulting experiences of the call takers having to redirect field responders to the site of the emergency losing invaluable field response time;
- (3) Already scarce public safety resources are being diverted and misallocated by responding to inaccurate PBX/MLTS 9-1-1 caller locations; and
- (4) Critical minutes are added to emergency response times with potentially tragic consequences relating to the PBX/MLST 9-1-1 call.<sup>91</sup>

The PSAPs' tireless contribution to this proceeding was insightful and truly helped the Commission understand the difficulties faced by a PSAP in identifying the actual location of a PBX/MLTS 9-1-1 caller. The PSAPs presented compelling findings in the CALNENA workshop presentation that inaccurate reporting of PBX/MLTS information to the PSAPs continues to be a major public safety concern that causes delayed response to emergency situations and

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<sup>91</sup> *Id.* at 5.

significant public safety hazard.<sup>92</sup> The PSAPs stressed that in many cases, employees in the private and public sector do not even know that their location is not being accurately presented to the local 9-1-1 call taker.

Other parties offered further insights on the nature of the PBX/MLTS Enhanced 9-1-1 problem that there is a general lack of awareness of this public safety problem. Participants stated that many business owners and installers do not understand how 9-1-1 caller location delivery works, so they are unaware of the problem and available solutions.<sup>93</sup> Furthermore, the Communications Division staff noted that the utilities generally viewed PS/ALI and other PBX/MLTS Enhanced 9-1-1 services as a demand product, and do not appear to have proactively identified Enhanced 9-1-1 issues and solutions when provisioning multi-line service.<sup>94</sup>

The presentations from third party vendors and the 9-1-1 Office also revealed that many individual businesses and installers have difficulty finding information on Enhanced 9-1-1 guidelines, standards and solutions for their California installations.<sup>95</sup> Facey Medical Foundation's letter to the Commission as a PBX/MLTS owner succinctly described these difficulties. The letter identified some key elements of a potential set of E911 solutions, including (1) a legislative solution similar to some of the other states, (2) increased public outreach/communications to make it easier to find information on Enhanced 9-1-1 services, and (3) ongoing dialog and cooperative mission with

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<sup>92</sup> *Ibid.*

<sup>93</sup> *Id.* at 8.

<sup>94</sup> *Id.* at 29.

<sup>95</sup> *Id.* at 17.



telecommunications providers to help ensure that PBX/MLTS customers' and end-users' needs are proactively addressed.<sup>96</sup>

## 7.2. Solutions

The Commission has jurisdiction over the regulated utilities but cannot require the utilities' customers to take specific actions associated with 911 service. Nevertheless, the Commission, utilities and other stakeholders all have roles in the overall solution, particularly in education and outreach to PBX/MLTS and E-9-1-1 customers, who are an indispensable part of that solution. The public safety needs here can be met only if those ultimate decision makers, the PBX/MLST customers and the end-users, are informed and participate in the overall solution.

Recognizing those constraints to closing the public safety gap in the California's 9-1-1 emergency response system, several components of the solution are readily within the Commission's reach. Specifically, the record of this proceeding suggests there are two complementary sets of solutions we should undertake here:

- (a) Raising awareness of this critical public safety need amongst the stakeholders, especially the PBX/MLTS customers; and
- (b) Supporting legislative efforts for California to adopt Enhanced 9-1-1 legislation such as the NENA Model Legislation<sup>97</sup> to mandate the PBX/MLTS customers to provision for PBX/MLTS Enhanced 9-1-1.

To those ends and in looking ahead, the Commission should take an active and ongoing part in raising awareness of this issue through, its website, its

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<sup>96</sup> *Ibid.*

<sup>97</sup> See Appendix B to this decision.

authority over the utilities, and its own efforts to support legislative activities, bodies or solutions.

In terms of raising awareness, the Commission must continue to provide leadership and continue the efforts started in this proceeding. Until now, the Commission's Communications Division has played an integral role in California on this issue by following the FCC's direction and initiating a California forum where representative stakeholders have participated in identifying issues and crafting balanced solutions. We believe such continued leadership is necessary and must continue toward effectively closing this public safety gap so that all California telecommunications customers are afforded the critical emergency access protections of Enhanced 9-1-1.

The Commission also must continue to provide such forum and support, as necessary, to the individuals, the PBX/MLTS owners/operators/lessees, the local carrier/service providers, other interested governmental (e.g., State of California 9-1-1 Emergency Communications Office) and non-governmental organizations working with and responsible for providing public safety, in support of raising awareness of the critical public safety Enhanced 9-1-1 need associated with the PBX/MLTS as identified in this proceeding. The momentum created in this proceeding should not be lost and the stakeholders must continue to be reminded of their respective role and in taking respective part in the solution.

Specifically, we believe California must move toward adoption of a legislative solution. Seventeen other states,<sup>98</sup> to date, have already adopted

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<sup>98</sup> See OIR, Appendix D (Alaska, Arkansas, Colorado, Connecticut, Florida, Illinois, Kentucky, Louisiana, Maine, Massachusetts, Minnesota, Mississippi, Texas, Vermont,

*Footnote continued on next page*

varying versions of E911 PBX/MLST legislation addressing this same public safety issue in their states by requiring the businesses and other PBX/MLTS customers to provide accurate caller location information. Those laws and the technical requirements set forth in the NENA Model Legislation, provide ample examples of what works and does not work for effective compliance and E911 PBX/MLTS legislative solutions. Thus, there is no reason why California could not look to those preceding legislative responses and the NENA Model Legislation, as guides, and adopt such legislative solution for the California's business PBX/MLTS customers and other PBX/MLTS customers.

Throughout this proceeding, California's PSAP organization, CALNENA, and other 9-1-1 subject matter experts have repeatedly pled for Commission and legislative action to improve the California's E911 PBX/MLTS system. We are compelled by their pleas, and we find there is a critical public safety need, which requires legislative solution. The simple goal here is to improve the public's access to E911 and close the identified public safety communication gap; in turn, we will improve public safety where we work, shop, relax and vacation; where our kids attend school and college; where we receive government services and medical care; and where many of our disabled and elderly citizens live.

Examining other states' legislative responses to the E911 PBX/MLTS issue to date, the NENA organization's MLTS Technical Subcommittee found that that legislative solutions must have effective enforcement provisions and that merely mandating all PBX/MLTS be provisioned for Enhanced 9-1-1 without significant enforcement provisions, does not in fact result in implementation of those E911

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Virginia, and Washington); and in 2011, Michigan became the seventeenth state to pass E911 requirements for MLTS.

solutions. In those instances, the PBX/MLTS owners/operators/lessees/customers ignored those mandates and still failed to comply with the mandates, leaving the public safety need unmet. As such, the NENA organization's MLTS Technical Subcommittee Chairman Mark Fletcher argues that a state law similar to the NENA Model Legislation, with strong compliance provisions, is necessary to effectively correct this problem. Otherwise, PBX/MLTS owners/operators/lessees/customers have little incentive to correct the problem and will continue to ignore this important public safety concern.

In sum, we find that, to effectively execute the complementary solutions to the public safety concerns associated with the 9-1-1 call delivery problems with certain high risk PBX/MLTS installations, the Commission and the utilities must partner to support effective E911 PBX/MLTS legislation as well as deliver effective education efforts to the public and customers such that the overall awareness is raised of this critical public safety need.

### **7.3. Cost Impediment to Enhanced 9-1-1 Service**

In addition to the need for the various recommended solutions, during the Workshop and the Technical Workgroup meeting, two stakeholders - 911 ETC (as contractor to the County of San Bernardino) and Orange County -- identified AT&T California's "Inform 911" rate as a cost impediment for large counties in provisioning a PBX/MLTS Enhanced 9-1-1 solution for their employees and citizens meeting at county facilities.<sup>99</sup> Although this issue came up during the Workgroup meeting, as discussed in section 6.2.2 of this decision, the issue was

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<sup>99</sup> See *supra*, fn. 84.

further reviewed through the comment process following the Technical Workgroup meeting.

In general, AT&T California's "Inform 911" service uses phone station ANI or CPN and transmits that information to the 9-1-1 database on a PRI ISDN trunk for an additional monthly charge.<sup>100</sup> In contrast to AT&T California, the record shows that no other LEC provider charges for such similar service.

On August 3, 2011, Orange County submitted a letter to the Communications Division responding to the assertions in AT&T California's Comments filed on June 1, 2011, further elaborating on the issue. Specifically, Orange County's letter illustrated that it had to reconfigure the routing of its 9-1-1 calls over one trunk to avoid paying AT&T California's "Inform 911" rate on the 40 separate ISDN-PRI trunks serving the various county offices, and Orange County documented the costs in its letter.

On September 15, 2011, ALJ issued a ruling, addressing Orange County's Letter and sought comments and information on AT&T California's 9-1-1 related charges. The issue was further examined pursuant to the Joint Assigned Commissioner and ALJ Ruling, dated March 8, 2012, which ordered briefs on the related issues. The parties filed comments and briefs which informed the record and showed that utilities were generally confused, unaware or disagreed that (1) 9-1-1 service should be cost-based, (2) Enhanced 9-1-1 service is a 9-1-1 service feature or (3) Enhanced 9-1-1 type of service should similarly be cost-based, as is 9-1-1 service.

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<sup>100</sup> Pacific Bell Advice Letter 19615, August 7, 1998.

### **7.3.1. Resolutions T-14043 and Resolution T-17203**

The discussions during the Workshop and the Technical Workgroup meeting further revealed that very few parties knew of the Commission's 1990 Resolution T-14043 and its requirement that 9-1-1 service rates are to be "as close to cost as possible."<sup>101</sup> At the Workshop, Communications Division staff explained that this 1990 Resolution remains in effect and is applicable to all 9-1-1 services offered by LECs.

Consistent with this 1990 Resolution, the Communications Division has reviewed the rates and costs for ILECs resulting in tariff filings with updated cost support.<sup>102</sup> Consistent with its past practices, Communications Division has made requests of AT&T California to update the cost data supporting the "Inform 911" service in AT&T California's 1998 advice letter. However, AT&T California, to date, has not updated its cost data for its "Inform 911" service, asserting that such service is competitive service and therefore should not be tariffed.

AT&T California takes this erroneous position, in part due to, the Commission's 2009 Resolution T-17203. In review of the Commission's record, it appears that an error took place when the Commission issued Resolution T-17203

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<sup>101</sup> Resolution T-14043, Request by Pacific Bell to Offer Enhanced 911 Services Under Tariff, January 9, 1990, at 4.

<sup>102</sup> In 2010, the Communications Division conducted a review of 9-1-1 rates charged by Small LECs which revealed that the rates of two LECs were approximately 210 and 450 percent of the average rate charged for comparable services. Subsequently, Sierra Telephone filed advice letter 381, on May 28, 2010, and Frontier filed advice letter 1115, December 20, 2010 with rate reductions based on updated cost support, generating annual savings of over \$500,000.

on April, 21, 2009, which inadvertently detariffed AT&T California's Enhanced 9-1-1 service feature, called "Inform 911".

The circumstances surrounding Resolution T-17203 and AT&T California's 2009 detariffing Advice Letter 33423 explain how this inadvertent detariffing occurred. AT&T California's 2009 detariffing Advice Letter 33423 stated that "Pursuant to General Order 96-B, AT&T California attests that these services do not fall within the categories of services excluded from detariffing under Telecommunications Industry Rule 5."<sup>103</sup> GO 96-B, Industry Rule 5, provides that it does not authorize cancelling or detariffing of "Basic Service; 911 or e-911 service." As such, the Commission was led to believe by this statement in Advice Letter 33423 that AT&T California was NOT proposing to detariff excluded "911 or E911 service."

In addition, AT&T California's Advice Letter 33423, Attachment 1, identified for detariffing 94 services in 19 tariffs without any detailed service descriptions. One of 94 listed services was ISDN Primary Rate Interface (ISDN-PRI).<sup>104</sup> The Inform 911 (aka Enhanced 9-1-1 or E911) service option was

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<sup>103</sup> "An URF Carrier may cancel by advice letter any retail tariff currently in effect except for the following: Basic Service; 911 or e-911 service; a provision, condition, or requirement imposed by the Commission in an enforcement, complaint, or merger proceeding; a provision relating to customer direct access to or choice of an interexchange carrier; a service (such as Resale Service) not within the scope of services for which the Commission granted full pricing flexibility in Decision 06-08-030; or a provision pertaining to a Utility's obligations under state or federal law (such as California public policy surcharges or Carrier of Last Resort obligations), or the Commission's decisions or orders." GO 96-B, Industry Rule 5: Detariffed and Non-tariffed Service.

<sup>104</sup> AT&T California Advice Letter 33323, Attachment 1: List of Services to Detariff, August 29, 2008. ISDN PRI was not one of the services subsequently removed from the detariffing request.

not specifically identified by name in that advice letter filing, but was merely one of many rates found in the 99 pages of the A18 tariff.

The resulting Resolution T-17203 noticeably does not make mention of any “911 services” or “e-911 services.” Instead and understandably, the Commission directed its focused and limited resources for review. The Resolution T-17203’s narrative focused on the hundreds of complaints from residential customers about AT&T California’s Residential Service Agreement (RSA),<sup>105</sup> and the Joint Protest and Communications Division’s suspension, investigation, analysis and discussion of the issues raised by the RSA.

What is certain is that only few years prior to issuing that 2009 Resolution T-17203, the Commission issued D.06-08-013. In it, the Commission unequivocally announced its commitment to public safety, recognized the importance of our 9-1-1 system to public safety and extended the 9-1-1 requirements to the wireless customers, stating:

[T]he role of government at issue here -- the promotion of public safety -- is independent of the marketplace. Significant public safety considerations justify the extension of 9-1-1 requirements to wireless carriers.

We also know that the Commission thereafter issued D.07-09-018, wherein the Commission again explicitly reaffirmed its commitment to public safety and prioritized public safety. The Commission specifically excluded 9-1-1 services and determined that such services must not be detariffed:

The 9-1-1 system provides the public an important public service that must be available to all phone customers and must not be detariffed.

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<sup>105</sup> Resolution T-17203 at 2.



In view of the totality of the circumstances, including this decisional backdrop leading to Resolution T-17203 and filing of the advice letter under General Order 96-B which does not permit detariffing of E-911 service by advice letter, we find that the detariffing of AT&T California's "Inform 911" was an error. Because AT&T California's "Inform 911" feature is a significant and notable public safety feature, had the Commission intended to detariff it, the Commission would have thoroughly discussed and explicitly explained why we are taking such an extraordinary action in the Resolution or in some other form. Because that was not in the record or reflected in any way in Resolution T-17203, we must conclude that "Inform 911" is an Enhanced 9-1-1 service that was inadvertently detariffed by the 2009 Resolution T-17203, and that error should be promptly corrected.

### **7.3.2. Tariffing of Enhanced 9-1-1 Service Feature**

We disagree with AT&T California's characterization that its "Inform 911" is an optional feature and therefore should not be tariffed. Similarly, we disagree with AT&T California's assertion that its CAMA trunks, which it characterizes as essential 911 service, in the A9 tariff offer the same functionality as "Inform 911" such that "Inform 911" should be considered just an optional competitively priced feature. In fact, "Inform 911" is an Enhanced 9-1-1 telephony service which was tariffed for 11 years before it was inadvertently detariffed in Resolution T-17203. As discussed above, in section 7.3.1 of this decision, that error should be promptly corrected.

To further examine this "Inform 911" issue, the March 8, 2012 Ruling ordered the parties to file briefs on the issue of whether AT&T California's "Inform 911" Service was a "911 service" or "other emergency service" under the detariffing decisions: D.07-09-018 and D.07-09-019. Upon review of the briefs,

we are persuaded and agree with DRA that “Inform 911” and similar types of service features are components of Enhanced 9-1-1 service. With the advancement of the technology, the contours of the Enhanced 9-1-1 service feature should and will continue to evolve and change with time. Inform 911 and similar services today are essential to ensure PBX/MLTS customers and end-users receive potentially life-saving emergency services that are of same quality and speed as those provided to residential customers.

We do agree with AT&T California, in part. A service feature with only some remote relationship to 911 services should not be deemed a 9-1-1 service. However, we do not agree that the “Inform 911” service feature is just a service with remote relationship to 9-1-1 service, as further evidenced by the plain language of the service description:

Inform 911 allows the Calling Party Number of the station to be sent to the E911 database rather than the Billed Telephone Number.<sup>106</sup>

The two main utilities in California that provide a service similar to Inform 911 for ISDN-PRI trunks are Verizon and AT&T California, and they both filed briefs and comments in this proceeding. Of the two, only AT&T California has indicated that it separately charges for a service that sends the CPN or ANI on a 9-1-1 call to the 911 database.

In short, AT&T California contends it provides two types of 911 services: essential tariffed 911 service such as CAMA trunking, and an alternative optional 911 service feature of detariffed products such as ISDN-PRI Trunking “Inform

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<sup>106</sup> Transmittal letter of Pacific Bell Advice Letter 19615, August 7, 1998.

911” service feature. AT&T California argues that since its PBX customer has a tariffed 911 option, there is no need and justification for the other.

We find AT&T California’s basic reasoning flawed because of it stems from a flawed premise that its business customers have two comparable 911 service feature options, which we do not see in the record. As described by AT&T California, there are two methods of delivering 9-1-1 calls from a private switch: CAMA or ISDN-PRI trunks. Based thereon, AT&T California contends that the “essential” tariffed “CAMA” 9-1-1 services should suffice, instead of the “optional” detariffed “Inform 911” service features of ISDN-PRI trunks.

However, the record in this proceeding shows that CAMA is not only an outdated technology, but it is not cost effective. Orange County illustrated two significant and noteworthy differences between these two services: AT&T California’s “essential” tariffed “CAMA” 9-1-1 services and “optional” detariffed “Inform 911” service features of ISDN-PRI trunks.

The first notable difference is the pricing. The “essential” tariffed CAMA trunks could cost 10 times more than “Inform 911” for a business customer to install and maintain. As illustrated by Orange County, if the County were to install one CAMA trunk at each of its 40 PBX locations it would have cost taxpayers \$29,789.20 for the installation and \$2,963.60 every month. In contrast, the design used by the County, a single ISDN-PRI circuit or “optional” detariffed “Inform 911” service features of ISDN-PRI trunks cost far less. Installation cost for this ISDN-PRI trunk was substantially lower than CAMA at approximately \$2,387.00 with monthly recurring costs running at only around \$332.00.<sup>107</sup>

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<sup>107</sup> Orange County notes these amounts do not include the \$142.00 installation, \$147.00 database setup fee or the monthly \$140.00 Inform 911 charges.

The second notable difference is the actual service. With the “essential” tariffed CAMA trunk type of configuration, Orange County notes only one person would be able to place an emergency call from any given County location at a time, and that if a catastrophic event, large scale emergency, or a widespread disturbance took place, multiple victims or reporting parties from the same County location would be prevented from contacting emergency services. In comparison, the “optional” detariffed “Inform 911” service features of ISDN-PRI trunks allows for up to 23 simultaneous 911 calls from either a single County location or as an aggregate total number of calls from multiple locations within the County’s network.

Based on this information and the record of this proceeding, we conclude that CAMA trunking and “essential” tariffed “CAMA” 9-1-1 services is not comparable to the “optional” detariffed “Inform 911” service features of PRI trunks. CAMA trunking is an outdated legacy technology that is unduly costly, incompatible with modern communications technology and permits only one 9-1-1 call at a time. Instead, ISDN-PRI trunking is a circuit switched digital network that supports access of any type of service (e.g., voice, data and video) over a single, integrated local loop from the customer’s premises to the network edge, which is far more compatible with modern communications technology and the potential need for more than a single 9-1-1 call at a given time. Based on the foregoing, we conclude that “Inform 911” is a critical Enhanced 9-1-1 service that requires continued tariff protection.

### **7.3.3. Recovery of Costs**

We believe that although service providers are permitted to recover their costs, we affirm the Commission policy that rates and charges for 9-1-1 services should be cost based, as previously stated in Resolution T-14043 (January 9,

1990). The one-time, non-recurring installation cost to provision “Inform 911” is negligible based on knowledgeable industry sources, as described in the Technical Workgroup Summary.<sup>108</sup> In contrast, AT&T California’s recurring rates and charges to California’s larger counties to subscribe to its “Inform 911” is not insignificant and could amount to several hundred thousand dollars a year, as described in the Workshop Report.<sup>109</sup>

In light of the above, we find it necessary in this decision to explicitly reaffirm our policy that Enhanced 9-1-1 service rates and charges, including services such as “Inform 911”, should be fair and reasonable and based on a cost showing to the Commission. As discussed here, this means, the utilities’ rates associated with Enhanced 9-1-1 service to PBX/MLTS customers must be cost-based and subject to the 1990 Resolution to ensure that the PBX/MLTS customers, including county governments, can effectively bare the increased telecommunication costs, without being overburdened.

In sum, the Commission should continue to rate regulate Inform 911 and other similar or comparable legacy services<sup>110</sup> as tariffed 911 services, as a matter of public safety and consistent with the goal of this OIR. We find that rates for Enhanced 9-1-1 services that exceed the cost of providing the service are contrary to Commission’s policy. As the objective of this proceeding is to encourage schools, government agencies and businesses to improve public safety access to and protections of the 9-1-1 service for their students, visitors, customers and employees, PBX/MLTS customers should not be charged extra to deliver more

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<sup>108</sup> Technical Workgroup Summary at 4.

<sup>109</sup> Workshop Report, at 20, shows a monthly charge of \$140 per ISDN PRI circuit.

<sup>110</sup> As described in the ALJ’s Ruling and Scoping Memo, June 16, 2010, at 2.

accurate caller location over their ISDN-PRI trunks to receive such critical safety protection. Likewise, we should not leave this critical public safety service to chance based on the ability or skill of a customer to negotiate a rate.

## **8. Conclusion**

Based on the record of this proceeding, we are compelled and persuaded that the following actions must be taken to promote Enhanced 9-1-1 as an essential public safety tool and to begin closing the public safety gap in California's 9-1-1 emergency response system

### **8.1. Outreach and Education**

#### **8.1.1. LECs**

The LECs should (1) distribute the customer advisory brochure (PBX 9-1-1 Advisory) attached to this decision, as Appendix A, and any applicable updates, or a brochure with the same essential information, to their current and prospective customers when those customers initiate services and/or request information on PBX/MLTS Enhanced 9-1-1; (2) distribute the PBX 9-1-1 Advisory, and any applicable updates, or a brochure with the same essential information, to existing businesses and PBX/MLTS customers; and (3) provide links on their webpages to the Commission's CalPhoneInfo website and specifically the PBX 9-1-1 Advisory, and any applicable updates.

#### **8.1.2. The Communications Division**

The Commission's Communication should (1) take all reasonable actions toward continuing the Commission's ongoing leadership role in raising awareness of this critical public safety Enhanced 9-1-1 concern associated with the PBX/MLTS; and (2) place the PBX 9-1-1 Advisory, attached to this decision as Appendix A, on the Commission's CalPhoneInfo website, and thereafter

continue to maintain and make any applicable updates to the PBX 9-1-1 Advisory, on the Commission's CalPhoneInfo website, as necessary.

### **8.1.3. Logo**

All parties in this proceeding, including the regulated carriers, should proactively publicize the Commission's CalPhoneInfo webpage and the PBX 9-1-1 Advisory, including any applicable updates, using the logo developed and proposed by RedSky:



### **8.2. Legislative Efforts**

The Commission's Office of Governmental Affairs and the Communications Division should provide aid and otherwise further the introduction and adoption of effective legislation requiring PBX/MLTS owners/operators/lessees toward providing Enhanced 9-1-1 services with accurate caller location information for their customers, generally consistent with the record in this proceeding and this decision, including Appendix B.<sup>111</sup>

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<sup>111</sup> See *supra*, fn. 4.

### **8.3. Tariffing Issues**

#### **8.3.1. AT&T California**

The inadvertent detariffing of the Enhanced 9-1-1 feature, in the 2009 Resolution T-17203 should be promptly corrected by AT&T California's refiling of a tariff for its "Inform 9-1-1" service.

#### **8.3.2. LECs**

Consistent with Code § 2896 to provide sufficient information to the telecommunications customers upon which to make "informed choices among telecommunications services and providers," the LECs should file and/or revise their 9-1-1 tariffs such that their current and prospective customers are fully informed of options for provisioning accurate caller location information consistent with the below language:

The Utility (or Company) will provide the location of the pilot number to the PSAP for 911 calls and where technically and operationally feasible the Utility (or Company) will deliver ANI to the PSAP at a station level behind a PBX/MLTS. When station level ANI is provided, the customer is required to provide ALI sub-address information to the 911 database.

### **9. Comments on proposed Decision**

The proposed decision of the Assigned Commissioner Timothy Alan Simon in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on \_\_\_\_, and reply comments were filed on \_\_\_\_ by \_\_\_\_.

### **10. Assignment of Proceeding**

Timothy Alan Simon is the assigned Commissioner and Kimberly H. Kim is the assigned ALJ in this proceeding.



**Findings of Fact**

1. Currently, California's 9-1-1 emergency response system for our state's residential customers includes the critical emergency access protections of Enhanced 9-1-1 (also commonly referred to as E911) provisioning which ensures delivery of accurate caller location information to the appropriate local PSAP.

2. Business and other PBX/MLTS customers and end-users presently do not enjoy the same protection of Enhanced 9-1-1 with ensured delivery of accurate caller location information to the appropriate local PSAP as residential customers.

3. The Commission's vision in the OIR was to find ways to bridge this existing public safety gap and extend the critical emergency access protection of Enhanced 9-1-1 provisioning to the business and other PBX/MLTS customers and end-users in California.

4. In response to the OIR and in order to construct a meaningful record and ensure this rulemaking considers the views and ideas of all affected stakeholders, Communications Division staff initiated an outreach effort to representative stakeholders.

5. Throughout this proceeding, the stakeholders actively participated in a Workshop as well a Technical Workgroup meeting, made presentations and submitted comments, as discussed in this decision.

6. The Commission has long been a steadfast supporter of California's 9-1-1 system and committed to promotion of that 9-1-1 system in the sea of ever changing technological advances to provide critical public safety protection to California's telecommunications consumers.

7. In decision after decision, the Commission has carefully balanced the need for regulation to protect consumers with the need for businesses to be able to

explore the market. The Commission has repeatedly asserted the importance and need for 9-1-1 coverage for all telecommunications consumers.

8. In D.07-09-018, the Commission, while deregulating the pricing of telecommunications services other than basic residential service for certain ILEC, once again confirmed the importance and necessity of public safety services.

9. The advancement of technology allows the Enhanced 9-1-1 system to automatically deliver a calling party's callback number and calling location along with the voice call to the appropriate local PSAP.

10. The Enhanced 9-1-1 technology significantly improved the PSAPs' ability to effectively and timely deliver critical public safety and emergency response services in countless situations.

11. The Enhanced 9-1-1 technology has proven to be an essential emergency response public safety tool in saving lives and providing timely emergency response where the caller is unable (due to the language barrier, disability, or other exigent circumstances of the emergency) to verbally communicate caller's accurate location, including when the voice call is dropped, discontinued and cannot be reestablished.

12. Business, including other non-residential, lines represent about 40 percent of total switched access lines in California and well over 90% of those lines are multi-lines.

13. At least one party to this proceeding and manufacturer of PBX/MLTS equipment estimated that potentially 70% of all PBXs/MLTSs are not currently provisioned to display accurate caller location information to the responding PSAP; and this estimate is also consistent with an AT&T report which showed only 350 of AT&T California's customers with PBX/MLTS phone stations in 2007 had provisioned PS/ALI location information records in AT&T California's

Enhanced 9-1-1 database -- compared to the 1.3 million California businesses, governmental entities and non-profits during that same time.

14. The record in this proceeding suggests that an unacceptably large number of Californian PBX/MLTS users maybe without the E9-1-1 protections afforded to residential customers, despite the recent technological and market-based advances in E9-1-1 services.

15. The record in this proceeding demonstrates that there is lack of awareness of this public safety need, and particularly with the PBX/MLTS owner/operator/lessee community, it is imperative that the PBX/MLTS owners/operators/lessees be made aware of the public safety concerns associated with the PBX/MLTS and the essential role they each play in proactively and accurately provisioning the location information records in the Enhanced 9-1-1 database.

16. Currently, this public safety problem and implementation of attendant technology/solutions are left to the voluntary participation of the PBX/MLTS owners/operators/lessees.

17. California PSAPs are continuing to experience inaccurate caller location from PBX/MLTS without accurately provisioned location information records in the Enhanced 9-1-1 database.

18. It is imperative that California also take steps toward a legislative intervention here and that such significant public safety solution is not left to chance by leaving it for voluntary adherence by PBX/MLTS customers.

19. Founded in 1982, the NENA organization, a not-for-profit national organization, is widely respected and recognized as the standard-setting organization, and its members are the experts in 9-1-1 telephony, especially in the public safety and the 9-1-1 industry.

20. In this proceeding, the California Chapter of the NENA organization, CALNENA, has appeared, presented and requested that the Commission make a recommendation to the Legislature that it adopt a legislative solution consistent with Appendix B, the NENA Technical Requirements Document on Model Legislation E9-1-1 for Multi-Line Telephone Systems (commonly referred to and referred to herein as “NENA Model Legislation”), and stressed the importance of legislative provisions dealing with penalties for non-compliance and a mechanism for funding the compliance effort.

21. The NENA organization and the APCO jointly developed the NENA Model Legislation; and in 2011, an updated version 3 of this NENA Model Legislation (Appendix B) was submitted to the Congress and also submitted to this Commission by CALNENA to offer a viable blueprint for an E9-1-1 law in California.

22. The NENA Model Legislation proposes to target the E9-1-1 legislative solution specifically to those larger businesses and not burden the smaller businesses with an overly broad legislative response.

23. Since 1994, the FCC has been looking to the states to implement legislative solutions, similar to the NENA Model Legislation to address E9-1-1 PBX/MLTS issue; however, only about a third of the states since have enacted new legislation adopting E9-1-1 requirements for PBX/MLTS, bringing the current nationwide total to seventeen states with such legislation.

24. On February 22, 2012, Congress passed the Next Generation 911 Advancement Act of 2012 which recognizes that there still continues to be an outstanding public need in the emergency E911 call system and lack of effective implementation of PBX/MLTS E911 technology.

25. Code § 701 gives the Commission broad authority to regulate utilities in all respects, including with respect to consumer protection matters. At the same time, the Commission's broad authority to regulate the carriers does not extend to the California's telecommunications consumers.

26. An effective E9-1-1 solution in California will require a separate legislative action, as part of the overall solution.

27. In D.06-08-013 (Decision Adopting and Issuing Revised General Order 168), we found that:

- Consumers have a right to expect that providers of voice services utilizing numbers from the North American Numbering Plan and connecting to the Public Switched Telephone Network will offer reliable connections to E911 emergency services and Public Safety Answering Points, and to clear and complete disclosure on access to 911 emergency services through the use of those services; and
- Consumers have a right to receive clear and complete information about any limitations affecting the services they select, including limitations on bandwidth, applications or devices that may be used in connection with their service.

28. The PSAPs repeatedly confirmed that their primary concern is that inaccurate reporting of PBX/MLTS information to the PSAPs continues to be a major public safety concern that causes delayed response to emergency situations and that, to date, this public safety concern remains outstanding.

29. The Workshop also yielded important foundational information concerning feasibility and costs to businesses and other property owners of provisioning PBX/MLTS Enhanced 9-1-1 Caller Location Information.

30. RedSky offered to provide a statewide neutral and brand-free Enhanced 9-1-1- logo that each service provider can place on their webpage which would link directly to the Commission's webpage; and that logo is shown below:



31. There is a critical public safety need, which requires legislative solution with a goal to improve the public's access to E9-1-1 and close the identified public safety communication gap.

32. Resolution T-14043 requires that 9-1-1 service rates are to be "as close to cost as possible."

33. It continues to be the Commission's policy that Enhanced 9-1-1 service rates and charges, including services such as "Inform 911", should be fair and reasonable and based on a cost showing to the Commission, and the utilities' rates associated with Enhanced 9-1-1 service to PBX/MLTS customers must be cost-based and subject to Resolution T-14043.

34. An error took place when Resolution T-17203 was issued on April, 21, 2009, in part, inadvertently detariffing Enhanced 9-1-1 service feature.

35. AT&T California's CAMA trunks, in the A9 tariff, do not offer the same functionality as its "Inform 911".

36. AT&T California's "Inform 911" is an Enhanced 9-1-1 telephony service which was tarified for 11 years before it was inadvertently detariffed in Resolution T-17203.

37. The CAMA trunking and "essential" tarified "CAMA" 9-1-1 services is not comparable to AT&T California's "Inform 911" service features of PRI trunks.

38. Code § 2896 requires that the utilities provide sufficient information to the telecommunications customers upon which to make "informed choices among telecommunications services and providers".

**Conclusions of Law**

1. A utility service that sends the CPN or ANI of the phone station on a 9-1-1 call from customer premise equipment (such as a PBX telephone system) connected to the utility's switch using the utility's provided transport facility is a "911 service" or "other emergency service" under decisions D.07-09-019 and D.07-09-018.

2. The public safety gap in California's E9-1-1 system can be addressed with these two complementary sets of solutions:

- (a) Raising awareness of this critical public safety need amongst the stakeholders, especially the PBX/MLTS customers; and
- (b) Supporting legislative efforts for California to adopt effective Enhanced 9-1-1 legislation such as NENA Model (Appendix B) to mandate the PBX/MLTS customers to provision for PBX/MLTS Enhanced 9-1-1.

3. The continued leadership by the Commission is necessary and should continue toward effectively closing this public safety gap so that all California telecommunications customers are afforded the critical emergency access protections of Enhanced 9-1-1.

4. The Commission also should continue to provide such forum and support, as necessary, to the individuals, the PBX/MLTS owners, the local carrier/service providers, other interested governmental (e.g., State of California 9-1-1 Emergency Communications Office) and non-governmental organizations working with and responsible for providing public safety, in support of raising awareness of the critical public safety Enhanced 9-1-1 need associated with the PBX/MLTS as identified in this proceeding.

5. The Commission's continued leadership, forum and support on this issue are in the public interest and appropriate to maintain the momentum created in this proceeding.

6. It is consistent with the Commission's longstanding commitment to public safety and within its broad authority that the Commission take an active and ongoing part in raising awareness of this issue through, its website, its authority over the utilities, and its own efforts to support legislative activities, bodies or solutions.

7. In terms of raising awareness, the Commission should employ following approach:

- (a) The Commission should direct, support and encourage, where appropriate, LECs and other wireline voice service providers to participate in the effort to raise awareness by improving their business practices to proactively address the needs of their customers, establish public information on Enhanced 9-1-1 services and better facilitate customer access to existing services that provide PBX/MLTS Enhanced 9-1-1 solutions;
- (b) The Commission should encourage the PS/ALI service providers and VPCs to work with California's PSAPs and update their User Guides and Training & Reference Materials to make phone station sub-location descriptions as uniform as possible. For example, the NENA organization's website currently recommends using the abbreviations used by the United States Postal Service for sub-location information: room, floor, building, etc. Standardizing abbreviations where technically feasible will help ensure that critical sub-location information is not truncated within the twenty character field width limitations of the current 9-1-1 ALI record viewed by many California PSAPs;
- (c) The Commission should direct all service providers to review the 9-1-1 emergency telephone service language in their local access tariff, and ensure it includes language that informs customers of the option to provision more accurate 9-1-1 caller



PBX phone station information that can be sent to the PSAPs,<sup>112</sup> and that it is the customer's responsibility to provide and maintain accurate and complete phone station location information in the 9-1-1 database;<sup>113</sup> and

- (d) The Commission should direct the service providers to either link from web pages offering PBX /Enterprise multiline and/or network services to the above proposed CalPhoneInfo webpage, or alternatively provide the link on monthly bills<sup>114</sup> or as an annual bill message to all business customers. For the convenience of service providers, RedSky offers the unbranded logo below as a link; service providers can resize as necessary.

8. It is consistent with the Commission's longstanding commitment to public safety and within its broad authority that the Commission look to the NENA Model Legislation, as a guide, and support adoption of a similar legislative solution for California's business PBX/MLTS customers.

9. The Commission should support reasonable and effective legislative proposals setting forth legal requirements on the PBX owner/lessee, as well as effective enforcement mechanisms and penalties for non-compliance, consistent with those identified at the July 26-27 Workshop, such as the NENA Model

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<sup>112</sup> To be accurate, some older analog PBXs cannot be programmed to transmit phone station ANI, but such devices are very rare according to Workshop participants.

<sup>113</sup> The following language provided by SureWest and the Small LECs is an example of acceptable tariff language:

The Utility (or Company) will provide the location of the pilot number to the PSAP for 911 calls and where technically and operationally feasible the Utility (or Company) will deliver ANI to the PSAP at a station level behind a PBX. When station level ANI is provided, the customer is required to provide ALI sub-address information to the 911 database. Comments of SureWest and the Small LECs, June 1, 2011, at 8.

<sup>114</sup> As recommended in Comments of CALTEL, June 1, 2011, at 4.

Legislation (see Appendix B), with added provisions dealing with penalties for non-compliance and a mechanism for funding the compliance effort. As recommended by CALNENA, there should be a time-limited grandfathering program for existing systems.

10. The Commission should continue to rate regulate Inform 911 and other comparable legacy services as tariffed 911 services, as a matter of public safety and consistent with goal of this OIR.

11. The rates for Enhanced 9-1-1 services that exceed the cost of providing the service are contrary to Commission policy as stated in Resolution T-14043.

12. AT&T California's "Inform 911" is not an optional feature but a critical Enhanced 9-1-1 service that requires continued tariff protection.

13. AT&T California's "Inform 911" is Enhanced 9-1-1 service which was inadvertently detariffed by the 2009 Resolution T-17203, and that error should be promptly corrected.

14. Consistent with Code § 2896 to provide sufficient information to the telecommunications customers upon which to make "informed choices among telecommunications services and providers", LECs should revise their 9-1-1 tariffs such that customers are fully informed of options for provisioning accurate caller location information consistent with the below language:

The Utility (or Company) will provide the location of the pilot number to the PSAP for 911 calls and where technically and operationally feasible the Utility (or Company) will deliver ANI to the PSAP at a station level behind a PBX/MLTS. When station level ANI is provided, the customer is required to provide ALI sub-address information to the 911 database.

**O R D E R****IT IS ORDERED** that:

1. Upon the effective date of this decision, the Commission's Communications Division shall (1) take all reasonable actions toward continuing the Commission's ongoing leadership role in raising awareness of the critical public safety Enhanced 9-1-1 concern associated with the Private Branch Exchange (PBX)/Multi-line Telephone System (MLTS) in California; and (2) place the PBX 9-1-1 Advisory, attached to this decision as Appendix A, on the Commission's CalPhoneInfo website, and thereafter continue to maintain and make any applicable updates to the PBX 9-1-1 Advisory, on the Commission's CalPhoneInfo website, as necessary.

2. Upon the effective date of this decision, the Commission's Office of Governmental Affairs and the Communications Division shall take all reasonable actions toward providing aid and otherwise furthering the introduction and adoption of effective legislation requiring Private Branch Exchange (PBX)/Multi-line Telephone System (MLTS) owners/operators/lessees to provide Enhanced 9-1-1 services with accurate caller location information for their customers, generally consistent with the record in this proceeding and this decision, including Appendix B.

3. Within 60 days of the effective date of this decision, all local exchange carriers shall and other parties in this proceeding are strongly encouraged to: (1) distribute the customer advisory brochure (PBX 9-1-1 Advisory) attached to this decision, as Appendix A, and any applicable updates, or a brochure with the same essential information, to their current and prospective customers when those customers initiate services and/or request information on Private Branch

Exchange (PBX)/Multi-line Telephone System (MLTS) Enhanced 9-1-1;  
(2) distribute the PBX 9-1-1 Advisory, and any applicable updates, or a brochure with the same essential information, to existing businesses and PBX/MLTS customers; and (3) provide links on their webpages to the Commission's CalPhoneInfo website and specifically the PBX 9-1-1 Advisory, and any applicable updates.

4. Within 90 days from the effective date of this decision, all local exchange carriers shall:

- (a) include in their local access tariff language that informs customers of the option to provision more accurate 9-1-1 caller Private Branch Exchange/Multi-line Telephone System phone station information that can be sent to Public Safety Answering Points and that it is the customer's responsibility to provide and maintain accurate and complete phone station location information in the 9-1-1 database, generally consistent with the sample language in subsection 4(b) below; and
- (b) review, revise and update their 9-1-1 tariffs such that their current and prospective customers are fully informed of options for provisioning accurate caller location information generally consistent with the below language:

The Utility (or Company) will provide the location of the pilot number to the PSAP for 911 calls and where technically and operationally feasible the Utility (or Company) will deliver ANI to the PSAP at a station level behind a PBX/MLTS. When station level ANI is provided, the customer is required to provide ALI sub-address information to the 911 database.

5. Within 90 days of the effective date of this decision, AT&T California shall file a tariff, including cost justification for its "Inform 9-1-1" service.

6. Rulemaking 10-04-011 is closed.

This order is effective today.

Dated \_\_\_\_\_, at San Francisco, California.