A PRACTICAL GUIDE FOR THE OPERATORS OF MULTI-LINE TELEPHONE SYSTEMS IN MASSACHUSETTS

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MASSACHUSETTS STATE 911 DEPARTMENT
151 Campanelli Drive, Suite A, Middleborough, MA 02346

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Interactive Glossary of Terms

A hyperlink containing the definition and/or description of the term is linked to the term. Hover over the term with your mouse then Ctrl + Click to see the definition.

Introduction

Many thousands of residents and visitors to the Commonwealth of Massachusetts live, work, and frequent buildings and places where telephone service is provided by Multi-Line Telephone Systems (MLTS). An MLTS may provide telephone service to a handful of people all located in one small location or to thousands in multiple locations. MLTS are typically used in such enterprises as hotels and motels, office buildings and business campuses, schools and college campuses, hospitals and medical clinics, and individual stores located in large shopping malls, shopping centers, and strip malls.

When people are at home and there is an emergency, they know that the first thing to do is to call 9-1-1. They expect that the 9-1-1 System will direct first responders to the location of their home and that help will arrive quickly. The 9-1-1 System is designed to "find the location of the emergency by knowing the location of the caller". The public understands that quick responses save lives and property. This continues to be their expectation when they leave home to go to work, or to shop, or to go on vacation. Is this a realistic expectation?

The Massachusetts State 911 Department has established Regulations pertaining to MLTS in the Commonwealth. The intent of the Regulations is to extend the standard of 9-1-1 emergency response enjoyed by the public with their home telephones to situations where they call 9-1-1 with MLTS telephones. The goal is to answer the question, "Is this a realistic expectation", in the affirmative because the system has the ability to "find the location of the emergency by knowing the location of the caller".

The State 911 Department exists to support public safety. We have designed this document to provide information and practical guidance pertaining to the MLTS Regulations. MLTS owners and operators should consider this a tool that will help them understand and comply with the Regulations. This is not a legal document and should not be construed as legal advice. It is, however, a guide to compliance intended to support public safety by assisting the MLTS community in meeting not only "the letter of the law" but also "the spirit of the law".

The MLTS Regulations establish requirements that apply to every MLTS and MLTS operator in the Commonwealth. This guide has a section devoted to these common requirements. The section discusses the common requirements and provides interpretations, best practices, and example use cases that should prove helpful to everyone.

In addition to the common requirements, the MLTS Regulations also establish requirements for specific niches: Business and Government Entity MLTS, Shared Residential MLTS, Hotel/Motel MLTS, and School (and college) MLTS. The Regulations establish specific requirements for each of these niches and this guide has a section devoted to each of them. This guide provides a review of these specific requirements and provides interpretations, best practices, and example use cases that should prove helpful for each niche.

Background

State 911 Department 560 CMR 4.00, entitled "REGULATIONS GOVERNING ENHANCED 911 SERVICE FOR MULTI-LINE TELEPHONE SYSTEMS" is the controlling authority for MLTS in the Commonwealth of Massachusetts.

The Regulations "*require that, beginning July 1, 2009, any new or substantially renovated multi-line telephone system shall provide the same level of enhanced 911 service that is provided to others in the commonwealth*" (Source 560 CMR 4.01). Section 4.02 applies the Regulations to "***all** new or substantially renovated multi-line telephone systems beginning July 1, 2009*."

The Definitions Section of the Regulations (Section 4.03) specifically defines **five categories of MLTS Systems**. The five defined categories are:

- Shared Residential MLTS
- Business or Entity MLTS
- Governmental Agency MLTS
- Hotel/Motel MLTS
- School MLTS

Definitions Section 4.03 also provides a definition for a "*Multi-line telephone system operator*" and Section 4.04 specifically addresses **four categories of MLTS Operators**, as follows:

- Shared Residential MLTS Operators
- Business or Entity, and Governmental Agency MLTS Operators
- Hotel/Motel MLTS Operators
- School MLTS Operators

Sections 4.01 through 4.03 can be summarized as follows: In Massachusetts, **every MLTS system** falls under one of the five defined categories shown above and **every MLTS Operator** is covered by the Regulations (unless you can document that your MLTS system was purchased "new" or was "substantially renovated" prior to July 1, 2009).

Suggested Practice 1: Consider your organization covered by the Regulations and make sure you are in compliance.

The 911 System underwent a major upgrade since the MLTS Regulations were established. The 911 System upgrade incorporated significant advances in technology. Additionally, there have been advances in other fields related to public safety. Examples of just some of these changes and advances would be:

- Migration of the 911 System from E911 to NG911 accompanied by a new way of routing 911 calls

- MassGIS has built a statewide point location database corresponding to every valid address in the Commonwealth

- MassGIS has produced a standard for best practices including addressing issues for all communities in the Commonwealth

- The soon to be effective date (2/16/2020) of the new federal law known as "Kari's Law Act of 2017"

We emphasize that the changes, upgrades, and advancements in technology mentioned above do not diminish the requirement to comply with 560 CMR 4.00. This guide will assist you in complying by offering interpretations, suggested practices, and example use cases.

A copy of the Regulations, including definitions for specific terms and words used in this document, is included with this guide as Exhibit A. In addition, a copy of the Definitions Section of 560 CMR 2.00 Appendix A (containing additional Definitions of specific terms and words) has also been included with this guide as Exhibit B.

We have also included a copy of the text of a new federal law **("Kari's Law Act of 2017")** with this guide as Exhibit C. "Kari's Law" will go into full effect on February 16, 2020. It is directed at manufacturers, installers, managers, and operators of "Multi-Line Telephone Systems". The law requires the pre-configuration of MLTS in such a way:

1. That "a user may directly initiate a call to 9-1-1 from any station equipped with dialing facilities, without dialing any additional digit, code, prefix, or post-fix, including any trunk access code such as the digit "9", regardless of whether the user is required to dial such a digit, code, prefix, or post-fix for other calls", **and**
2. "to provide a notification to a central location at the facility where the system is installed or to another person or organization regardless of location if the system is able to be configured to provide the notification without an improvement to the hardware or software of the system."

You are encouraged to familiarize yourself with the requirements of "Kari's Law" and to prepare to be in compliance when the law takes effect.

I. Regulations That Are Common to All Multi-Line Telephone Systems and/or Operators

A. Regulations that Pertain to All Multi-Line Telephone Systems

Section 4.04 of the Regulations begins with a broad statement that serves to govern **all MLTS Systems** regardless of the specific use category. It states, "*Beginning July 1 2009, all new or substantially renovated multi-line telephone systems shall provide to end users or subscribers the same level of enhanced 911 service that is provided to other end users or subscribers in the commonwealth. The service shall include, but not be limited to, ALI and ANI that meets, at a minimum, the applicable standards set forth in this part*."

Interpretation 1: All MLTS must provide the same level of enhanced 911 services from each individual telephone station, including ANI and ALI, that non-MLTS users (for example, residential users) with landlines receive on their home landlines.

Suggested Practice 1 for all MLTS Systems and Operators: For 911 calls, all MLTS must transmit to a PSAP the same level of enhanced 911 data that would be provided if that same call were made from a landline telephone in a private residence. This would include, at a minimum, ALI and ANI particular to and appropriate for the telephone station initiating the call. Accordingly, for every MLTS in the Commonwealth, the Regulations prohibit call blocking line features that prevent the transmission of the actual telephone number of the calling station.

B. Regulations that Pertain to All Multi-Line Telephone System Operators

The second paragraph of Section 4.04 comprises a broad statement that serves to govern **all Operators** of MLTS systems regardless of system category. It states, "*Beginning July 1, 2009, each operator of a new or substantially renovated multi-line telephone system shall provide (1) a call back number; and (2) PSALI to the station level, or an ERL Identifier. For structures or buildings located in the Commonwealth, such information shall be transmitted to the appropriate jurisdictional PSAP*."

Interpretation: All Operators are required to program and configure their MLTS to ensure that when a 911 call is initiated on their MLTS, the call is received at the proper jurisdictional PSAP with:

(1) a call back number: The Regulations require that the call back number be:

a) the unique telephone number of the telephone station that generated the 911 call, that if called back by the PSAP, will ring the telephone station that generated the 911 call, or if this is not possible, then
b) a telephone number that, if called back by the PSAP, will ring the number of the MLTS switchboard operator, attendant, or a designated person located at the site of the 911 call, **and**
c) the designated operator, attendant, or person (referred to in point b above) must also have the ability to direct emergency responders to the 911 call to the exact location of the telephone station where the 911 call originated and this is required 24 hours a day, 7 days a week, and 365 days a year.

(2) PSALI or an ERL Identifier: In addition to requiring a call back number as detailed above, the Operator is also required to program and configure the MLTS to provide either:

a) **PSALI:** to individual telephone stations in an MLTS. The Location Information should be specific and include details such as Floor, Room, Building Number, Cubical, Office Name, etc.

b) an **ERL Identifier:** an additional location identification that provides specific location identification within a building, structure, complex, or campus such as a floor name or number, wing name or number, building name or number, unit name or number, room name or number, or office or cubicle name or number.

Suggested Practice 2 for all MLTS Systems and Operators: Program and configure the MLTS to transmit to the correct jurisdictional PSAP: ALI, ANI, a call back number, and PSALI to the telephone station level or an ERL Identifier and a Unit Identifier (depending upon the circumstances) specific to the telephone station that generated the 911 call. The call back number should ring the same telephone station that initiated the 911 call and the PSALI and/or ERL Identifier should provide the most specific location information possible depending upon the circumstances (for example – for a multi-story office building situated on a parcel with more than one building: building number or name, AND floor number or name, AND a Unit Identifier such as office number or name).

C. Regulations that Pertain to Prefix Digits for Dialing 9-1-1 from all MLTS Systems and for all MLTS Operators

The third paragraph of Section 4.04 of the Regulations governs MLTS that require a caller to dial a prefix (such as the digit "9" to get an "outside line" before dialing the digits "9-1-1". The Regulations state: "*If a multi-line telephone system requires a caller to dial a prefix, such as the digit 9, before dialing any outgoing call, the multi-line telephone system operator shall make a diligent effort to ensure that subscribers or end users are aware of the procedures for calling for emergency assistance. This requirement shall apply to all multi-line telephone system operators, even if such operator is providing service subject to an authorized waiver*."

Interpretation: If your MLTS requires dialing a prefix digit (such as an "8" or a "9") before dialing the digits "9-1-1", then you must make a diligent effort to "ensure" that users of your MLTS know how to do that. The use of the word "ensure" raises a very high bar and puts the burden of "ensuring" on the operator of the system. It could be argued that, even if the operator were to tell someone how to dial 9-1-1 using the required prefix over and over again, if the user does not do it correctly when the time comes, then you, the operator, did not "ensure" awareness. At a minimum, every telephone station should have an attached document containing specific details concerning how to dial 9-1-1 if your MLTS requires extra digits.

Suggested Practice 3 for all MLTS Systems and Operators - Kari's Law:

Because "ensuring" awareness is a very slippery slope and because "Kari's Law" takes effect in the near future (February 16, 2020), the recommended approach would be to become an early adapter of "Kari's Law" (note: refer to Exhibit C appended to this document for a copy of the Act). Kari's Law squarely addresses the MLTS prefix digit dialing issue. After its effective date, it will ban the manufacture, import, sale or lease, installation, management, and operation of any MLTS that requires dialing "any additional digit, code, prefix, or post-fix". In addition, Kari's Law also requires a notification to a central location at the facility where the system is installed or to another person or organization regardless of location if the system can be configured to provide the notification without an improvement to the hardware or software of the system.

Common Regulations Use Case 1 – EZ Mall

The "EZ Mall" is a small commercial strip that occupies one 2-story building containing five retail/office suites. Four of the suites are home to retail establishments and the fifth serves as the office of the owner of the strip mall. The building is constructed in such a way that there is no access inside of the building between the individual suites. Each suite has 2 floors and all of them are physically configured the same way. The first floor of each suite has a front counter and a rear office. The second floor of each suite is used for storage. Each individual suite has 3 MLTS telephone stations with 2 on the first floor (one located at the front counter and one in the rear office) with the third located in the second floor storage area. The building has its own unique street address (25 Ashaway Rd, Esmond, MA) that is shared by each of the five suites. There is nothing in the street address that would indicated the existence of the five suites. Each suite has distinct outside signage displaying the name of the business. Facing the front of the building from the street and moving from left to right the names are "Jack's Deli", "Kathy's Realty", "EZ Mall Offices", "Julie's Consignments", and "Dan's Tuxedos".

The MLTS is located in the "EZ Mall Offices" suite and all of the 15 telephone stations in the five suites are connected to it. The MLTS is new and is capable of meeting all of the requirements of the Regulations.

Question: How should the EZ Mall MLTS be programmed and configured for 911 calls?

Answer: For every telephone station, the MLTS should be programmed and configured to transmit to the correct jurisdictional PSAP, all of the following:

1. **The ALI and ANI** data transmitted is the same data that the PSAP would receive from a stand-alone telephone calling from the same location. That is, ALI and ANI that distinguishes between all of the telephone stations on the MLTS and correctly transmits as ANI the specific telephone number, and, as ALI, the correct civic street address (25 Ashaway, Rd, Esmond, MA) of the calling station, AND
2. The call back number transmitted to the PSAP is the specific telephone number of the MLTS telephone station that generated the 911 call that if called back by the PSAP, will ring the specific telephone station that generated the 911 call.
3. **PSALI to the Station Level* or Specific** ERL Identifier **and Unit Identifier**: each telephone station should have a unique ERL Identifier and a unique or specific Unit Identifier associated with it, as follows:
    a. **First Floor:** No suites have numbers but all have distinct names with outside signage. The c for the entire floor should be "EZ Mall, Floor 1" with Unit Identifiers of "Jack's Deli, Front Desk", "Jack's Deli, Rear Office", Kathy's Realty, Front Desk", "Kathy's Realty, Rear Office", EZ Mall Offices, Front Desk", "EZ Mall Offices, Rear Office", Julie's Consignments, Front Desk", Julie's Consignments, Rear Office", "Dan's Tuxedo's Front Desk", and "Dan's Tuxedos, Rear Office".
    b. **Second Floor:** No room numbers and no signage. The ERL Identifier for the entire floor should be "EZ Mall, Floor 2" with Unit Identifiers "Jack's Deli, Storage", Kathy's Realty, Storage", EZ Mall Offices, Storage", "Julie's Consignments. Storage" and "Dan's Tuxedos, Storage".

4. **Kari's Law:** Since it is capable of compliance, the MLTS should be programmed and configured to comply with "Kari's Law" immediately. Users should be able to call 911 by dialing the digits 9-1-1 and no other digits from all MLTS telephone stations. In addition, the system should provide a notification to the system that a 911 call has been initiated on the MLTS.

***Note:** The Regulations Require "PSALI to the Station level" or an "ERL Identifier". In this use case example, I have used an ERL Identifier and a Unit Identifier rather than PSALI.

EZ Mall Use Case 1 – But With a Call Back Number Deficiency

Note: All of the facts are the same as that of the "EZ Mall Use Case 1" above with one exception. That exception is, the MLTS is not capable of (and cannot be programmed and configured to) provide a call back number per the requirement of the Regulations. More specifically, the MLTS does not transmit a call back number to the PSAP that if called back, will ring the telephone station that generated the 911 call.

Use Case Question: How should the EZ Mall MLTS be programmed and configured considering the call back number Deficiency"

Answer: The MLTS with the call back number deficiency must be programmed and configured to transmit a call back number that if called back by the PSAP, will ring the telephone number of the MLTS switchboard operator, attendant, or a designated person located at the site where the 911 call originated from (the EZ Mall). In addition, said designated operator, attendant, or person must also have the ability to direct emergency responders to the exact location where the 911 call originated from and this is required 24 hours a day, 7 days a week, and 365 days a year.

EZ Mall Use Case 1 – But With a Cannot Dial 911 without Dialing Extra Digits Deficiency

Note: All of the facts are the same as that of the "EZ Mall Use Case 1" above with one exception. That exception is, the MLTS is not able to (and cannot be programmed and configured to) make a 911 call by dialing only the digits "9-1-1" (that is, without the need to dial any prefix digits such as an "8" or a "9" or any other requirements of dialing extra digits) as per the Regulations. For purposes of this Use Case example, in order to make a 911 call, the MLTS requires the dialing of the prefix digit "9" before dialing "9-1-1".

Use Case Question: What steps must the Operator of the EZ Mall MLTS with the "Cannot Call 911 without Dialing Extra Digits Deficiency" take to comply with the Regulation?

Answer: Since direct dialing of 9-1-1 is not possible, the Operator should attach written instructions on how to make a 9-1-1 call to each telephone station and provide training to all Users. In addition, if a prefix digit is required, use the number "8" as the prefix digit rather than the number "9".

Common Requirements Use Case 2 – Hope Hospital

Hope Hospital is a large private hospital that is located on a 25-acre campus in Darien, MA. The hospital consists of: two medical towers (the 10 floor "Barnard Building", and the 10 floor "Carson Building"), a medical/administrative office building (the 5 floor "Bean Building)", a 2 floor maintenance and security building (" the Maintenance and Security Building") and a large parking lot with a security shack ("Security") at the entrance.

The hospital's physical layout is as follows: The Bean Building is located at the center of the campus. Someone standing in the street in front of the Bean Building would observe the Barnard medical tower to the left (west) of the Bean Building and the Carson medical tower to the right (east) of the Bean Building. One would also observe that the Bean Building is connected to the Barnard Building by two walkways with one connecting the two buildings on the ground floor ("West Walkway 1") and the other connecting the two buildings on the third floor ("West Walkway 3). One would also observe that the Bean Building is also connected to the Carson Building by two walkways with one connecting the two buildings on the ground floor ("East Walkway 1") and the other connecting the two buildings on the third floor ("East Walkway 3"). The Bean Building, the Barnard Building, the Carson Building, and the four connecting walkways all face Lowell St. and the entrance to all of these buildings is from Lowell St. All of these buildings have a common address of 220 Lowell St. Darien, MA.

The Maintenance & Security Building, parking lot, and Security shack are located behind (north of) the Bean, Barnard, and Carson Buildings. There is no access to this part of the hospital campus from Lowell St. Instead, the entrance to and the exit from this part of the campus is from Back Street. This part of the campus has a single address of 55 Back St., Darien, MA

Barnard Medical Building Basement: The basement has three distinct areas with each marked with signage. The "Morgue" suite is located at the west end of the basement and is separated from the rest of the basement by walls and a door. Entering the Morgue suit there is a large open area to the left with a desk and an open area behind it where the morgue lockers are located. There is an MLTS telephone station on the desk in the morgue area and on the wall. On the opposite side of the suite is a walled off area with a sign on the door that reads "Autopsy". Entering the Autopsy area one would see a desk in the front with a large, open, autopsy room located behind the desk. There is one MLTS telephone station on the desk and another on the wall in the autopsy room. In the back of the suite is an office with a sign on the door that reads "Medical Examiner". Inside the door are several desks and one desk has an MLTS telephone station on it.

The "Laundry" is located in the center of the basement behind a door with a sign that reads "Laundry". Inside is a large open area with laundry machines. Just inside the door on a wall to the left there is an MLTS telephone station.

The "Shipping & Receiving" area is located at the east end of the basement in a wide-open area. There are two MLTS telephone located there – one on a desk near the loading docks in the rear and one in an office at the front of the area with a sign that reads "Office".

Barnard Medical Building First Floor: The front doors open to a seating area in the front left and an Information desk area (with a sign that reads "Patient Information" at one end and a sign that reads "Visitor Information" at the other) on the front right. Beyond this area is a corridor that leads to large

cafeteria open to the public. Just before the corridor, on each side of the wall, are two elevators that access all floors. On the right side of the corridor, before the cafeteria, is a store with signage that reads "Pharmacy". One the left side of the corridor, before the cafeteria, is another store with a sign that reads "Gift Shop". There are two MLTS telephone stations at the "Information" desk. There is one MLTS telephone station on the wall near the elevators, one in the "Pharmacy" and one in the "Gift Shop". There are 3 MLTS telephone stations in the cafeteria with one on the wall at the entrance, one in the kitchen area, and one on the wall in the dining area. Each of the two elevators has an MLTS telephone station inside it.

Barnard Medical Building Second Floor: The elevators open to a corridor. One the wall across from the elevators is a large sign with an arrow pointing to the left that reads "Medical Imaging" and another sign pointing to the right that reads "Radiology".

A short walk to the left (west) brings one to a suite with a sign that reads "Medical Imaging" on the entrance door. Inside the suite is a reception area with a sign above the window that reads "Reception", a sign under the window with an arrow pointing to the left that reads "X-Ray", and another sign pointing to the right that reads "MRI". There is a small waiting area with a sign that reads "Waiting Room" that is located just in front of Reception. There is a corridor to the left of Reception that has two Patient Examination Rooms on the right side with signs that read ("Patient Examination 1" and "Patient Examination 2"). To the rear of the corridor is an open "X-Ray Patient Waiting" area large enough to fit several hospital beds and two X-Ray rooms marked "X-Ray One" and "X-Ray Two". To the right of Reception is another corridor that has two Patient Examination Rooms to the left with signs that read "Patient Examination 1" and "Patient Examination 2". To the rear of the corridor is an open "MRI Patient Waiting" area large enough to fit several hospital beds and two MRI rooms marked "MRI One" and "MRI Two". There are MLTS telephone stations at Reception (1), the front waiting room (1), the two left corridor Patient Examination Rooms (1 per room), the X-Ray Patient waiting area (1), X-Ray One (1) X-Ray 2 (1), the two right corridor Patient Examination rooms (1 per room), the MRI Patient waiting area (1), MRI-One (1) and MRI-Two (1).

A short walk to the right (east) brings one to a suite with a sign that reads "Radiology" on the entrance door. Inside the suite is a reception area with a sign that reads "Reception" and a small waiting area with a sign that reads "Waiting Room". There is a corridor to the left of Reception that has two Patient Examination Rooms on the right side with signs that read "Patient Examination 1" and "Patient Examination 2". To the rear of the corridor is an open "Chemo Patient Waiting" area large enough to fit several hospital beds and two Chemotherapy rooms marked "Chemo One" and "Chemo Two". To the right of Reception is another corridor that has two Patient Examination Rooms to the left with signs that read "Patient Examination 1" and "Patient Examination 2". To the rear of the corridor is an open "Radiation Patient Waiting" area large enough to fit several hospital beds and two Radiation rooms marked "Radiation One" and "Radiation Two". There are MLTS telephone stations at Reception (1), the front waiting room (1), the two left corridor Patient Examination Rooms (1 per room), the "Chemotherapy Patient waiting area (1), Chemo One (1) Chemo Two (1), the two right corridor Patient Examination Rooms (1 per room), the "Radiation Patient Waiting" area (1), Radiation One (1) and Radiation Two (1).

Barnard Building Floor 3 through 9: All of these floors contain private hospital rooms for one patient and their visitors with each room containing a hospital bed and a bathroom. There is an MLTS

telephone station next to each hospital bed and in each bathroom. There are 20 patient rooms per floor. The nursing desk for each floor is located in the center of each floor. Each nursing desk on each floor has two MLTS telephone stations.

Barnard Building Floor 10. This floor has two suites. The elevator opens to a Reception Window with a door on the left with a sign that reads "Hospice" and a door on the right with a sign that reads "Bereavement". The Reception window has a sign that reads "Reception".

Just inside the door to the Hospice suite, there is a waiting area with a sign that reads "Waiting" and beyond that is a corridor with six private rooms for one hospice patient and their visitors. There is one MLTS telephone station on a table next to the bed in each hospice room and one MLTS station on the wall in the bathroom that is part of each hospice room. There are 3 hospice rooms on the right side of the corridor and 3 hospice rooms on the left side of the corridor. The rooms on the right are numbered 1, 3, and 5 while the rooms on the left are numbered 2, 4, and 6.

Just inside the door that reads, "Bereavement" are two rooms marked "Bereavement 1" and "Bereavement 2" and each room has one MLTS telephone station. Beyond the two Bereavement rooms is a chapel. There is a table outside the chapel with one MLTS telephone station.

Carson Medical Building Basement: The basement has two distinct areas with each marked with signage. The "Laundry" is located to the left (west) of the basement behind a door with a sign that reads "Laundry". Inside is a large open area with laundry machines. Just inside the door on a wall to the right, there is an MLTS telephone station. The "Shipping & Receiving" area is located to the right (east) of the basement in a wide-open area. There are two MLTS telephone located there – one on a desk near the loading docks in the rear and one in an office at the front of the area with a sign that reads "Office".

Carson Medical Building First Floor: The front doors open to a seating area in the front left and a Visitor Information desk area (with a sign that reads "Patient Information") on the front right. Beyond this area is a corridor that leads to large cafeteria open to the public. Just before the corridor are two elevators that access all floors. On the right side of the corridor, before the cafeteria, is a store with signage that reads "Pharmacy". One the left side of the corridor, before the cafeteria, is another store with a sign that reads "Gift Shop". There are two MLTS telephone stations at the "Visitor Information" desk. There is one MLTS telephone station on the wall near the elevators, one in the "Pharmacy" and one in the "Gift Shop". There are three MLTS telephone stations in the cafeteria: one on the wall at the entrance, one in the kitchen area, and one on the wall in the dining area.

Carson Medical Building Second Floor: The elevators open to a corridor. One the wall across from the elevators is a large sign with an arrow pointing to the left that reads "Dialysis" and another sign pointing to the right that reads "Stroke Clinic".

A short walk to the left (west) brings one to a suite with a sign that reads "Dialysis" on the entrance door. Inside the suite is a Reception window with a sign above the window that reads "Reception". There is a small waiting area in front of Reception with a sign that reads "Waiting Room". Beyond the reception area, there is a corridor with four "Patient Examination" rooms on the left and four "Patient Examination" rooms on the right. The rooms on the right are numbered 1, 3, 5 and 7. The rooms on the left are numbered 2, 4, 6, and 8. To the rear of the corridor is the "Dialysis Patient Waiting" area that is large enough to fit several hospital beds and two Dialysis rooms marked "Dialysis One" and "Dialysis

Two". There are MLTS telephone stations at Reception (1), the front waiting room (1), the eight Patient Examination Rooms (1 per room), the Dialysis Patient waiting area (1), Dialysis One (1) and Dialysis Two (1).

A short walk to the right (east) brings one to a suite with a sign that reads "Radiology" on the entrance door. Inside the suite is a reception area with a sign that reads "Reception" and a small waiting area with a sign that reads "Waiting Room". Beyond the reception area, there is a corridor with four "Patient Examination" rooms on the left and four "Patient Examination" rooms on the right. The rooms on the right are numbered 1, 3, 5 and 7. The rooms on the left are numbered 2, 4, 6, and 8. To the rear of the corridor is the "Stroke Patient Waiting" area large enough to fit several hospital beds and two "Stroke Treatment" rooms marked "Stroke Treatment One" and "Stroke Treatment Two". There are MLTS telephone stations at Reception (1), the front waiting room (1), the eight Patient Examination Rooms (1 per room), the Stroke Patient waiting area (1), Stroke Treatment One (1) and Stroke Treatment Two (1).

Carson Building Floors 3 through 10: All of these floors contain hospital rooms for two patients and their visitors with each room containing two hospital beds (designated and marked as "Patient One" and "Patient Two") and one bathroom. There is an MLTS telephone station next to each hospital bed and in each bathroom. There are 16 patient rooms per floor. The nursing desk for each floor is located in the center of each floor. Each nursing desk on each floor has two MLTS telephone stations.

Bean Building: The hospital's "Emergency Room" and "Walk-In Clinic" are located on the ground (first) floor and the Operating Rooms are located on the second and third floors. The hospital's "Medical Staff Offices" are located on the fourth floor and the "Administrative Staff Offices" are located on the fifth floor. The basement is the home of the hospital's "Rehabilitation Department".

Bean Building Ground Floor: The front doors open to a large lobby waiting area located in front of a wall that runs the entire width of the building and which serves to separate the waiting area from the rest of the floor. In the middle of the wall is a "Reception" area for the public with a sign that reads "Reception" on a large glass window. Facing the wall and the Reception window, to the left and to the right, is a door and an elevator. The door to the left is the public entrance to the Emergency Room and it has a sign that reads "Emergency". The door to the right is the public entrance to the Walk-In Clinic and it has a sign on it that reads "Walk-In Clinic". The elevator to the left of Reception has a sign that reads "Public". The elevator to the right of Reception has a sign that reads "Hospital Staff Only". There are three MLTS telephone stations on the desks behind sections of the "Reception" window and there is an MLTS telephone station on the wall next to the two elevators as well as one inside each of the two elevators.

Behind the wall separating the waiting room from rest of the floor, to the left, is a door that reads "Emergency Room". Beyond that door are twelve individual Emergency Rooms with walls on three sides and a curtain in the front. The twelve Emergency Rooms are numbered and marked as "Emergency 1" through "Emergency 12" respectively. There is also a nursing station desk, with a sign that reads "Nursing" in front of the twelve Emergency rooms. There is an MLTS telephone station inside of each of the twelve individual Emergency rooms and two MLTS telephone stations on the nursing station desk.

Behind the wall separating the waiting room from rest of the floor, to the right, is a door that reads "Walk-Ins". Beyond that door are six individual rooms with walls on three sides and a curtain in the front. The six rooms are numbered and marked as "Patient 1" through "Patient 6" respectively. There is

also a nursing station desk, with a sign that reads “Nursing” in front of the six Patient rooms. There is an MLTS telephone station inside of each of the six patient rooms and two MLTS telephone stations on the nursing station desk.

To the rear of the Emergency Room Unit, there is an entrance for patients who arrive in ambulances and first responder vehicles. This part of the first floor of the Bean Building is not accessed from Lowell St. like the rest of the building; instead, it is accessed from Back St. There is a desk located at the rear entrance and there are MLTs telephone stations located on the desk and on a wall at the rear entrance.

Bean Building Floors 2 and 3: There is a suite of eight Operating Rooms per floor and they are numbered and marked with signs as “OR-1” through “OR-8” respectively, on each floor. In addition, there is a “Medical Staff” desk located on each floor. There are MLTS telephone stations in each of the eight Operating rooms on each floor as well as a Medical Staff desk on each floor.

Bean Building Floor 4: There are twelve medical staff offices and they are numbered and marked with a three-digit scheme, with the first digit representing the floor the second two digits representing the room number. Accordingly, they are marked and numbered 401 through 412 respectively. Each room has one MLTS telephone station.

Bean Building Floor 5: The “Administrative Offices” floor contains three suites. The “Hospital Staff Only” elevator opens to a corridor with a door marked appropriately for each suite. The door to the suite to the left (west) is marked “Fiscal”. The door to the suite in the middle is marked “Medical”. The door to the right (east) is marked “Operations”. Each of the three suites is laid out identically with six cubicles numbered 1 through 6 and a rear office with a sign on the door that reads “Manager”. There is an MLTS telephone station in each cubicle and in the Manager’s office in each of the three suites.

Maintenance & Security Building Ground Floor: The ground floor is a large open area that used for equipment and tool storage. There is a fenced off cage marked “Equipment” to the left (east) and a fenced off cage marked “Tools” to the right (west). Inside each cage is a desk with one MLTS telephone station. A central staircase leads from the ground floor to the second floor.

Maintenance & Security Building Floor 2: At the top of the central staircase is a corridor. On the left (west), side of the corridor is a door marked “Maintenance” and to the right side (east) of the corridor is a door marked “Security”. The “Maintenance” door leads to an unmarked open room with four desks. Two of the desks have MLTS telephone stations. The “Security” door leads to an unmarked room with two desks and an office with a door that has a sign that reads “Office”. There is an MLTS telephone station on one of the desks in the open room and another on a desk in the “Office”.

Security Shack at Parking Lot Entrance: This is a one-story building. There is an MLTS telephone station on a desk in the Security shack on the ground floor. The Building has signage that reads “Security”.

The Hope Hospital MLTS is new and is capable of meeting all of the requirements of the Regulations.

Question: How should the Hope Hospital MLTS be programmed and configured for 911 calls?

Answer: For every telephone station, the MLTS should be programmed and configured to transmit to the correct jurisdictional PSAP, all of the following:

1. **The ALI and ANI** transmitted is the same data that the PSAP would receive from a stand-alone telephone calling from the same location. That is, ALI and ANI that distinguishes between all of the telephone stations on the MLTS and correctly transmits as ANI the specific telephone number and, as ALI, the correct street address (either 220 Lowell St. or 55 Back St. as would be appropriate) of the calling station, AND,
2. **The call back numbe**r transmitted to the PSAP is the specific telephone number of the station that generated the 911 call and that if called back by the PSAP, will ring the specific telephone station that generated the 911 call.
3. **PSALI to the Station level* or Specific ERL Identifier and Unit Identifier:** each telephone station should have a unique ERL Identifier and a unique or specific Unit Identifier associated with it, as follows:
    a. **Barnard Building Basement:** No areas have numbers but all have distinct names. ERL Identifier for the entire floor should be "Barnard Building, Basement" with Unit Identifiers for the Morgue Suite of: "Morgue Desk", "Morgue Wall", "Morgue, Autopsy Desk", "Morgue, Autopsy Wall", and "Morgue Office", "Autopsy Office", and "Medical Examiner Office". Unit Identifier for the Laundry area: "Laundry, Wall". Unit Identifiers for the Shipping & Receiving area: "Shipping & Receiving, Rear Desk", and "Shipping & Receiving, Front Office".
    b. **Barnard Building First Floor:** No room numbers but all areas have names. The ERL Identifier for the entire floor should be "Barnard Building, Floor 1" with Unit Identifiers: "Lobby, Patient Information", "Lobby, Visitor Information", "Lobby, Elevators", "Corridor, Pharmacy", "Corridor, Gift Shop", "Cafeteria, Entrance", "Cafeteria, Kitchen", and "Cafeteria, Dining Room".
    c. **Barnard Building Second Floor:** contains two named and marked suites ("Medical Imaging" and "Radiology") each containing several sub units and areas.
    Medical Imaging Suite: The ERL Identifier for the entire suite should be "Barnard Floor 2, Medical Imaging". Unit Identifiers for this suite should be: "Reception, Front", "Waiting Room, Front", "Left Corridor, Patient Exam 1","Left Corridor, Patient Exam 2", "X-Ray, Patient Waiting", "X-Ray, 1" "X-Ray, 2", "Right Corridor, Patient Exam 1", "Right Corridor, Patient Exam 2", "MRI, Patient Waiting", "MRI, 1" and "MRI, 2".
    Radiology Suite: The ERL for the entire suite should be "Barnard Floor 2, Radiology". Unit Identifiers for this suite should be: "Reception, Front", "Waiting Room, Front", "Left Corridor, Patient Exam 1","Left Corridor, Patient Exam 2", "Chemo, Patient Waiting", "Chemo, 1" "Chemo, 2", "Right Corridor, Patient Exam 1", "Right Corridor, Patient Exam 2", "Radiation, Patient Waiting", "Radiation, 1" and "Radiation, 2".
    d. **Barnard Building Floors 3 through 9:** all units on all floors have room numbers with the exception of the nursing desk. The ERL Identifier for each floor should be "Barnard Building, Floor 3" through Barnard Building, Floor 9" as would be appropriate for the floor. The room numbering scheme is a 4-digit number with the first two digits representing the floor (floors 1 through 9 shown as 1, 2, 3, etc. and not 01, 02, 03 etc.). Examples: Room 6 on Floor 4 would be marked as "406", room 15 on Floor 8 would be "815", and room 18 on Floor 10 would be "1018".

Accordingly, the Unit Identifier for all patient rooms should be “Room 301” through “Room 1020” as would be appropriate for the particular floor number/room number. The Unit Identifiers for the bathroom in each room should be “Room 301, Bathroom” through “Room 1016, Bathroom” as would be appropriate for the particular floor number/room number. The Unit Identifier for the nursing desk on each floor would be “Nursing Desk, Center”.

e. **Barnard Building Tenth Floor:** contains two named and marked suites (“Hospice” and “Bereavement”) and a Reception window.
Reception: The ERL Identifier should be “Barnard, Floor 10” and the Unit Identifier should be “Reception”.
Hospice Suite: The ERL Identifier should be “Barnard Floor 10, Hospice” and the Unit Identifiers should be “Waiting Room”, “Room 1, Bed” and “Room 1, Bathroom” through “Room 6, Bed” and “Room 6, Bathroom” as would be appropriate for the room number.
Bereavement Suite: The ERL Identifier should be “Barnard Floor 10, Bereavement” and the Unit Identifiers should be “Room 1”, “Room 2”, and “Rear Chapel, Front Desk”.

f. **Carson Building Basement:** No room numbers but both areas are named and have signage.
Laundry: The ERL Identifier should be “Barnard Basement, Laundry” with a Unit Identifier of “Wall near door”.
Shipping & Receiving: The ERL Identifier should be “Barnard Basement, Shipping & Receiving” with Unit Identifiers of “Loading Dock, Desk”, and “Front, Office”.

g. **Carson Building First Floor:** No room numbers but all areas have names. The ERL Identifier for the entire floor should be “Carson Building, Floor 1” with Unit Identifiers: “Lobby, Patient Information”, “Lobby, Visitor Information”, “Lobby, Elevators”, “Corridor, Pharmacy”, “Corridor, Gift Shop”, “Cafeteria, Entrance”, “Cafeteria, Kitchen”, and “Cafeteria, Dining Room”.

h. **Carson Building Second Floor:** contains two named and marked suites (“Dialysis” and “Stroke Clinic”).
Dialysis Suite: The ERL Identifier for the entire Dialysis suite should be “Carson Building Floor 2, Dialysis”. The Unit Identifiers should be “Reception”, “Waiting Room, Front”, “Exam Room, 1” through “Exam Room, 8” (as would be appropriate to the exam room number), “Patient Waiting, Rear”, “Dialysis, 1”, and “Dialysis, 2”.
Stroke Clinic Suite: The ERL Identifier for the entire Stroke Clinic suite should be “Carson Building Floor 2, Stroke”. The Unit Identifiers should be “Reception”, “Waiting Room, Front”, “Exam Room, 1” through “Exam Room, 8” (as would be appropriate to the exam room number), “Patient Waiting, Rear”, “Stroke Clinic, 1”, and “Stroke Clinic, 2”.

i. **Carson Building Floor 3 through 10**: all units on all floors have room numbers with the exception of the nursing desk. The ERL Identifier for each floor should be “Carson Building, Floor 3” through “Carson Building, Floor 10” as would be appropriate for the floor. The room numbering scheme is a 4-digit number with the first two digits representing the floor (floors 1 through 9 shown as 1, 2, 3, etc. and

not 01, 02, 03 etc.). Examples: Room 6 on Floor 4 would be marked as "406", room 15 on Floor 8 would be "815", and room 16 on Floor 10 would be "1016". Accordingly, the Unit Identifier for all patient rooms should be "Room 301, Bed 1" and "Room 301, Bed 2" through "Room 1016, Bed 1" and "Room 1016, Bed 2" as would be appropriate for the particular floor number/room number. The Unit Identifier for the single bathroom in each patient room should be "Room 301, Bathroom" through "Room 1016, Bathroom" as would be appropriate for the particular floor number/room number. The Unit Identifier for the nursing desk on each floor would be "Nursing Desk, Center".

j. **Bean Building Ground Floor:** The ground floor is divided into four distinct areas separated by walls and doors. Access to the front Lobby/Reception area, the mid-floor public Emergency Room area, and the mid-floor public Walk-In Clinic area is from the (front) doors facing 220 Lowell St. while access to the Ambulance Patient Drop-Off area in the rear is from the (rear) doors facing 55 Back St.
Lobby/Reception: The ERL Identifier for the Lobby/Receptions area should be "Bean Building Front, Ground Floor" and the Unit Identifiers should be: "Reception, 1", "Reception, 2", "Reception, 3", and "Elevators, Wall".
Public Emergency Room Suite: This area has twelve numbered and marked Emergency rooms and a Nursing desk. The ERL Identifier for the Public Emergency Room Suite should be "Bean Building Center, Ground Floor" with Unit Identifiers of "Emergency Room, 1" through "Emergency Room, 12" (as would be appropriate for the particular room), "Nursing Desk, 1" and "Nursing Desk, 2".
Public Walk-In Clinic: This area has six numbered and marked Patient rooms and a Nursing desk. The ERL Identifier for the Public Walk-In Clinic Suite should be "Bean Building Center, Ground Floor" with Unit Identifiers of "Walk-In, 1" through "Walk-In, 6" (as would be appropriate for the particular room), "Nursing Desk, 1" and "Nursing Desk, 2".
Ambulance Entrance to Emergency Room: This area is located in the rear of the Bean Building and it can only be accessed via the 55 Back St. entrance. The ALI should be 55 Back St., Darien, MA. The ERL Identifier should be "Bean Building Rear, Ground Floor" and the Unit Identifiers should be "Ambulance Entrance, Rear Desk" and "Ambulance Entrance, Rear Wall".

k. **Bean Building Floors 2 and 3**: Each of the operating rooms on both floors have signage. The ERL Identifier for Floors 2 and 3 should be "Bean Building, Floor 2" and "Bean Building, Floor 3" respectively. The Unit Identifiers should be "OR-1" through "OR-8" and "Medical Staff Desk" as would be appropriate for the floor.

l. **Bean Building Floor 4**: All of the medical staff office are numbered and marked with signage. The ERL Identifier for the entire floor should be "Bean Building, Floor 4) with Unit Identifiers of "Room 401" through "Room 412" respectively.

m. **Bean Building Floor 5**: There are three separate named suites and all three are marked with signage on their respective entrance doors.
The ERL Identifier for the Fiscal suite should be "Bean Building, Floor 5 Fiscal" with Unit Identifiers of "Cubicle 1" through "Cubicle 6" respectively and "Manager Office".

The ERL Identifier for the Medical suite should be "Bean Building, Floor 5 Medical" with Unit Identifiers of "Cubicle 1" through "Cubicle 6" respectively and "Manager Office".

The ERL Identifier for the Operations suite should be "Bean Building, Floor 5 Operations" with Unit Identifiers of "Cubicle 1" through "Cubicle 6" respectively and "Manager Office".

n. Maintenance & Security Building Ground Floor: There are two distinct areas and both are named and marked with signage. The ERL Identifier for the entire floor should be "Bean Maintenance & Security, Ground Floor" and the Unit Identifiers should be "Equipment Cage, Desk" and "Tools Cage, Desk".

o. **Maintenance & Security Building Second Floor**: There are two physically separated suites with one marked with a sign that reads "Maintenance" and the other marked with a sign that reads "Security". The ERL Identifier for the entire floor should be "Bean Maintenance & Security, Floor 2" with Unit Identifiers of "Maintenance, Open Area Desk 1", "Maintenance, Open Area Desk 2", "Security, Open Area Desk 1", and "Security, Office".

p. **Security Shack at Parking Lot Entrance**: The ALI should be "55 Back St., Darien, MA". The ERL Identifier should be "Security Shack, Ground Floor" and the Unit Identifier should be "Inside, Desk".

4. **Kari's Law:** Since it is capable of compliance, the MLTS should be programmed and configured to comply with "Kari's Law" immediately. Users should be able to call 911 by dialing 9-1-1 and no other digits from all MLTS telephone stations. In addition, the system should provide a notification to the system that a 911 call has been initiated on the MLTS.

***Note:** The Regulations Require "PSALI to the Station level" or an "ERL Identifier". In this use case example, I have used an ERL Identifier and a Unit Identifier rather than PSALI.

Common Requirements Use Case 2 – Hope Hospital - But With a Call Back Number Deficiency

Note: All of the facts are the same as that of "Common Requirements Use Case 2 – Hope Hospital" above with one exception. That exception is: the MLTS is not capable of (and cannot be programmed and configured to) provide a call back number per the requirement of the Regulations. More specifically, the MLTS does not transmit a call back number to the PSAP that if called back, will ring the telephone station that generated the 911 call.

Use Case Question: How should the Hope Hospital MLTS be programmed and configured considering the call back number deficiency?

Answer: The MLTS with the call back number deficiency must be programmed and configured to transmit a call back number to the PSAP, which if called back by the PSAP, will ring the telephone number of the MLTS switchboard operator, attendant, or a designated person located at the site where the 911 call originated from (Hope Hospital). In addition, said designated operator, attendant, or person must also have the ability to direct emergency responders to the 911 call to the exact location where the 911 call originated and this is required 24 hours a day, 7 days a week, and 365 days a year.

Common Requirements Use Case 2 – Hope Hospital – But With a Cannot Dial 911 without Dialing Extra Digits Deficiency

Note: All of the facts are the same as that of "Common Requirements Use Case 2 – Hope Hospital" above with one exception. That exception is - the MLTS is not able to (and cannot be programmed and configured to) make a 911 call by dialing only the digits "9-1-1" (that is, without the need to dial any prefix digits such as an "8" or a "9" or any other requirement of dialing extra digits) as per the Regulations. For purposes of this Use Case example, in order to make a 911 call, the MLTS requires the dialing of the prefix digit "9" before dialing "9-1-1".

Use Case Question: What steps must the Operator of the Hope Hospital MLTS with the "Cannot Call 911 without Dialing Extra Digits Deficiency" take to comply with the Regulations?

Answer: Since direct dialing of 9-1-1 is not possible, the Operator should attach written instructions on how to make a 9-1-1 call to each telephone station and provide training to all Users. In addition, if a prefix digit is required, use the number "8" as the prefix digit rather than the number "9".

II. Standards That Apply to Specific Categories of MLTS

In addition to the "Regulations That Are Common to All Multi-Line Telephone Systems, Operators, and Prefix Dialing Digits" as set forth in the first three paragraphs of 560 CMR 4.04, sub-paragraphs (1) through (4) set forth regulations specific to Operators of the following MLTS categories:

- Shared Residential MLTS Operators
- Business or Entity, **and** Governmental Agency MLTS Operators
- Hotel/Motel MLTS Operators
- School MLTS Operators

It should be noted and emphasized that all four of the listed categories of MLTS Operators also fall under the common requirements of the first three paragraphs of Part I. Accordingly, one should not conclude that any Part I common requirements that are not specifically repeated or mentioned in the treatment of subsections (1) through (4) of Section 4.04 serve to excuse compliance with the common requirements already set forth in the Part I. Common Requirements.

Specific Use: Shared Residential Multi-Line Systems 560 CMR 4.04 (1)

Section 4.04 (1) governs Operators of shared residential MLTS: "*Each operator of a shared residential multi-line telephone system shall transmit to the PSAP one ANI and one ALI for each residential unit.*"

Residential Unit "*means a private home, townhouse, condominium, apartment, mobile home, cabin, cottage, or residential unit in a governmental public housing facility*" (as defined by Section 4.03 of the Regulations).

Interpretation: This category is directed at operators of MLTS serving multiple residential units located in a single building, or complexes and campuses with multiple buildings that contain multiple residential units. Examples of shared residential units would include: privately owned condominium and townhouse complexes, government owned public housing complexes, apartment buildings, and mobile home or trailer parks. This standard requires the transmission of unique ANI and unique ALI that distinguishes between individual residential units. In addition, the "Regulations that are Common to all MLTS and MLTS Operators must also be considered and complied with. Accordingly, in addition to "*one ANI and one ALI*", shared residential MLTS must also provide a call back number, and an ERL Identifier or PSALI.

Shared Residential Unit Suggested Practices – Location Information: In the interest of Public Safety, program and configure the MLTS to provide an ERL Identifier and a Unit Identifier or PSALI to the telephone station level.

Operators should program and configure the MLTS to meet the higher standards of the common requirements, as follows: transmit enhanced 911 standard ALI and ANI, AND transmit a call back number as specifically defined, AND transmit ERL Identifiers AND Unit Identifiers that contain as much location information as possible. The ANI and ALI should be unique to the particular telephone station originating the 911 call and should provide the correct street address and telephone number of the telephone station calling 911. The call back number, if called back by a PSAP, should ring the same telephone station that placed the 911 call. The ERL Identifier should provide the Building Name/Number and Floor at a minimum. The Unit Identifier should provide the room name/number for sleeping rooms, or the most accurate location information within the structure for non-sleeping rooms or sections such as: cafeterias, lounges, swimming pools, exercise rooms, lobbies, and common areas.

Shared Residential Unit Suggested Practice - Kari's Law: Be aware that the impetus for Kari's Law was an actual, tragic, incident wherein a child repeatedly and unsuccessfully dialed 9-1-1 on a motel telephone while witnessing the murder of her mother. The child knew to call 911 in an emergency but did not know that the motel's MLTS required the dialing of a prefix digit.

Become an early adapter of "Kari's Law" (note: refer to Exhibit C appended to this document for a copy of the Act). Program and configure your MLTS to be able to call 911 without dialing a prefix digit or any other digit. In addition, the system should provide a notification to the system that a 911 call has been initiated on the MLTS.

Shared Residential MLTS Specific Use Case 1 – Bradley Center

The Bradley Center is a governmental public housing facility located in Midway, MA. The Bradley Center consists of two high-rise residential buildings with signage that distinguishes them as "Building A" and "Building B". There is also a one story "Roosevelt Building" where employees of the Bradley Center work and where residents pick up their mail and packages.

The address of the **Roosevelt Building** is 32 Maple St., Midway MA. It has a front reception area with one office to the left and another to the right. The office to the left has a sign on the door that reads "Manager" and the office to the right has a sign that reads "Communications". Behind the Reception Area is a large open common area with a sign that reads "Residents' Lobby". This lobby contains some tables and chairs as well as individual mailboxes for the residents of Buildings A and B. Behind the Residents' Lobby is a Shipping & Receiving area where supplies and the resident's mail is received. The Reception area, the two offices, the Residents Lobby, and the Shipping & Receiving area each have one MLTS telephone station.

Building A is located directly across the street from the Roosevelt Building. It has an address of 33 Maple St., Midway MA. The doors to the **first floor** open to a lobby area with an office to the right with a sign that reads "Security" on the door. Two elevators are located across from the front door and residents use these to access floors 2 through 6. There is an MLTS telephone station in the Security office and another one on the wall between the two elevators. There are no MLTS telephone stations inside the elevators.

Floors 2 through 6 each contain 10 apartments (residential units). All of the apartments are numbered and there is a sign on the door of each showing the apartment number. There is a 3-digit numbering scheme deployed with the first digit being the floor number and the last two digits being the apartment number (so that, for example, apartment 4 on the third floor would be numbered 304 and apartment 10 on the fifth floor would be numbered 510). Each apartment on floors 2 through 6 has one MLTS telephone station.

Building B is located next door to the Roosevelt Building. It has an address of 34 Maple St., Midway MA. The doors to the **first floor** open to a lobby area with an office to the right with a sign that reads "Security" on the door. Two elevators are located across from the front door and residents use these to access floors 2 through 6. There is an MLTS telephone station in the Security office and another one on the wall between the two elevators. There are no MLTS telephone stations inside the elevators.

Floors 2 through 6 each contain 10 apartments (residential units). All of the apartments are numbered and there is a sign on the door of each showing the apartment number. There is a 3-digit numbering scheme deployed with the first digit being the floor number and the last two digits being the apartment number (so that, for example, apartment 4 on the third floor would be numbered 304 and apartment 10 on the fifth floor would be numbered 510). Each apartment on floors 2 through 6 has one MLTS telephone station.

Bradley Center MLTS: When the Bradley Center opened in 2012, the management purchased and installed a brand new MLTS. The purchase price of the MLTS included "free setup". The MLTS is located in the Communications office in the Roosevelt Building and the address on the telephone bill the Bradley Center receives every month is the address of the Roosevelt Building. The billing telephone number on

the monthly telephone bill is 617-888-1111 and that is the main telephone number of the Bradley Center. When the MLTS vendor did the "free setup", it seemed logical (and quick) to use the address of the Roosevelt Building and the main telephone number of the Bradley Center for every MLTS telephone station in all three buildings. Consequently, if someone makes a 911 call from anywhere in the Bradley Center, what is transmitted to the PSAP would be ANI of 617-888-1111, and ALI of 32 Maple St., and no other location information - no matter where the call actually originated from. For all 911 calls originating from both Building A or Building B, this is a clear violation of the requirements of the Regulations (that the ANI transmitted must be the unique telephone number of the MLTS telephone station making the call and the ALI transmitted must be include the actual street address of the calling MLTS telephone station). In addition, if the PSAP were to call back the number transmitted with the 911 call, it would ring the main number and not the MLTS station that originated the call. This situation represents a clear violation of the call back number requirement of the Regulations. To make matters worse, the Bradley Center does not have a designated person available to answer the call back 24 hours a day, 7 days a week, and 365 days per year as is required by the Regulations. Finally, in order to make a 911 call from any and all of the Bradley Center MLTS telephone stations, one has to dial a pre-fix 9 digit (just like every other outside call) and there has been no effort to "ensure" that the users know that they must dial the pre-fix 9 digit before dialing 9-1-1.

Question: How much time does the Bradley Center MLTS Operator have to bring their system into compliance?

Answer: Since the Bradley Center MLTS was purchased and installed after July 1, 2009 (the compliance date per the Regulations), the Operator has been out of compliance since the system was installed in 2012 and it has remained out of compliance every moment since then. There could be serious liability issues for the Bradley Center and their controlling government entity if emergency response to a 911 call is delayed for a critical amount of time because first responders were unable to find the specific location of the caller due to inaccurate and non-compliant data transmittals to the PSAP.

Question: What must the Bradley Center Operator do to bring the MLTS into compliance?

Answer: For every telephone station, the MLTS should be programmed and configured to transmit to the correct jurisdictional PSAP, the data required by the Regulations. In order to bring the system into compliance, all of the following must be done.

1. **Assign Unique Telephone Numbers to all MLTS telephone stations**: Every MLTS telephone station must be assigned a telephone number that is unique on the MLTS and that can be called directly from outside the system. One way to do this would be by assigning unique DID (Direct Inward Dialing) telephone numbers to each MLTS telephone station.
2. **The ALI and AN**I information transmitted must be the same information that the PSAP would receive from a stand-alone telephone calling from the same location. That is, ALI and ANI that distinguishes between all of the telephone stations on the MLTS and correctly transmits as ANI the specific telephone number and, as ALI, the correct street address of the calling station. Accordingly, the following must be done:
    a. **ANI for all buildings:** every telephone station must be re-programmed and configured to transmit to the PSAP the unique telephone number assigned to it (in step 1 above), AND

b. **ALI for Roosevelt Building:** every telephone station must be re-programmed and configured to transmit ALI of "Bradley Center, 32 Maple St. Midway, MA".
c. **ALI for Building A:** every telephone station must be re-programmed and configured to transmit ALI of "Bradley Center, 33 Maple St. Midway, MA".
d. **ALI for Building B:** every telephone station must re-programmed and configured to transmit ALI of "Bradley Center, 34 Maple St. Midway MA".

3. **The call back number**: every telephone station must be re-programmed and configured to transmit a call back number that is:
    a. The unique telephone number of the telephone station that generated the 911 call, which if called back by the PSAP, will ring the telephone station that generated the 911 call, **or if this is not possible, then**
    b. A telephone number that, if called back by the PSAP, will ring the number of the MLTS switchboard operator, attendant, or a designated person located at the site of the 911 call, **AND**
    c. Said designated operator, attendant, or person must also have the ability to (1) direct emergency responders to the 911 call to the exact location where the 911 call originated **and** this is required 24 hours a day, 7 days a week, and 365 days a year.
4. **PSALI to the Station level* or Specific ERL Identifier and Unit Identifier:** each telephone station should have a unique ERL Identifier and a unique or specific Unit Identifier associated with it, as follows:
    a. **Roosevelt Building**: Needs an ERL Identifier and Unit Identifiers. The ERL Identifier for the entire floor should be "Roosevelt Building, Floor 1" with Unit Identifiers of "Front, Reception", "Right, Managers Office", "Left, Communications Office", "Center, Residents' Lobby", and "Rear, Shipping & Receiving".
    b. Building A First Floor: Needs an ERL Identifier and Unit Identifiers. The ERL Identifier for the entire floor should be "Building A, Floor 1" with Unit Identifiers of "Lobby, Security Office" and "Lobby, Elevators".
    c. **Building A floors 2 through 6**: Need ERL Identifiers and Unit Identifiers. The ERL Identifiers for the second floor through the sixth floor should be: "Building A, Floor 2" through "Building A, Floor 6" as would be appropriate to the particular floor. The Unit Identifiers should be "Apartment 201" through "Apartment 610" as would be appropriate for the floor number and apartment number.
    d. Building B First Floor: Needs an ERL Identifier and Unit Identifiers. The ERL Identifier for the entire floor should be "Building B, Floor 1" with Unit Identifiers of "Lobby, Security Office" and "Lobby, Elevators".
    e. **Building B floors 2 through 6**: Needs ERL Identifiers and Unit Identifiers. The ERL Identifiers for the second floor through the sixth floor should be: "Building B, Floor 2" through "Building B, Floor 6" as would be appropriate to the particular floor. The Unit Identifiers should be "Apartment 201" through "Apartment 610" as would be appropriate for the floor number and apartment number.
5. **Kari's Law:** In addition, the MLTS should be brought into compliance with "Kari's Law" if possible. This means that no digits other than 9-1-1 should need to be dialed in order to call 911. If this is not possible, then the Operator must immediately attach specific written instructions on how to dial 911 to every MLTS telephone station in each building.

***Note:** The Regulations Require “PSALI to the Station level” or an “ERL Identifier”. In this use case example, I have used an ERL Identifier and a Unit Identifier rather than PSALI.

Shared Residential MLTS Specific Use Case 2 – Golden Years Villa

The Golden Years Villa is a privately owned residential community for senior citizens. It is located in Snug Harbor, MA. Golden Years Villa has two categories of residents with two corresponding kinds of living quarters.

The "Independent Living" residents occupy duplex style living quarters constructed as single, two-story dwelling houses containing two separate and distinct residential units each. Each of the two residential units has its own entrance, kitchen, dining area, bathroom and living room on the first floor with a single bedroom and a bathroom on the second floor. Each residence has one MLTS telephone station located in the first floor living room and a second located in the second floor bedroom. In all, there are six "Independent Living" houses containing twelve residential units. All of the residential units are located on Maple St. and all have their own front door entrances. Each of the six "houses" have a unique Street Address and the house numbers are numbered consecutively with the odd numbers on one side of the street and the even numbers on the other side.

Each residential unit in a house shares the same street address number and the local authority has not assigned sub addresses. However, each residential unit is marked as either "Unit A" or "Unit B" as would be appropriate.

The street addresses assigned by the local authority for the independent living quarters with residential unit identifiers are as follows: 101 Maple St. through 106 Maple St. Each of the 24 MLTS telephone stations in the 12 residential units has a unique telephone number.

Two of the residents of the independent living houses have disabilities and they have filed the requisite documents to obtain Disability Indicators when they call 911. Their applications for Disability Indicators have been approved. Mr. Jones in Unit 105A has a mobility impairment and Ms. Smith in Unit 103B has a speech impairment.

In addition to the Independent Living residents, Golden Villa also has facilities for residents who do not live independently because they require more nursing care. These residents live in a two-story building (the "Spaulding House") that has 16 rooms on each floor. The first floor has 16 semi-private rooms with two residents assigned per room. Each first floor room has two MLTS telephone stations located on a table next to each of the two beds. Each bed is designated with a numbering scheme of room #, bed A or B (so, for example, there would be a "Room 7A" and a "Room 7B"). The second floor has 16 private rooms with one resident assigned per room. The rooms are numbered as Room 1 through Room 16 and all are clearly marked with the appropriate number. All of the private rooms have one MLTS telephone station located on a table next to the bed.

The Spaulding Building has a nursing station on each floor with two MLTS telephone stations at each nursing station. The nursing station has two areas - one with a sign that reads "Information" and the other with a sign that reads "Nursing". The Golden Years Villas' offices are located in a room on the first floor with a sign that reads "Office". There is one MLTS telephone station in the office. The second floor nursing station is set up just like the one on the first floor with two areas – one with a sign that reads "Information" and another with a sign that reads "Nursing".

The Spaulding Building has one street address of 17 Elm St for the entire building.

The Golden Years Villa has a **new MLTS that is capable of meeting all of the requirements** of the Regulations.

Question: How should the Golden Years Villa's MLTS be programmed and configured for 911 Calls?

Answer: For every telephone station, the MLTS should be programmed and configured to transmit to the correct jurisdictional PSAP, all of the following:

1. **The ALI and ANI** data transmitted is the same data that the PSAP would receive from a stand-alone telephone calling from the same location. That is, ALI and ANI that distinguishes between all of the telephone stations on the MLTS and correctly transmits as ANI the specific telephone number, and, as ALI, the correct civic street address (Golden Years Villa, 101A through 106B Maple St, Snug Harbor, MA or Golden Years Villa, 17 Elm St, Snug Harbor, MA as would be appropriate) of the calling station, **AND**
2. The call back number transmitted to the PSAP is the specific telephone number of the MLTS telephone station that generated the 911 call that if called back by the PSAP, will ring the specific telephone station that generated the 911 call.
3. **PSALI to the Station Level* or a Specific** ERL Identifier **and Unit Identifier**: each telephone station should have a unique ERL Identifier and a unique or specific Unit Identifier associated with it, as follows:
    a. **Independent Living Houses floor one:** Since each residence house has a distinct street address, the ERL Identifier only needs to identify the floor, so the ERL Identifier for all first floor telephone stations should be Floor 1. The Unit Identifier would be Unit A or Unit B as would be appropriate.
    b. **Independent Living Houses floor two:** Since each residence house has a distinct street address, the ERL Identifier only needs to identify the floor, so the ERL Identifier for all first floor telephone stations should be Floor 2. The Unit Identifier would be Unit A or Unit B as would be appropriate
    c. **Spaulding Building Floor 1:** All 16 resident's rooms are numbered and all have two beds. The ERL Identifier for the entire floor should be "Spaulding Building, Floor 1". The Unit Identifiers should be "Room 1A" through "Room 16B" as would be appropriate for the resident's room, "Nurse Station, Information" and "Nurse Station, Nursing" for the Nursing Stations, and "Office" for the Office.
    d. **Spaulding Building Floor 2.** All 16 rooms are private rooms with one MLTS telephone station. The ERL Identifier for the entire floor should be "Spaulding Building, Floor 2" and the Unit Identifiers should be "Room 1" through "Room 16" as would be appropriate for the residents, and "Nurse Station, Information" and "Nurse Station, Nursing" for the Nursing Stations
4. **Disability Indicators:** The MLTS should be programmed and configured to transmit to the PSAP the Disability Indicator information of "MI" for Mr. Jones at 105A Maple St. and "SI" for Ms. Smith at 103B Maple St.

5. Kari's Law: Since it is capable of compliance, the MLTS should be programmed and configured to comply with "Kari's Law" so that Users can initiate a 911 call by simply dialing the

digits 9-1-1 without any extra digits. In addition, the system should provide a notification to the system that a 911 call has been initiated on the MLTS.

***Note:** The Regulations Require "PSALI to the Station level" or an "ERL Identifier". In this use case example, I have used an ERL Identifier and a Unit Identifier rather than PSALI.

Shared Residential MLTS Use Case 2 - Golden Years Villa – But With a Call Back Number Deficiency

Note: All of the facts are the same as that of the "Golden Years Villa Use Case 2" above with one exception. That exception is - the MLTS is not capable of (and cannot be programmed and configured to) provide a call back number per the requirement of the Regulations. More specifically, the MLTS does not transmit a call back number to the PSAP that if called back, will ring the telephone station that generated the 911 call.

Use Case Question: How should the Golden Years Villa MLTS be programmed and configured considering the call back number Deficiency"

Answer: The MLTS must be programmed and configured to transmit a call back number to the PSAP, that if called back by the PSAP, will ring the telephone number of the MLTS switchboard operator, attendant, or a designated person located at the site where the 911 call originated from (the Golden Years Villa). In addition, said designated operator, attendant, or person must also have the ability to direct emergency responders to the exact location where the 911 call originated from and this is required 24 hours a day, 7 days a week, and 365 days a year.

Shared Residential MLTS Use Case 2 - Golden Years Villa – But With a Cannot Dial 911 without Dialing Extra Digits Deficiency

Note: All of the facts are the same as that of the "Golden Years Villa Use Case 2" above with one exception. That exception is - the MLTS is not able to (and cannot be programmed and configured to) make a 911 call by dialing only the digits "9-1-1" (that is, without the need to dial any prefix digits such as an "8" or a "9" or any other requirements of dialing extra digits) as per the Regulations. For purposes of this Use Case example, in order to make a 911 call, the MLTS requires the dialing of the prefix digit "9" before dialing "9-1-1".

Use Case Question: What steps must the Operator of the Golden Years Villa MLTS with the "Cannot Call 911 without Dialing Extra Digits Deficiency" take to comply with the Regulation?

Answer: Since direct dialing of 9-1-1 is not possible, the Operator should attach written instructions on how to make a 9-1-1 call to each telephone station and provide training to all Users. In addition, if a prefix digit is required, use the number "8" as the prefix digit rather than the number "9".

Business or Entity, and Governmental Agency MLTS Operators 560 CMR 4.04 (2)

"*Each operator of a Business or entity multi-line telephone system and each operator of Governmental agency multi-line system shall transmit to the PSAP the street address and an* ERL Identifier *that provides at least the building and floor location of the caller*."

Interpretation: MLTS Operators must program and configure the MLTS to transmit the street address and an ERL Identifier comprising at least the building name/number and floor. In addition, the requirements common to all MLTS and all MLTS Operators also apply and are clearly more stringent than what is required in this Section.

Workspace of 22,500 square feet or less:

"Each operator of a business or entity multi-line telephone system and each operator of a governmental agency multi-line telephone system shall, for buildings having their own street address or a common street address and containing workspace of 22,500 square feet or less, transmit to the PSAP at least one ANI and at least one ERL Identifier that provides a street address and a unit identifier for each building."

Interpretation: For each building with a Workspace of 22,500 square feet or less, the MLTS Operator must program and configure the MLTS to transmit at least one ANI, AND at least one ERL Identifier containing the street address, AND a Unit Identifier (building name/number, AND floor name/number, AND room name/number, OR unit name/number). In addition, the requirements common to all MLTS and all MLTS Operators also apply and are clearly more stringent than what is required in this Section.

Workspace of more than 22,500 square feet:

"Each operator of a business or entity multi-line telephone system and each operator of a governmental agency multi-line system shall, for buildings having their own street address or a common street address and containing workspace of more than 22,500 square feet, transmit to the PSAP at least one ANI per 22,500 square feet of workspace and at least one ERL Identifier *per 22.500 square feet of workspace that provides a street address and a unit identifier for each building."*

Interpretation: For each building with a Workspace of more than 22,500 square feet, the MLTS Operator must program and configure the MLTS to transmit at least one ANI per every 22,500 square feet of space (so a 30,000 square foot building would require at least two ANIs), and at least one ERL Identifier containing the street address for every 22,500 square feet of space (so a 30,000 square foot building would require at least two ERL Identifiers), AND a Unit Identifier for each building (if more than one). In addition, the requirements common to all MLTS and all MLTS Operators also apply and are clearly more stringent than what is required in this Section.

Exceptions to Workspace Requirements

The operators of the following multi-line telephone systems shall not be required to provide more than one ERL Identifier*:*

(a) A business or entity or governmental agency multi-line telephone system with workspace less than 7000 square feet and located on a single contiguous property;

Interpretation: This clause carves out an exception based upon Workspace square footage of less than 7000 square feet. However, for all practical purposes, it is the same as the requirements for a Workspace of 22,500 square feet or less. In addition, the requirements common to all MLTS and all MLTS Operators also apply and are clearly more stringent than what is required in this Section.

> *(b) A business or entity or governmental agency multi-line telephone system with fewer than 49 stations and occupying not more than 22,500 square feet and located on a single contiguous property.*

Interpretation: If your Workspace is more than 22,500 square feet, AND is all in one building, AND you have fewer than 49 telephone stations (located in that building) on your MLTS, then you need to provide only one ANI, AND one ERL Identifier containing the street address, AND one Unit Identifier, regardless of the fact that your Workspace exceeds 22,500 square feet. In addition, the requirements common to all MLTS and all MLTS Operators also apply and are clearly more stringent than what is required in this Section.

How Workspace Size is Determined

The square footage measurement includes, but is not limited to, hallways, lobbies, conference rooms, restrooms, breakrooms, elevators, laboratories, warehouse space, and other areas where the employees or the public have access on a regular basis, but does not include wall thickness, shafts, heating or ventilation spaces, mechanical or electrical spaces or other areas not ordinarily accessible to employees or the public.

Interpretation: This is how your Workspace square footage is measured.

Off-Premises Use of MLTS

"Each operator of a business or entity multi-line telephone system and each operator of a governmental agency multi-line telephone system shall, for multi-line telephone system telephones provided to users for use off-premises beyond the workspace of such business or entity or governmental agency, provide written instructions that clearly and accurately inform each user how to place an emergency call from the multi-line telephone system telephone."

Interpretation: If any individual MLTS telephone stations are capable of being used to call 911 somewhere other than your regular business workspace (such as the user's home, or while traveling on business, or in remote areas of a campus or complex where the station would not be physically connected to the MLTS network), then the Operator must provide clear and accurate written instructions pertaining to off-premises usage (or non-usage if appropriate). For example - how to make a 911 call on the softphone station while in the office, or, for example – to never use the softphone station to call 911.

Business or Entity, and Government Agency MLTS Operators Suggested Practices

Business or Government Agency Suggested Practice – Location Information: Be aware that the requirements common to all MLTS and for all MLTS Operators also apply and must therefore be adhered to. Also, be aware that the requirements common to all MLTS and for all MLTS Operators often require a higher standard than the use-specific requirements of this Section. Accordingly, disregard workspace square footage and exceptions. Instead, program and configure the MLTS to meet the higher standards of the common requirements. That includes: transmit enhanced 911 standard ALI and ANI, **AND** transmit a call back number as specifically defined, **AND** transmit ERL Identifiers and Unit Identifiers that contain as much location information as possible. The ANI and ALI should be unique to the particular telephone station and provide the correct street address and telephone number of the telephone station calling 911. The call back number, if called back by a PSAP, should ring the same telephone station that placed the 911 call. The ERL Identifier should provide the Building Name/Number and Floor at a minimum and the Unit Identifier should provide the most specific location information within the Building possible depending upon the circumstances. (For example - a multi-story building situated on a parcel with one street address but more than one building should include an ERL Identifier consisting of a building number/name, **AND** a floor number/ name, **AND** a Unit Identifier that includes a room number/name, or unit number/name).

Business or Government Agency Suggested Practice - Kari's Law: Become an early adapter of "Kari's Law" (note: refer to Exhibit C appended to this document for a copy of the Act). Program and configure your MLTS to be able to call 911 without dialing a prefix digit or any other digit. If that is not possible, then attach written instructions on how to make a 9-1-1 call to each MLTS telephone station and provide training to Users of the MLTS stations.

Business or Government Agency Use Case 1 – ABC Corporation

ABC Corporation's home office is a campus style location consisting of three buildings, an outdoor picnic area, and a large parking garage. Every structure and open area on the campus shares a common street address of One ABC Way, Waverly, MA. The three buildings are named Building A, Building B, and Building C.

Building A has a basement with two floors above it (ground floor and second floor) and has a workspace of less than 6,000 square feet. The basement is a wide-open area and used for record storage. The ground floor has a company cafeteria and a company exercise room. The cafeteria and the exercise room have signs that read "Cafeteria" and "Exercise Room" respectively. The second floor is home to the Outside Sales Department and consists of eight offices. None of the offices has office numbers or names. All eight of the members of the outside sales force have laptops with "softphone" software installed. The softphones can remotely connect to the corporate MLTS to make and receive telephone calls. The basement storage area has one telephone station. The ground floor cafeteria and exercise rooms each have one telephone station. The offices in the second floor Outside Sales Department each have one telephone station.

Building B has six floors (ground floor and floors 2 through 6) and has a total workspace of 18,000 square feet. The **Ground Floor (Floor 1)** consists of a large lobby/reception area that is unmarked and a room with a sign that reads "Corporate Security". There is an MLTS telephone station in the lobby/reception area and two telephone stations in Corporate Security (front desk and rear office).
Floors 2 through 4 each have ten rooms and all ten rooms are offices. Each office has a three-digit number with the numbering scheme being: first digit is the floor number and last two digits is the office number (so, for example, room 5 on the fourth floor has a number of 405). Each office on Floors 2 through 4 has one telephone station.
Floor 5 is home to the inside sales department and has six rooms used as office space and a conference room. None of the rooms on Floor 5 has a room number. Each office on Floor 5 as well as the conference room has one telephone station.
Floor 6 is home to the Executive Office Suite. It has a very large conference room located in the center part of the floor and four large corner offices. Each Executive corner office has a secretarial space in front of the office. The four corner offices, the four secretarial spaces, and the large conference room each have one telephone station. Neither the conference room, nor the four large corner offices, nor the secretarial spaces have room numbers.
Building B also has **two elevators**. The "Employee" elevator is used by most employees to get from the lobby level to Floors 2 through 5. The "Executive" elevator goes only to the 6th Floor Executive Offices. Both elevators have a telephone station connected to the MLTS.

Building C is home to the manufacturing plant and is over 60,000 square feet. The **manufacturing area** occupies most of the central part of the building and consists of one very large floor at ground level with a roof that is three stories high. The manufacturing floor is wide open and has no room numbers. There are, however, three distinct areas on the manufacturing floor and they are marked with signage as - "Production", "Quality Control" and "Raw Materials". Each of these three designated areas has one telephone station.
The **"Shipping & Receiving" area** is located at the east end of the ground floor and it is marked as such with signage. Two MLTS telephone stations are located in Shipping & Receiving with one on a desk near the shipping dock and the other on a wall near the receiving dock.

The opposite (west) end of the building has a "**Tool Room**" located on the first floor. On the **second floor**, is a room with a sign that reads "Nurse" and another room with a sign that reads "First Aid" Each of these two rooms has one MLTS telephone station. The third floor on that (west) end of the Building has two offices without room numbers but with signs that read "Plant Manager" and "Safety Manager". Each third floor room has a telephone station.

The **parking garage** is located at the back of the campus and it has one entrance and one exit. There are three floors but no rooms. On each of the three floors, there is one telephone station attached to the wall located next to the single elevator doors. There an MLTS telephone station in the elevator.

The **picnic area** has tables and benches used for eating and relaxing. There is no structure there and no telephone stations. Employees, including members of the Outside Sales team, often eat their lunch there. Sometimes they bring their MLTS softphone equipped laptops with them so they can check their emails and make phone calls while they eat.

The ABC Corporation has a new MLTS that is capable of complying with the Regulations.

USE Case Question: How should the ABC Corporation's MLTS be programmed and configured for 911 calls?

Answer: For every telephone station, the MLTS should be configured to transmit to the correct jurisdictional PSAP, all of the following:

6. **The ALI and ANI** transmitted is the same data that the PSAP would receive from a stand-alone telephone calling from the same location. That is, ALI and ANI that distinguishes between all of the telephone stations on the MLTS and correctly transmits as ANI the specific telephone number and, as ALI, the correct street address (One ABC Way, Waverly, MA) of the calling station, AND,
7. **The** call back number: transmitted to the PSAP is the specific telephone number of the station that generated the 911 call and that if called back by the PSAP, will ring the specific telephone station that generated the 911 call.
8. **PSALI to the Station level* or Specific** ERL Identifier **and Unit Identifier:** each telephone station should have a unique ERL Identifier and a unique or specific Unit Identifier associated with it, as follows:
    a. **Building A Basement**: The ERL Identifier for the entire floor should be "Building A, Basement" and the Unit Identifier should be "Record Storage".
    b. **Building A Ground Floor:** The ERL Identifier for the entire floor should be "Building A, Floor 1" and the Unit Identifiers should be "Cafeteria" and "Exercise Room" respectively.
    c. **Building A Second Floor:** The offices have neither numbers nor names. The ERL Identifier for the entire floor should be "Building A, Floor 2" and the Unit Identifiers should be "Outside Sales Offices". Note: a public safety best practice in this case would be to number and mark the Outside Sales department offices so one office could be distinguished from another to aid in locating someone in an emergency situation.

d. **Building B Ground Floor:** The ERL Identifier for the entire floor should be "Building B, Floor 1" with Unit Identifiers of "Lobby, Reception", "Corporate Security, Front Desk", and "Corporate Security, Rear Office".
e. **Building B Floors 2 through 4:** All of the offices have room numbers: The ERL Identifiers for these floors should be "Building B, Floor 2" through "Building B, Floor 4" respectively as would be appropriate for the floor. The Unit Identifiers should be "Office Number 201" through "Office Number 410" respectively and as would be appropriate for the floor/office numbers.
f. **Building B Floor 5:** None of the rooms has room numbers. The ERL Identifier for the entire floor should be "Building B, Floor 5" with Unit Identifiers of "Inside Sales, Office" or "Conference Room" as would be appropriate. Note: once again, a public safety best practice would be to number and mark the offices so that one could be distinguished from another to aid in locating someone who has made a 911 call.
g. **Building B Floor 6:** has no office numbers but does have a distinct layout: The ERL Identifier for the entire floor should be "Building B, Floor 6, with Unit Identifiers for the Executive Offices of "Executive Office, NE Corner", "Executive Office, SE Corner", "Executive Office, NW Corner" and "Executive Office, SW Corner, as would be appropriate for the particular corner of the building. For the Secretarial spaces, the Unit Identifier should follow the same pattern ("Secretarial, SE Corner", etc.) as would be appropriate. The Conference Room Unit Identifier should be "Conference Room, Center".
h. **Building B Elevators:** The ERL Identifier for both elevators should be "Building B". Note: no floor number should be included because the elevators could be "at rest" on any floor. The Unit Identifiers should be "Employee Elevator" and "Executive Elevator" respectively.
i. **Building C Manufacturing Area of Floor 1:** this is a large open area with three distinct and marked sections. The ERL Identifier for the entire manufacturing floor should be "Building C Center, Floor 1" with Unit Identifiers of "Manufacturing, Production", "Manufacturing, Quality Control", and "Manufacturing, Raw Materials".
j. **Building C Shipping & Receiving Area of Floor 1**: The ERL Identifier for this area of Floor 1 should be "Building C East, Floor 1" with Unit Identifiers "Shipping & Receiving, Shipping Desk", and "Shipping & Receiving, Receiving Wall").
k. **Building C Tool Room Area of Floor 1**: The ERL Identifier for this area of Floor 1 should be "Building C West, Floor 1" with Unit Identifier "Tool Room".
l. **Building C Floor 2**: Has two named and marked rooms but no room numbers. The ERL Identifier for the entire floor should be "Building C West, Floor 2"with Unit Identifiers of "Nurse Room", and "First Aid Room" respectively.
m. **Building C Third Floor:** has two rooms that are marked but not numbered. The ERL Identifier for the entire floor should be "Building C, Floor 3" with Unit Identifiers of "Plant Manager" and "Safety Manager" respectively.
n. **Parking Garage:** The ERL Identifiers for floors 1 through 3 should be: "Parking Garage, Floor 1" through "Parking Garage, Floor 3" respectively as would be appropriate for each floor. The Unit Identifier for the MLTS telephone stations

located at the elevator doors on each floor should be "Elevator Doors". The ERL Identifier for the MLTS telephone station located inside the elevator should be "Parking Garage, Elevator". (Note: there is no need for a Unit Identifier for this elevator because it would be superfluous.

9. **Kari's Law:** Since it is capable of compliance, the MLTS should be programmed and configured to be in compliance with "Kari's Law" immediately. Users should be able to call 911 by dialing 9-1-1 and no other digits from all MLTS telephone stations. In addition, the system should provide a notification to the system that a 911 call has been initiated on the MLTS.

***Note:** The Regulations Require "PSALI to the Station level" or an "ERL Identifier". In this use case example, I have used an ERL Identifier and a Unit Identifier rather than PSALI.

10. Finally, the softphones on the laptops issued to the Outside Sales staff must be configured to the same standard for transmitting ANI, ALI, call back number, ERL Identifiers and Unit Identifiers, as are the hard-wired telephone stations. If this can only be achieved when the laptop softphones are physically located in the Sales Department offices (and not in the picnic area, parking garage, or elsewhere off-campus), then the Sales Staff must be given explicit and clear instructions to NEVER call 911 on their softphones unless they are physically located in the office and connected to the MLTS network. Furthermore, if the standards cannot be met when the laptops are located in the office, then the same explicit and clear instructions to NEVER call 911 on the softphones must be given.

Business or Government Agency Use Case 1 – ABC Corporation - But With a call back number **Deficiency**

Note: All of the facts are the same as that of "ABC Corporation Use Case 1" above with one exception. That exception is - the MLTS is not capable of (and cannot be programmed and configured to) provide a call back number per the requirement of the Regulations. More specifically, the MLTS does not transmit *a* call back number *to the PSAP that if called back, will ring the telephone station that generated the 911* call.

Use Case Question: How should the ABC Corporation MLTS be programmed and configured considering the call back number Deficiency?

Answer: The MLTS must be programmed and configured to transmit a call back number to the PSAP, which if called back by the PSAP, will ring the telephone number of the MLTS switchboard operator, attendant, or a designated person located at the site where the 911 call originated from (ABC Corporation). In addition, said designated operator, attendant, or person must also have the ability to direct emergency responders to the 911 call to the exact location where the 911 call originated and this is required 24 hours a day, 7 days a week, and 365 days a year.

Business or Government Agency Use Case 1 – ABC Corporation – But With a Cannot Dial 911 without Dialing Extra Digits Deficiency

Note: All of the facts are the same as that of "ABC Corporation Use Case 1" above with one exception. That exception is - the MLTS is not able to (and cannot be programmed and configured to) make a 911 call by dialing only the digits "9-1-1" (that is, without the need to dial any prefix digits such as an "8" or a

"9" or any other requirement of dialing extra digits) as per the Regulations. For purposes of this Use Case example, in order to make a 911 call, the MLTS requires the dialing of the prefix digit "9" before dialing "9-1-1".

Use Case Question: What steps must the Operator of the ABC Corporation MLTS with the "Cannot Call 911 without Dialing Extra Digits Deficiency" take to comply with the Regulations?

Answer: Since direct dialing of 9-1-1 is not possible, the Operator should attach written instructions on how to make a 9-1-1 call to each telephone station and provide training to all Users. In addition, if a prefix digit is required, use the number "8" as the prefix digit rather than the number "9".

Hotel/Motel Multi-Line Telephone Systems 560 CMR 4.04(3)

"Each operator of a hotel or motel multi-line telephone system shall ensure that the system clearly identifies the street address and a unit identifier of the caller through the delivery to the PSAP of ANI, an ERL Identifier, or both, and that provides the PSAP with the ability to retrieve the ALI. Each operator of a hotel/motel multi-line telephone system shall be subject to this subsection (3) and shall not be subject to the requirements applicable to operators of business or entity or governmental agency multi-line telephone systems set forth in subsection (2)."

Interpretation: Operators must program and configure the MLTS to ensure that the system clearly identifies the street address and a Unit Identifier of the telephone station placing the 911 call through the delivery to the PSAP of ANI, and/or an ERL Identifier, that (together or separately) are sufficient to provide the receiving PSAP with the ability to retrieve the ALI. Hotels and Motels are governed by this subsection (3) of the Regulations and not by subsection (2) (which pertains to business and governmental agency MLTS). Section 4.03 of the Regulations sets a threshold of a minimum of 20 rooms potentially occupied as sleeping quarters for an MLTS to be recognized as a Hotel/Motel MLTS. To the vague and minimal requirements set forth in this subsection, must be added the requirements common to every MLTS and to all MLTS Operators. The common requirements applicable to all MLTS and MLTS Operators are clearly more stringent than what is required in this subsection (3).

Hotel/Motel MLTS Suggested Practices

Hotel/Motel Suggested Practices – Location Information: In the interest of Public Safety, disregard the twenty room minimum and, instead, adopt these suggested practices for all Hotel/Motel MLTS.

Operators should program and configure the MLTS to meet the higher standards of the common requirements: transmit enhanced 911 standard ALI and ANI, AND transmit a call back number as specifically defined, AND transmit ERL Identifiers AND Unit Identifiers that contain as much location information as possible. The ANI and ALI should be unique to the particular telephone station originating the 911 call and should provide the correct street address and telephone number of the telephone station calling 911. The call back number, if called back by a PSAP, should ring the same telephone station that placed the 911 call. The ERL Identifier should provide the Building Name/Number and Floor at a minimum. The Unit Identifier should provide the room name/number for sleeping rooms, or the most accurate location information within the structure for non-sleeping rooms or sections such as: restaurants, lounges, swimming pools, exercise room, lobbies, and common areas.

Hotel/Motel Suggested Practice - Kari's Law: Be aware that the impetus for Kari's Law was an actual, tragic incident wherein a child repeatedly and unsuccessfully dialed 9-1-1 on a motel telephone while witnessing the murder of her mother. The child knew to call 911 in an emergency but did not know that the motel's MLTS required the dialing of a prefix digit.

Become an early adapter of "Kari's Law" (note: refer to Exhibit C appended to this document for a copy of the Act). Program and configure your MLTS to be able to call 911 without dialing a prefix digit or any

other digit. If that is not possible, then attach written instructions on how to make a 9-1-1 call to every MLTS telephone station and provide training to Users of the stations.

Hotel/Motel Specific Use Case 1 – Frugal House Motel

The "Frugal House" is a small and inexpensive motel with 16 sleeping rooms located in one building with a single street address of 25 Ashaway Rd., Esmond, MA. The motel has two floors ("First Floor" and "Second Floor") with eight sleeping rooms on the first floor and eight sleeping rooms on the second floor. The motel also has an office and a laundry room, with both located on the first floor. The sleeping rooms are numbered with a 3-digit scheme with the first digit representing the floor number and the second two digits representing the room number (for example, sleeping room number 3 located on the second floor is numbered "203"). Neither the office nor the laundry room have room numbers but both are clearly marked with signage. The office, the laundry room, and the 16 sleeping rooms each have one telephone station connected to the motel's MLTS.

The frugal house has an **MLTS that is capable of meeting the Regulations.**

USE Case Question: How should the MLTS be programmed and configured for 911 calls?

Answer: For every telephone station, the MLTS should be programmed and configured to transmit to the correct jurisdictional PSAP, all of the following:

1. **The ALI and ANI** transmitted is the same data that the PSAP would receive from a stand-alone telephone calling from the same location. That is, ALI and ANI that distinguishes between all of the telephone stations on the MLTS and correctly transmits as ANI the specific telephone number and, as ALI, the correct street address (25 Ashaway Rd., Esmond, MA) of the calling station, AND,
2. **The** call back number: transmitted to the PSAP is the specific telephone number of the station that generated the 911 call and which, if called back by the PSAP, will ring the specific telephone station that generated the 911 call.
3. **PSALI to the Station level* or ERL Identifier and Unit Identifier**:
   a. **Frugal House Floor 1:** The ERL Identifier for the entire first floor should be "Frugal House, Floor 1" with Unit Identifiers of "Office", "Laundry", and "Room 101" through "Room 108" respectively for the sleeping quarters room.
   b. **Frugal House Floor 2:** all rooms are numbered and are marked. The ERL Identifier for the entire second floor should be "Frugal House, Floor 2" with Unit Identifiers of "Room 201" through "Room 208" respectively.
4. **Kari's Law:** Since it is capable of compliance, the MLTS should be programmed and configured to comply with "Kari's Law" immediately. Users should be able to call 911 by dialing 9-1-1 and no other digits from all MLTS telephone stations. In addition, the system should provide a notification to the system that a 911 call has been initiated on the MLTS.

***Note:** The Regulations Require "PSALI to the Station level" or an "ERL Identifier". In this use case example, I have used an ERL Identifier and a Unit Identifier rather than PSALI.

Hotel/Motel Specific Use Case 1 – but with Frugal House MLTS with a Call Back Number Deficiency

Note: All of the facts are the same as that of Frugal House Motel Specific Use Case 1 above with one exception. That exception is - the MLTS is not capable of (and cannot be programmed and configured to) provide a call back number per the requirement of the Regulations. More specifically, the MLTS does not transmit a call back number to the PSAP that, if called back, will ring the telephone station that generated the 911 call.

Use Case Question: How should the Frugal House Motel MLTS with the call back number deficiency be programmed and configured?

Answer: The MLTS with the call back number deficiency must be programmed and configured to transmit a call back number to the PSAP, which, if called back by the PSAP, will ring the telephone number of the MLTS switchboard operator, attendant, or a designated person located at the site where the 911 call originated from. In addition, said designated operator, attendant, or person must also have the ability to direct emergency responders to the 911 call to the exact location where the 911 call originated and this is required 24 hours a day, 7 days a week, and 365 days a year.

Hotel/Motel Specific Use Case 1 – but Frugal House MLTS Cannot Dial 911 without Dialing Extra Digits Deficiency

Note: All of the facts are the same as that of Frugal House Motel Specific Use Case 1 above with one exception. That exception is - the MLTS is not able to (and cannot be programmed and configured to) make a 911 call by dialing only the digits “9-1-1” (that is, without the need to dial any prefix digits such as an “8” or a “9” or any other requirement of dialing extra digits) as per the Regulations. For purposes of this Use Case example, in order to make a 911 call, the MLTS requires the dialing of the prefix digit “9” before dialing “9-1-1”.

Use Case Question: What steps must the Operator of the Frugal House MLTS with the “Cannot Call 911 without Dialing Extra Digits Deficiency” take to comply with the Regulations?

Answer: The MLTS requires the dialing of a prefix digit before dialing the digits “9-1-1”. It was programmed to dial the prefix digit “9” before dialing the digits “9-1-1”. A best practice would be to re-configure the MLTS to require dialing the digit “8” as a prefix digit (rather than the digit “9”). In addition, the Operator of the MLTS is required to make a diligent effort to “ensure” that users of the MLTS know how to do that. The use of the word “ensure” raises a very high bar and puts the burden of “ensuring” on the operator of the system. It could be argued that, even if the operator were to tell someone how to dial 9-1-1 using the required prefix repeatedly, if the user does not do it correctly when the time comes, then Operator, did not “ensure” awareness. At a minimum, every telephone station should have an attached document containing specific details concerning how to dial 9-1-1 if your MLTS requires extra digits

Hotel/Motel Specific Use Case 2 – The Brunswick Hotel

The "Brunswick Hotel" is a new large luxury hotel. The hotel's structures and grounds are located in a retail complex called One Brunswick Place. In addition to the Brunswick Hotel, One Brunswick Place is also home to a shopping mall and several busy restaurants that are not part of the hotel. The retail complex contains eight structures (including the Brunswick Hotel) as well as acres of open grounds, gardens, and parking lots. Everything in the complex shares a common street address of One Brunswick Place, Township, MA.

The Brunswick Hotel is constructed as follows: The central portion of the main building is two floors high with an eleven story tower attached to each end. An outdoor swimming pool with a Tiki bar and four outdoor tennis courts are located behind the central part of the structure. The hotel also owns and operates a restaurant that is located in a separate building that is part of the shopping mall. It is located 100 yards away from the hotel's front entrance and is called "Golden Isles".

The central portion of the structure may be accessed directly through the front doors or indirectly from each of the attached towers. Each of the towers can be accessed through their respective front doors and indirectly from the central portion of the structure. The hotel appears to be one contiguous structure from both the inside and the outside of the building.

The central portion of the building is configured as follows: The First Floor (ground floor) has an expansive lobby in the front with the Reception area and Reception desk in the back. The front lobby has a "lounge area" with couches and comfortable chairs with tables. Drinks and snacks are served there. Four MLTS telephone stations are located in the "lounge area" and there is an MLTS telephone station on the wall next to the Reception desk.

The second floor of the central portion can only be accessed via an escalator. There is a coffee shop located in the front near the top of the escalator with a sign on the window that reads "Quick Rick's". Next to the entrance to "Quick Rick's", a corridor leads to the rear of the floor where the hotel's "Administrative Office Suite" is located. There is a sign on the wall that reads "Administrative Offices" with an arrow pointing the way. On the First Floor, next to the bottom of the escalator, there is a sign that says "Administrative office Suite, 2nd Floor". The Administrative Office Suite is walled off from the rest of the Second Floor and it has its own door. Inside the door are four offices. The offices do not have room numbers but each has a name and signage, as follows: "Manager", "Finance", "Engineering", and "Hospitality". Quick Rick's, and each of the offices in the Administrative Office Suite, have one MLTS telephone station each.

When facing the front of the central portion of the structure, one can see a tower to the right and a tower to the left. The tower to the right has a huge sign that reads "North Tower" and the tower to the left has a huge sign that reads "South Tower". Standing inside the lobby on the ground floor of the central portion of the structure, one can see a very large sign that reads "North Tower" as well as another very large sign that reads "South Tower" on the respective walls adjoining the towers to the central lobby.

The "North Tower" has 11 floors. The ground floor ("First Floor") has three units: an indoor swimming pool, an exercise room, and a sauna. None of these units has room numbers but each has signage and each has an MLTS telephone station. The second floor has a cigar bar with a sign that reads "Simon's"

and a restaurant with a sign that reads “Sapelo’s”. Neither of these units has a room number and each has an MLTS telephone station. The Third through the Eleventh Floors each have 15 sleeping rooms per floor, a laundry room, and a room containing vending machines and an icemaker. The sleeping rooms are numbered with a four digit scheme with the first two digits representing the floor number and the last two digits representing the room number (Examples: Room 5 on the third floor would be “305” and Room 15 on the eleventh floor would be 1115). All sleeping rooms on all floors have an MLTS telephone station. The laundry room has no room number but has a sign reading “Laundry”. The room containing the vending machines and the icemaker does not have a room number but does have a sign that reads “Snacks”. The “Laundry” and the “Snacks” rooms each have one MLTS telephone station. The “North Tower” has two elevators that can access each of the eleven floors. Inside each elevator, there is an MLTS telephone station. One each of the eleven floors, there is an MLTS telephone station located on the wall between the two sets of elevator doors.

The “South Tower” has 11 floors. The ground floor (“First Floor”) has three units: an indoor swimming pool equipped with water slides and amenities designed for children, an exercise room, and a sauna. None of these units has room numbers but each has signage and each has an MLTS telephone station. The second floor has a newsstand with a sign that reads “Newsstand” and a pharmacy with a sign that reads “Pharmacy”. Neither has a room number and each has an MLTS telephone station. The Third through the Eleventh Floors each have 15 sleeping rooms per floor, a laundry room, and a room containing vending machines and an icemaker. The sleeping rooms are numbered with a four digit scheme with the first two digits representing the floor number and the last two digits representing the room number (Examples: Room 5 on the third floor would be “305” and Room 15 on the eleventh floor would be 1115). All sleeping rooms on all floors have an MLTS telephone station. The laundry room has no room number but has a sign reading “Laundry”. The room containing the vending machines and the icemaker does not have a room number but does have a sign that reads “Snacks”. The “Laundry” and the “Snacks” rooms each have one MLTS telephone station. The “South Tower” has two elevators that can access each of the eleven floors. Inside each elevator, there is an MLTS telephone station. On each of the eleven floors, there is an MLTS telephone station located on the wall between the two sets of elevator doors.

The Tiki bar located right next to the outdoor swimming pool has an MLTS telephone station.

The outdoor tennis courts are located right behind the outdoor swimming pool. There is an MLTS telephone station located at a kiosk there.

The “Golden Isles” restaurant is located about 100 yards north of the “North Tower” in a one-story building. There are four units in the building: reception area located next to the front doors, a dining area located behind the reception area, an office located next to the reception area and a kitchen located behind the dining area. The four units do not have room numbers but they all have signage and each unit has an MLTS telephone station.

The MLTS for the Brunswick Hotel was purchased in August of 2018. When it was installed, it was not programmed and configured to dial 9-1-1 directly without any prefix digits. Instead, it was programmed to require dialing the 8 digit as prefix before dialing 9-1-1. However, the MLTS is capable of being programmed to make a 911 by dialing the digits 9-1-1 directly without any prefix digits.

USE Case Question: How should the Brunswick House MLTS be programmed and configured for 911 calls?

Answer: For every telephone station, the MLTS should be programmed and configured to transmit to the correct jurisdictional PSAP, all of the following:

1. **The ALI and ANI** transmitted is the same data that the PSAP would receive from a stand-alone telephone calling from the same location. That is, ALI and ANI that distinguishes between all of the telephone stations on the MLTS and correctly transmits as ANI the specific telephone number and, as ALI, the correct street address (One Brunswick Place, Township, MA) of the calling station, AND,
2. **The** call back number transmitted to the PSAP is the specific telephone number of the station that generated the 911 call and that if called back by the PSAP, will ring the specific telephone station that generated the 911 call.
3. **PSALI to the Station level* or ERL Identifier and Unit Identifier:** each telephone station should have a unique ERL Identifier and a unique or specific Unit Identifier, as follows:
    a. **Central Portion First Floor:** No units have room numbers but all have room names. The ERL Identifier for the entire floor should be "Brunswick, Center, Floor 1". The Unit Identifiers should be as specific as possible. Accordingly, the four stations in the lounge area should have Unit Identifiers "Front Lobby, Lounge", and the Unit Identifier for the reception area should be "Rear Lobby, Reception".
    b. **Central Portion Second Floor:** No units have room numbers but all have room names. The ERL Identifier for the entire floor should be "Brunswick, Center, Floor 2". The Unit Identifiers should be "Front, Quick Rick's" for the coffee shop, and "Rear, Admin Offices, Manager", and "Rear, Admin Offices, Finance" etc., as would be appropriate, for each office.
    c. **North Tower First Floor:** No units have room numbers but all have room names. The ERL Identifier for the entire floor should be "Brunswick, North Tower, Floor 1". The Unit Identifiers should be "Swimming Pool", "Exercise Room", and "Sauna" as appropriate.
    d. **North Tower Second Floor:** No units have room numbers but all have room names. The ERL Identifier for the entire floor should be "Brunswick, North Tower, Floor 2". The Unit identifiers should be "Simons" and "Sapelo's" as would be appropriate.
    e. **North Tower Floor 3:** All sleeping rooms have room numbers. The Laundry room and Snacks room do not have room numbers but are clearly marked with signage and have room names. The ERL Identifier for the entire floor should be "Brunswick, North Tower, Floor 3". The Unit Identifiers for the sleeping rooms should be the room number, as appropriate for the specific room (for example – Room 5 on Floor 3 would be 305, and Room 15 would be 315, etc.). The Unit Identifiers for the laundry room and snacks room should be "Laundry Room" and "Snacks Room" respectively.
    f. **North Tower Floors 4 through 11:** The ERL Identifiers and the Unit Identifiers should be programmed and configured the same way as detailed in point e above (North Tower Floor 3) but with adjustments for the appropriate floor.

g. **South Tower First Floor:** No units have room numbers but all have room names. The ERL Identifier for the entire floor should be "Brunswick, South Tower, Floor 1". The Unit Identifiers should be "Swimming Pool", "Exercise Room", and "Sauna" as appropriate.

h. **South Tower Second Floor:** No units have room numbers but all have room names. The ERL Identifier for the entire floor should be "Brunswick, South Tower, Floor 2". The Unit identifiers should be "Newsstand" and "Pharmacy" as would be appropriate.

i. **South Tower Floor 3:** All sleeping rooms have room numbers. The Laundry room and Snacks room do not have room numbers but are clearly marked with signage and have room names. The ERL Identifier for the entire floor should be "Brunswick, South Tower, Floor 3". The Unit Identifiers for the sleeping rooms should be the room number, as appropriate for the specific room (for example – Room 5 on Floor 3 would be 305, and Room 15 would be 315, etc.). The Unit Identifiers for the laundry room and snacks room should be "Laundry Room" and "Snacks Room" respectively.

   South Tower Floors 4 through 11: The ERL Identifiers and the Unit Identifiers should be programmed and configured the same way as detailed in point e above (South Tower Floor 3) but with adjustments for the appropriate floor.

j. **Outside Swimming Pool and Tiki Bar:** This is an in-ground swimming pool located outside and to the rear of the central portion of the structure. There is no telephone station directly at the pool but there is one that serves the pool at the Tiki Bar located next to the pool. The ERL Identifier should be "Brunswick, Rear, Outdoor Pool" and the Unit Identifier should be "Tiki Bar".

k. **Outside Tennis Courts:** The ERL Identifier should be "Brunswick, Rear, Outside Tennis" and the Unit Identifier should be "Kiosk".

l. **Golden Isles Restaurant:** The ERL Identifier should be "Brunswick, Golden Isles, Floor 1) and the Unit Identifiers should be "Front, Reception", "Front, Office", "Dining Room", and "Rear, Kitchen" respectively.

4. **Kari's Law:** Since it is capable of compliance, the MLTS should be programmed and configured to comply with "Kari's Law" immediately. Users should be able to call 911 by dialing 9-1-1 and no other digits from all MLTS telephone stations. In addition, the system should provide a notification to the system that a 911 call has been initiated on the MLTS.

***Note:** The Regulations Require "PSALI to the Station level" or an "ERL Identifier". In this use case example, I have used an ERL Identifier and a Unit Identifier rather than PSALI.

Hotel/Motel Specific Use Case 2 – Brunswick Hotel – but with Brunswick House Call Back Number Deficiency

Note: All of the facts are the same as that of Brunswick House Hotel Specific Use Case 2 above with one exception. That exception - the MLTS is not capable of (and cannot be programmed and configured to) provide a call back number per the requirement of the Regulations. More specifically, the MLTS does not transmit a call back number to the PSAP, which, if called back, will ring the telephone station that generated the 911 call.

Use Case Question: How should the Brunswick House Motel MLTS with the call back number deficiency be programmed and configured?

Answer: The MLTS must be programmed and configured to transmit a call back number to the PSAP that if called back by the PSAP, will ring the telephone number of the MLTS switchboard operator, attendant, or a designated person located at the site where the 911 call originated. In addition, said designated operator, attendant, or person must also have the ability to direct emergency responders to the 911 call to the exact location where the 911 call originated and this is required 24 hours a day, 7 days a week, and 365 days a year.

Hotel/Motel Specific Use Case 2 - Brunswick Hotel – but Brunswick House MLTS Cannot Dial 911 without Dialing Extra Digits Deficiency

Note: All of the facts are the same as that of "Brunswick House Use Case 2" above with one exception. That exception - the MLTS is not able to (and cannot be programmed and configured to) make a 911 call by dialing only the digits "9-1-1" (that is, without the need to dial any prefix digits such as an "8" or a "9" or any other requirement of dialing extra digits) as per the Regulations. For purposes of this Use Case example, in order to make a 911 call, the MLTS requires the dialing of the prefix digit "9" before dialing "9-1-1".

Use Case Question: What steps must the Operator of the Brunswick House MLTS with the "Cannot Call 911 without Dialing Extra Digits Deficiency" take to comply with the Regulations?

Answer: The MLTS requires the dialing of a prefix digit before dialing the digits "9-1-1". For purposes of this example, it is programmed to dial the prefix digit "9" before dialing the digits "9-1-1". A best practice would be to re-configure the MLTS to require dialing the digit "8" as a prefix digit (rather than the digit "9"). In addition, the Operator of the MLTS is required to make a diligent effort to "ensure" that users of the MLTS know how to do that. The use of the word "ensure" raises a very high bar and puts the burden of "ensuring" on the operator of the system. It could be argued that, even if the operator were to tell someone how to dial 9-1-1 using the required prefix repeatedly, if the user does not do it correctly when the time comes, then Operator, did not "ensure" awareness. At a minimum, every telephone station should have an attached document containing specific details concerning how to dial 9-1-1 if your MLTS requires extra digits.

560 CMR 4.04 (4) School Multi Line Telephone Systems

"Each operator of a school multi-line telephone system shall ensure that the system clearly identifies the street address and a unit identifier of the caller through the delivery to the PSAP of ANI, an ERL Identifier, or both, and that provides the PSAP with the ability to retrieve the ALI. Each operator of a school multi-line telephone systems shall be subject to this subsection (4) and shall not be subject to the requirements applicable to operators of business or entity or governmental agency multi-line telephone systems set forth in subsection (2)."

Interpretation: The School specific MLTS Regulations requires Operators to program and configure the MLTS to ensure that the system clearly identifies the street address and a Unit Identifier of the telephone station placing the 911 call by transmitting ANI, and/or an ERL Identifier, sufficient to provide the receiving PSAP with the ability to retrieve the ALI. Schools are governed by this subsection (4) and not by subsection (2) pertaining to business and governmental agency MLTS. A School multi-line telephone system is defined as an MLTS "that provides service to a school campus, complex, or facility, including the portions of a dormitory, sleeping unit, living unit, apartment building, boarding hall, structure, or facility suitable for use as a housing facility for students, faculty, officers, or employees.

The requirements common to every MLTS and to all MLTS Operators also apply to these common requirements appear to be more stringent than what is required in this subsection (4).

School MLTS Suggested Practices

School Suggested Practices – Location Information: In the interest of Public Safety, incorporate the requirements common to all MLTS and MLTS Operators and adopt these suggested practices for all School MLTS.

Operators should program and configure the MLTS to meet the higher standards of the common requirements: transmit enhanced 911 standard ALI and ANI, AND transmit a call back number as specifically defined, AND transmit ERL Identifiers AND Unit Identifiers that contain as much location information as possible. The ANI and ALI should be unique to the particular telephone station originating the 911 call and should provide the correct street address and telephone number of the telephone station calling 911. The call back number, if called back by a PSAP, should ring the same telephone station that placed the 911 call. The ERL Identifier should provide the Building Name/Number and Floor at a minimum.

The Unit Identifier should be the room name/number for sleeping rooms.

For non-sleeping rooms or units (classrooms, laboratories, lavatories, assembly halls, faculty and staff offices, faculty and staff break-rooms, nursing and first aid rooms, gymnasiums, locker rooms, libraries, cafeterias, dining halls, swimming pools, tennis courts, athletic structures, and non-structural athletic fields, parking garages and parking lots, elevators, and walk-ways, etc.), the Unit Identifier should the room name/number or the most accurate location information within a structure (or outside a structure).

School Suggested Practice - Kari's Law: Become an early adapter of "Kari's Law" (note: refer to Exhibit C appended to this document for a copy of the Act). Program and configure your MLTS to be able to call 911 directly (that is, without the need to dial a prefix digit or any other digit). Also, program the MLTS to provide immediate notice to a central location that the MLTS has generated a 9-1-1 call.

If direct dialing of 9-1-1 is not possible, then attach written instructions on how to make a 9-1-1 call to each telephone station and provide training to all Users. In addition, if a prefix digit is required, use the number "8" as the prefix digit rather than the number "9".

School MLTS Use Case 1 – Neil Armstrong School

The Neil Armstrong School is a medium sized public school with grades 1 through 6. The school occupies one building. It has a street address of 100 School St., Mapleton, MA. The school building has two floors and a basement. There is a small schoolyard with a playground located outside and to the rear of the building.

The school's population contains a large group of very young students who are recently arrived immigrants to the USA. Many of these children only speak English as a second language and some are just beginning to learn the language. In an emergency, some children may have difficulty in communicating their specific location in English.

A staircase located near the center of the First Floor reaches the school's basement. There is a sign at the top of the staircase that reads "Basement". The basement has a "Utilities Room" and a "Maintenance Room" with signs that identify them. The Maintenance Room contains a small living quarters suite (containing a bedroom, a kitchenette, and a bathroom) used by a member of the custodial staff who does double duty as a night watchman. The Utilities Room, Maintenance Room, and Custodial Living Quarters each have one MLTS telephone station.

The first floor of the school contains the kitchen, the cafeteria, the teacher's break room, the principal's office, the school office, boys and girls lavatories, and two first grade classrooms. None of these units has a room number except the two first grade classroom (Room 101 and Room 102). All of the other rooms/units are clearly marked with signage. Every room, with the exception of the girls and boys lavatories, has one MLTS telephone station. There is an MLTS telephone station on the wall between the two lavatories. There are two staircases, one on each end of the building, that connect the first floor with the second floor. The staircases are not marked.

The second floor contains ten classrooms as well as boys and girls lavatories that are marked as such. The ten classrooms are numbered Room 201 through 210. Each classroom has one MLTS telephone station. The lavatories do not have telephones but there is an MLTS telephone station on the wall between the two lavatories.

The schoolyard and playground do not have MLTS telephone stations. However, there is an outdoor MLTS station in a protective box installed on the back wall of the school building near the schoolyard.

The school just received a grant and has installed a state of the art **MLTS that is capable of compliance with all of the current Regulations** as well as Kari's Law.

School Use Case Question: How should the Neil Armstrong School MLTS be programmed and configured for 911 calls?

Answer: For **every telephone statio**n, the MLTS should be programmed and configured to transmit to the correct jurisdictional PSAP, all of the following:

a. **The ALI and ANI** transmitted is the same data that the PSAP would receive from a stand-alone telephone calling from the same location. That is, ALI and ANI that distinguishes between all of the telephone stations on the MLTS and correctly transmits as ALI the specific telephone number and, as ANI, the correct street address (100 School St., Mapleton, MA) of the calling station, AND

b. **PSALI to the Station level* or Specific** ERL Identifier **and Unit Identifier** - each telephone station should have a unique ERL Identifier and a unique or specific Unit Identifier associated with it, as follows:

c. **Basement**: No units have room numbers but all have room names. The ERL Identifier for the entire floor should be "Neil Armstrong School, Basement". The Unit Identifiers should be as specific as possible. Accordingly, the Unit Identifier for the Utilities Room should be "Utilities Room", the Unit Identifier for the Maintenance Room should be "Maintenance Room" and the Unit Identifier for the Custodial Living Quarters should be "Maintenance, Custodial Quarters".

d. **First Floor**: Only the two classrooms have room names. The ERL Identifier for the entire first floor should be "Neil Armstrong School, Floor 1". The Unit Identifiers for the rooms without numbers should be "Kitchen", "Cafeteria", "Teacher's Breakroom", "Principal Office", "School Office", and "Lavatories". The Unit Identifiers for the two classrooms would be "101" and "102".

e. **Second Floor:** All units have room numbers except the Lavatories. The ERL Identifier for the entire second floor should be "Neil Armstrong School, Floor 2". The Unit Identifiers for the numbered classrooms should be "201" through "210" respectively.

f. **Back Wall of School:** The telephone station has no room number. The ERL should be "Neil Armstrong School, Outside" and the Unit Identifier should be "Back Wall Phone".

g. **Kari's Law:** Since it is capable of compliance, the MLTS should be programmed and configured to comply with "Kari's Law" immediately. Users should be able to call 911 by dialing 9-1-1 and no other digits from all MLTS telephone stations. In addition, the system should provide a notification to the system that a 911 call has been initiated on the MLTS.

***Note:** The Regulations Require "PSALI to the Station level" or an "ERL Identifier". In this use case example, I have used an ERL Identifier and a Unit Identifier rather than PSALI.

School Use Case 1 – Neil Armstrong School - But With a Call Back Number Deficiency

Note: All of the facts are the same as that of "Neil Armstrong School Use Case 1" above with one exception. That is - the MLTS is not capable of (and cannot be programmed and configured to) provide a call back number per the requirement of the Regulations. More specifically, the MLTS does not transmit a call back number to the PSAP that if called back, will ring the telephone station that generated the 911 call.

Use Case Question: How should the Neil Armstrong School MLTS be programmed and configured considering the call back number Deficiency.

Answer: The MLTS must be programmed and configured to transmit a call back number to the PSAP that if called back by the PSAP, will ring the telephone number of the MLTS switchboard operator, attendant, or a designated person located at the site where the 911 call originated from. In addition, said designated operator, attendant, or person must also have the ability to direct emergency responders to the 911 call to the exact location where the 911 call originated and this is required 24 hours a day, 7 days a week, and 365 days a year.

School Use Case 1 – Neil Armstrong School - But With a Cannot Dial 911 without Dialing Extra Digits Deficiency

Note: All of the facts are the same as that of "Neil Armstrong School Use Case 1" above with one exception. That is - the MLTS is not able to (and cannot be programmed and configured to) make a 911 call by dialing only the digits "9-1-1" (that is, without the need to dial any prefix digits such as an "8" or a "9" or any other requirement of dialing extra digits). For purposes of this Use Case example, in order to make a 911 call, the MLTS requires the dialing of the prefix digit "9" before dialing "9-1-1".

Use Case Question: What steps must the Operator of the Neil Armstrong School MLTS with the "Cannot Call 911 without Dialing Extra Digits Deficiency" take to comply with the Regulations?

Answer: Since direct dialing of 9-1-1 is not possible, the Operator should attach written instructions on how to make a 9-1-1 call to each telephone station and provide training to all Users. In addition, if a prefix digit is required, use the number "8" as the prefix digit rather than the number "9".

School MLTS Use Case 2 – Leafy Prep

"Leafy Prep" is a small private prep school with a campus located in a rural area. Two public roads connect to the campus – Main St. and Ballfield Rd. Both roads are located in the town of Prepville. All of the athletic facilities on the campus share one address – 80 Ballfield Rd., Prepville MA. All of the non-athletic facilities share a common address of 100 Main St., Prepville MA.

The school has been in existence for well over 100 years and all of the structures on campus are known by their building names both on campus and in the local community. There are 11 structures on the campus: Two student dormitories (Washington Hall and Lincoln Hall), three classroom buildings (Newton, Twain, and Plato), a library (Jefferson), an Administrative Offices building (Adams), a dining hall (Epicure), an infirmary (Hippocrates), a "Plant and Utilities" building, and a central athletic complex (Olympia). The baseball field (Williams Field), and the football field (Brady Field) are located behind the Olympia Athletic Complex.

"Washington Hall" Dormitory: The street address is 100 Main St. and it has four floors. The first floor has a "Snack Room" with vending machines, an "Audio Visual" room, and a "Study" room. None of the rooms on the first floor has a room number but they are all marked with signs. Each of the three rooms has one MLTS telephone station. Floors 2 through 4 are student living quarters with 20 suites per floor. Each suite has a unique three digit Unit Number with the first digit representing the floor number and the second two digits representing the suite number (so, for example, Suite 6 on Floor 2 would have a number of 206 and Suite 18 on Floor 4 would have a number of 418). Each suite has one MLTS telephone station.

"Lincoln Hall" Dormitory: The street address is 100 Main St. and it has six floors. The first floor has a "Snack Room" with vending machines, an "Audio Visual" room, and a "Study" room. None of the rooms on the first floor has room number but they are all marked with signs. Each of the three rooms has one MLTS telephone station. Floors 2 through 6 are student living quarters with 24 rooms per floor. Each room has a unique three digit Unit Number with the first digit representing the floor number and the second two digits representing the room number (so, for example, Room 7 on Floor 3 would have a number of 307 and Room 24 on Floor 6 would have a number of 624). Each room has one MLTS telephone station. There is an elevator in Lincoln Hall and it is equipped with an MLTS telephone station. Each floor also has an MLTS telephone located on the wall next to the elevator.

"Newton" Classroom Building: The street address is 100 Main St. and it has two floors. The first floor has six classrooms and they are numbered 101 through 106 respectively. The second floor has four units: a "Biology Laboratory", a "Chemistry Laboratory", a "Physics Laboratory", and a "Planetarium". None of the four units has a room number but they are all clearly marked with signs. Each unit has one MLTS telephone station.

"Twain" Classroom Building: The street address is 100 Main St. and it has three floors. Each floor has six classrooms that are numbered with a three digit numbering scheme with the first digit representing the floor and the second two digits representing the room number (so, for example, Room 5 on Floor 1 would be numbered Room 105). Each classroom in the Twain Building has one MLTS telephone station.

"Plato" Building: The street address is 100 Main St. and it has two floors. The first floor has three units but no room or unit numbers: two debate rooms (named "Debate A" and "Debate B") and a large

auditorium (named “Thespians Auditorium”) used for campus drama presentations, musicals, student assemblies, and special events such as graduation ceremonies and guest speaker engagements. Many of the events held at the Thespians Auditorium are open to the public. “Debate A” has an MLTS telephone but “Debate B” does not. Thespians Auditorium has two MLTS telephone stations with one being located on a wall on the stage behind the curtain and the other on the back wall of the auditorium. The two debate rooms and the auditorium are clearly marked with signs. The second floor has 12 classrooms and they are all numbered (201 through 212).

“Jefferson Library”: The street address is 100 Main St. and it has four floors. Floor 1 contains: a reception desk area with a sign that reads “Check In and Check Out”, another section with a sign that reads “Help Desk”, an office for the head librarian with a sign that reads “Librarian”, a conference room with a sign that reads “Conference Room”, and a study hall section with a sign that reads “Study Area: QUIET!”. Only the reception area Help Desk, the Librarian’s Office and the Conference Room have MLTS telephone stations. The Second through the Fourth floors contain the books, periodicals, and audiovisual materials, for the library. On each floor, located in the center of the room, is a “Help Desk” that is occupied by library staff from 7AM until 10PM each day of the week (except for major holidays). On each of these desks is an MLTS telephone station. There are no other MLTS phones anywhere else in the Jefferson Library.

“Adams” Administrative Office Building: The street address is 100 Main St. and it has three floors. Floor 1 contains an area marked as “Reception” and an area marked as “Conference Room”. Each of these units has one MLTS telephone station. In addition, there are five office suites marked: “Head of School”, “Bursar”, “Admissions”, “Alumni”, and “Endowment”. Each of the five office suite units has three MLTS telephones with one at the “Front Desk”, one in a “Clerical” office, and one in a “Back Office”. None of the units on Floor 1 has a room or unit number, but signs identify all. Floor 2 and Floor 3 contain teaching faculty offices with 12 offices on each floor. Each office has a room number with a three digit numbering scheme with the first digit representing the Floor Number and the second two digits the Room Number (so, for example, Room Number 8 on Floor 2 would be numbered 208 and Room Number 12 on Floor 3 would be numbered 312).

“Epicure” Dining Hall: The street address is 100 Main St. and it has a basement (“Basement”) and a ground floor (“Ground”). The kitchen and food storage areas are located in the basement and are clearly marked as “Kitchen” and “Pantry” respectively. Each basement unit has one MLTS telephone station. The ground floor contains two units – a Dining area and a food serving area. Neither of these two units are marked. There is one MLTS phone in the dining area and one MLTS phone located in the food serving area.

“Hippocrates” Infirmary: The street address is 100 Main St. and it has one floor with eight units: a unit marked “Reception”, a room marked as “Medical Staff”, a room marked “Examination”, a room marked “X-Ray”, and four rooms for admitted patients (these room serve as sleeping quarters when required) marked “Patient 1” through “Patient 4” respectively.

“Plant and Utilities” Building: The address is 100 Main St. and it is comprised of four very large sections: “Utilities”, “Maintenance”, “Repairs”, are located on the First Floor and the “Equipment Storage Shed” is located on the same level but the floor is dirt there. The Utilities section of the structure is clearly marked and It contains one MLTS telephone station. The Maintenance section is located behind a wall and has a sign that says “Maintenance”. There are two offices and a large open area contained within

the Maintenance unit. The two offices do not have room numbers but they are clearly marked as "Supervisor" and "Scheduling". There is an MLTS telephone station in each office but none in the open area. The Repairs section of the structure is in a large open area with a sign that reads "Repairs. There is one MLTS phone located on a wall. The "Equipment Storage Shed" section is an extension of the original structure comprised of a roof over a dirt floor with a chain link fence segregating this unit from the rest of the structure. There is an office contained within the Equipment Storage unit marked as "Office". There is one MLTS telephone station in the office.

"Olympia Athletic Complex": The street address is 80 Ballfield Rd. The complex has one very large structure that contains a gymnasium, an indoor hockey rink, a swimming pool, and four very large locker rooms. Although the structure is four stories high, there are only two floors (Ground Floor) and Floor 2. The gymnasium, hockey rink, swimming pool, and the four locker rooms are all located on the ground floor. Each of these units have one MLTS telephone station. Because the building is so large, it has wide entry and exit sections on all four sides of the structure. These sections are marked as "North", "East", "West", and "South" based upon their geographic orientation. The four locker rooms are located near one of the four sets of Entry and Exit doors and are named and clearly marked with signs as "North Locker Room", "East Locker Room", "West Locker Room", and "South Locker Room", respectively. Each locker room has one MLTS telephone station. The gymnasium, hockey rink, and swimming pool are all clearly marked with signs. Located on the north end of the complex, on the second floor, are two team-meeting rooms marked with signs as "North Team Room A" and "North Team Room B". Located on the south end of the complex, on the second floor, are two additional team-meeting rooms marked with signage as "South Team Room A" and "South Team Room B".

Brady field used for both football and soccer and is located to the west of the main athletic complex building. The street address is 80 Ballfield Rd. The field has a grandstand on one side with a small press box at the top of the grandstand that is marked with a sign that says "Press Box". One MLTS telephone station is located there.

The Williams baseball field is located to the north of the main athletic complex building. The address is 80 Ballfield Rd. There is an equipment shed with an MLTS telephone station inside. The shed is marked as "Baseball Equipment".

The outdoor tennis courts are located to the east of the main athletic complex building. The address is 80 Ballfield Rd. There is an equipment shed located at the tennis courts and it is marked as "Tennis Equipment". There is an MLTS telephone station in the shed.

There is a large parking lot located to the south of the main athletic complex building that used for on campus and public parking. The address is 80 Ballfield Rd. There is an unmarked guard shack at the entrance to the parking lot and there is an MLTS telephone station inside the guard shack.

Leafy Prep has a brand new **MLTS that is capable of complying with all of the Regulations** as well as Kari's Law.

School Use Case Question: How should the Leafy Prep School MLTS be programmed and configured for 911 calls?

For every telephone station on the Leafy Prep School campus: The MLTS should be programmed and configured to transmit to the correct jurisdictional PSAP, all of the following:

1. **The** ALI **and** ANI transmitted is the same data that the PSAP would receive from a stand-alone telephone calling from the same location. That is, ALI and ANI that distinguishes between all of the telephone stations on the MLTS and correctly transmits as ALI the specific telephone number and, as ANI, the correct street address (Leafy Prep, 100 Main St., Prepville or Leafy Prep Athletics, 80 Ballfield St., Prepville) as would be appropriate to the particular location) of the calling station, AND
2. **The Call Back Number**: transmitted to the PSAP is the specific telephone number of the station that generated the 911 call and that if called back by the PSAP, will ring the specific telephone station that generated the 911 call.
3. **PSALI to the Station level* or Specific ERL Identifier and Unit Identifier**- each telephone station should have a unique ERL Identifier and a unique and/or specific Unit Identifier associated with it, as follows:
    a. **Washington Hall Dormitory First Floor:** None of the units has room name. The ERL Identifier for the entire first floor should be "Washington Hall, Floor 1". The Unit Identifiers for the rooms without numbers should be "Snack Room", "Audio Visual", and "Study Room".
    b. **Washington Hall Dormitory Second Floor through Fourth Floor:** All units have room numbers. The ERL Identifier for the entire second floor should be "Washington Hall, Floor 2". The Unit Identifiers for the numbered classrooms should be "Suite 201" through "Suite 220" respectively. The ERL Identifier for Floor 3 and Floor 4 should be "Washington Hall, Floor 3, (or 4 as would be appropriate for the Floor) with Unit Identifiers of "Suite 301" to "Suite 420" as would be appropriate for the Floor/Suite.
    c. **Lincoln Hall Dormitory First Floor:** None of the units has room name. The ERL Identifier for the entire first floor should be "Lincoln Hall, Floor 1". The Unit Identifiers for the rooms without numbers should be "Snack Room", "Audio Visual", and "Study Room".
    d. **Lincoln Hall Dormitory Second Floor through Sixth Floor:** All units have room numbers. The ERL Identifier for the entire second floor should be "Lincoln Hall, Floor 2". The Unit Identifiers for the numbered classrooms should be "Room 201" through "Room 224" respectively. The ERL Identifiers for Floor 3 through Floor 6 should be "Washington Hall, Floor 3 (or 4 or 5 or 6 as would be appropriate for the Floor) with Unit Identifiers of "Room 301" to "Room 624" as would be appropriate for the Floor/Room.
    e. **Newton Classroom Building First Floor:** All of the rooms have room numbers. The ERL Identifier for the entire first floor should be "Newton, Floor 1" with Unit Identifiers of "Room 101" through "Room 106" as would be appropriate.
    f. **Newton Classroom Building Second Floor:** No unit has a room number. The ERL Identifier for the entire second floor should be "Newton, Floor 2" with Unit Identifiers of "Biology Lab", "Chemistry Lab", "Physics Lab", and "Planetarium" respectively.
    g. **Twain Classroom Building Floors 1 through 3:** All rooms have room numbers. The ERL Identifiers should be "Twain, Floor 1" through "Twain, Floor 3" as would be

appropriate to the specific floors. Unit Identifiers should be “Room 101” through “Room 306” as would be appropriate for the specific Floor/Room.

h. **Plato Building First Floor:** The units do not have room numbers. The ERL Identifier for the entire first floor should be “Plato, Floor 1”. The Unit Identifiers should be “Debate Room A” (note, there is no MLTS telephone station in Debate Room B), “Thespians Auditorium, Stage” and “Thespians Auditorium, Rear”.
i. **Plato Building Second Floor:** All of the rooms have room numbers. The ERL Identifier for the entire floor should be “Plato, Floor 2” and the Unit Identifiers should be “Room 201” through “Room 212” as would be appropriate.
j. **Jefferson Library First Floor:** None of the units has a room number. The ERL Identifier for the entire first floor should be “Jefferson, Floor 1” with Unit Identifiers of “Reception, Help Desk”, “Librarian Office Area” and “Conference Room Area” (Note: main Reception Desk and study area do not have MLTS telephone stations).
k. **Jefferson Library Second through Fourth Floors:** No room numbers and each floor has only one centrally located MLTS telephone station. The ERL Identifiers should be “Jefferson, Floor 2” through “Jefferson, Floor 4” as would be appropriate to the specific floor. Unit Identifiers should be “Help Desk, Central” for each of the single MLTS telephone stations on floors 2, 3, and 4.
l. **Adams Administrative Office Building First Floor:** None of the units has a number. The ERL Identifier for the entire first floor should be “Adams, Floor 1” with Unit Identifiers “Reception”, “Conference Room”, “Head of School Suite, Front Desk”, “Head of School Suite, Clerical”, “Head of School Suite, Back Office”, “Bursar Suite, Front Desk”, “Bursar Suite, Clerical”, “Bursar Suite, Back Office”, “Admissions, Front Desk”, “Admissions, Clerical”, “Admissions, Back Office”, “Alumni, Front Desk”, “Alumni, Clerical”, “Alumni, Back Office”, “Endowment, Front Office”, “Endowment, Clerical”, and “Endowment, Back Office”.
m. **Adams Administrative Office Building Floors 2 and 3:** All of the offices have room numbers. The ERL Identifiers should be “Adams, Floor 2” and “Adams, Floor 3” as would be appropriate to the specific floor. The Unit identifiers should be “Room 201” through “Room 312” as would be appropriate to the specific Floor/Room.
n. **Epicure Dining Hall Basement:** There are no room numbers. The ERL Identifier for the entire basement floor should be “Epicure, Basement” with Unit Identifiers of “Kitchen” and “Pantry”.
o. **Epicure Dining Hall Ground Floor:** No room numbers and no signage. The ERL Identifier for the entire ground floor should be “Epicure, Ground Floor” with Unit Identifiers of “Dining Area” and “Food Serving Area”.
p. **Hippocrates Infirmary:** Four units without numbers and four rooms with numbers. The ERL Identifier for the entire building should be “Hippocrates, Ground Floor” with Unit Identifiers of “Reception Area”, “Medical Staff Room”, “Examination Room”, “X-Ray Room”, “Patient, Room 1”, “Patient, Room 2”, “Patient, Room 3”, and “Patient, Room 4”.
q. **Plant and Utilities Building Floor 1:** No room numbers and four very large sections (Note: the equipment storage shed is on a dirt floor and that is a way to distinguish that unit from the rest of the building). The ERL Identifier for the first floor should

be “Plant&Utilities, Floor 1” with Unit Identifiers of “Utilities Area”, “Maintenance, Supervisor Office”, “Maintenance, Scheduling Office”, and “Repairs, Wall”.

r. **Plant and Utilities Building Dirt Floor:** The ERL Identifier should be “Plant&Utilities, Dirt Floor” with a Unit Identifier of “Equipment Storage, Office”.

s. **Olympia Athletic Complex Ground Floor:** No room or unit numbers. The ERL Identifier for the entire ground floor should be “Olympia Complex, Ground Floor” with Unit Identifiers “Gymnasium”, “Hockey Rink”, “Swimming Pool”, “North Locker Room”, “East Locker Room”, “West Locker Room” and “South Locker Room”.

t. **Olympia Athletic Complex Second Floor North:** The ERL Identifier should be “Olympia Complex North, Floor 2” with Unit Identifiers “Team Room A” and “Team Room B”.

u. **Olympia Athletic Complex Second Floor South:** The ERL Identifier should be “Olympia Complex South, Floor 2” with Unit Identifiers “Team Room A” and “Team Room B”.

v. **Outdoor Football and Soccer Field:** The ERL Identifier should be “Olympia Complex West, Brady Field” with a Unit Identifier “Grandstand, Press Box”.

w. **Outdoor Baseball Field:** The ERL Identifier should be “Olympia Complex North, Williams Field” with a Unit Identifier of “Baseball Equipment Shed”.

x. **Outdoor Tennis Courts:** The ERL Identifier should be “Olympia Complex East, Tennis” and the Unit Identifier should be “Tennis Equipment Shed”.

y. **Parking Lot:** The ERL Identifier should be “Olympia Complex South, Parking” and the Unit Identifier should be “Guard Shack” (Note: this guard shack is unmarked. In the interest of public safety, a sign should be placed on the structure).

4. **Kari’s Law:** Since it is capable of compliance, the MLTS should be programmed and configured to comply with “Kari’s Law” immediately. Users should be able to call 911 by dialing 9-1-1 and no other digits from all MLTS telephone stations. In addition, the system should provide a notification to the system that a 911 call was initiated on the MLTS.

***Note:** The Regulations Require “PSALI to the Station level” or an “ERL Identifier”. In this use case example, I have used an ERL Identifier and a Unit Identifier rather than PSALI.

School Use Case 2 – Leafy Prep - But With a Call Back Number Deficiency

Note: All of the facts are the same as that of "Leafy Prep School Use Case 2" above with one exception. That is - the MLTS is not capable of (and cannot be programmed and configured to) provide a call back number per the requirement of the Regulations. More specifically, the MLTS does not transmit a call back number to the PSAP that if called back, will ring the telephone station that generated the 911 call.

Use Case Question: How should the Leafy Prep School MLTS be programmed and configured considering the call back number Deficiency.

Answer: The MLTS must be programmed and configured to transmit a call back number to the PSAP that if called back by the PSAP, will ring the telephone number of the MLTS switchboard operator, attendant, or a designated person located at the site where the 911 call originated. In addition, said designated operator, attendant, or person must also have the ability to direct emergency responders to the 911 call to the exact location where the 911 call originated and **this is required 24 hours a day, 7 days a week, and 365 days a year**.

School Use Case 2 – Leafy Prep – But With a Cannot Dial 911 without Dialing Extra Digits Deficiency

Note: All of the facts are the same as that of "Leafy Prep School Use Case 2" above with one exception. That is - the MLTS is not able to (and cannot be programmed and configured to) make a 911 call by dialing only the digits "9-1-1" (that is, without the need to dial any prefix digits such as an "8" or a "9" for example) as per the Regulations. For purposes of this Use Case example, in order to make a 911 call, the MLTS requires the dialing of the prefix digit "9" before dialing "9-1-1".

Use Case Question: What steps must the Operator of the Leafy Prep School MLTS with the "Cannot Call 911 without Dialing Extra Digits Deficiency" take to comply with the Regulations?

Answer: Since direct dialing of 9-1-1 is not possible, the Operator should attach written instructions on how to make a 9-1-1 call to each telephone station and provide training to all Users. In addition, if a prefix digit is required, use the number "8" as the prefix digit rather than the number "9".

School Use Case 2 – Leafy Prep – Students issued tablets with softphone

Note: All of the facts are the same as that of "Leafy Prep School Use Case 2" above with one exception. That is - Every student has been issued a tablet with a softphone application pre-installed. Students can use the softphone application on their tablets to connect to the campus MLTS to make outbound telephone calls. The MAC address of the tablet is registered with the MLTS and the MLTS associates the MAC address with the student's on campus residence address. The Wi-Fi signal is very strong everywhere on campus so all students can make outbound calls from anywhere on the campus and some places a bit beyond the campus. If a student were to use the tablet softphone to call 911 from a remote part of the campus other than their assigned living quarters (for example, from the baseball field), then then what would be transmitted to the PSAP would be the ALI, ERL Identifier, and Unit Identifier of their living quarters room and not the location of the emergency (the baseball field in this example).

Use Case Question: What steps should the Operator of the Leafy Prep School MLTS take to promote public safety by preventing the transmission of incorrect location information?

Answer: The softphones on the tablets issued to the students must be configured to the same standard for transmitting ANI, ALI, call back number, ERL Identifiers and Unit Identifiers, as are the other MLTS telephone stations that are hard wired to the network. If this can only be achieved when the tablet softphones are used in the students' residence quarters, then every student must be given explicit and clear instructions to NEVER call 911 on their softphones unless they are in their own dorm room. In the alternative, the MLTs and/or the softphones could be programmed to be unable to make 911 calls.

ALI Database Maintenance 560 CMR 4.05

Section 4.05 of the Regulations establishes a process and a time period for MLTS Operators to follow when updating the ALI Database. It states: "*Each operator of a multi-line telephone system, except those granted a waiver from the requirements of 560 CMR 4.00, shall update the ALI Database with Master Street Address Guide validation as soon as practicable for new multi-line telephone systems or within one business day following completion of the substantial renovation of an existing multi-line telephone system. To the extent that the operator of a multi-line telephone system assigns the direct inward dialing number of the station or ERL as the ALI Database record indicator, updates to the ALI Database shall match the direct inward dialing number ALI Database record indicator. The updates shall provide valid address and callback information for such multi-line telephone system*."

Interpretation: "*Each operator of a multi-line telephone system, except those granted a waiver from the requirements of 560 CMR 4.00, shall update the ALI Database with Master Street Address Guide validation as soon as practicable for new multi-line telephone systems or within one business day following completion of the substantial renovation of an existing multi-line telephone system."*

This part of the Regulation places responsibility for ALI Database Maintenance squarely on the MLTS Operator. The section focuses on what MLTS Operators must do if they (1) deploy a brand new MLTS or (2) substantially renovate their existing MLTS; rather than on routine maintenance (such as adding, subtracting, or editing records). If an Operator deploys a new MLTS, they are required to update the ALI Database with Master Street Address Guide Validation (MSAG) "as soon as practicable". For a substantially renovated MLTS, the Operator is required to update the ALI Database with MSAG validation "within one business day following completion of the substantial renovation".

Note: Since the completion of the upgrade of the 9-1-1 System in the Commonwealth from E911 to NG911, the MSAG no longer formally exists (please refer to the Suggested Practices Section below for guidance).

"To the extent that the operator of a multi-line telephone system assigns the direct inward dialing number of the station or ERL as the ALI Database record indicator, updates to the ALI Database shall match the direct inward dialing number ALI Database record indicator. The updates shall provide valid address and callback information for such multi-line telephone system."

Interpretation: If the MLTS Operator uses direct inward dialing (DID) telephone numbers and assigns them to individual telephone stations or ERLs as ALI Database record indicators, then updates to the ALI Database must match the assigned DID record indicators. ALI Database updates must include validated location information and a callback number as defined in the Regulations.

ALI Database Maintenance Suggested Practices

The Regulation (560 CMR 4.05) requires MLTS operators to update "the ALI Database with Master Street Address Guide validation". As noted above, the Master Street Address Guide (known as the "MSAG") no longer formally exists. The upgrade of the 911 System in the Commonwealth from Enhanced 911 (E911) to Next Generation 911 (NG911) included the integration of the old civic address data from the MSAG into a new Master Address Database (known as the "MAD"). Accordingly, validation of new or updated addresses must be against the MAD.

In the NG911 system, the required ALI Database maintenance process is more precise. New addresses receiving landline telephone service need to be validated individually against the MAD rather than simply checked against the ranges in the MSAG. Accordingly, all new, changed, and deleted addresses must be incorporated into the MAD as they occur – even if the change would not have previously required an MSAG update.

MLTS Operators must determine who is to provide ALI Database Services (including database maintenance and validation against the MAD). It can be done "in house" or it can be done by contracting with a third party ALI Database service provider.

If your organization chooses to do the job "in house", you must coordinate this effort with the designated "Municipal Coordinator" for the city or town where you are located. For a variety of reasons, your ALI Database may be lacking in one or more of the following defined and required data categories: (1) Enhanced 911 standard ANI and ALI, Callback Number, and PSALI to the Station Level or ERL Identifier. In the interests of public safety and because the Regulations require it, now is the time to do whatever is necessary to ensure that your MLTS transmits the required data along with a 911 call. Once this task is completed, you must coordinate with your local Municipal Coordinator to ensure that your ALI Database records match the local municipality's records. If you have just brought your data up to standard, there is a chance that the records will not match. If so, the next task would be to coordinate with the Municipal Coordinator to bring the ALI Database records into agreement. The final task will be to validate the matched ALI Database records against the MAD.

If your organization chooses to employ a third party, the same matching and validation process detailed in the paragraph above must be completed by the third party. (Note: if you choose to go with the third party option, refer to the Section entitled "**FOR MLTS MANAGERS AND OPERATORS**" below for a more information).

The Regulations specifically address Operators of MLTS that use direct inward dialing (DID) and associate the DID telephone number to particular telephone stations or an ERL. Caution must be taken to match the MLTS' ALI Database record indicators to the MAD through the coordination and validation process detailed above.

Finally, be aware that the Regulations place sole responsibility for ALI Database maintenance on the MLTS Operator. This is the case even when an organization has contracted with its carrier, or a third party, to provide these services.

FOR MLTS MANAGERS AND OPERATORS

This document repeatedly advises MLTS Operators that they are required to program and configure their MLTS to ensure that when a 911 call is initiated on their system, the call is received at the proper jurisdictional PSAP with all of the following (as defined elsewhere in this document):

- The same level of E911 service (including ANI and ALI specific to the telephone station that initiated the call), that is enjoyed by others in the Commonwealth
- A Callback Number
- PSALI to the individual telephone station level, OR, an ERL Identifier

Most MLTS systems receive telephone service primarily through private branch exchange (PBX) systems. These systems do not typically provide the specific location information required by 560 CMR 4.04. Yet, MLTS Operators are still required to comply with the Regulations. One way that MLTS Operators can meet the requirements of the Regulations would be by utilizing Private Switch Automatic Location Identification (PSALI). PSALI, also sometimes referred to as PS911, is a service option that provides enhanced 911 service features for multi-line telephone systems.

If your carrier provides dial tone for your MLTS, they may be able to provide PSALI as an additional service (check with them). If your carrier is not providing PSALI, then you will need to apply for a company ID (CID) through the National Emergency Number Association (NENA) so that ownership of the telephone numbers assigned to your organization by your carrier can be "ported over" to you. Enter https://companyid.nena.org/default.aspx into a web browser for more information and an FAQ.

If your carrier does not provide PSALI service, or if you would prefer to contract with another organization, you can contract with third parties for these services. We cannot recommend any specific third party organization but can offer you options. One option among several would be the organization that provides ALI Database services for the State 911 Department (Digital Data Technologies Inc. or DDTI).

SUGGESTED PRACTICES

1. Never block or divert outbound 911 calls.
2. Use direct inward dialing (DID) so that every telephone station can receive a callback.
3. Upgrade the database on your MLTS so that it can transmit all of the required data with a 911 call.
4. Immediately ensure that your MLTS ALI Database records are in agreement with the local municipality's records.
5. Validate your ALI Database against the MAD.
6. Contract with your carrier or a third party to provide PSALI services
7. Program and configure your MLTS to provide PSALI to the telephone station level location information.
8. Program and configure your MLTS to be able to make a 911 call directly without the need of any other digits.

9. If the MLTS does not have the capability of dialing 911 without any other digits, attach a sign or document to each telephone station with specific instructions about how to make a 911 call.
10. If the MLTS requires a prefix digit to dial a 911 call, program it to require a digit other than “9” (use the prefix digit “8” and not “9”).

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FOR MUNICIPAL COORDINATORS AND LIASONS

9-1-1 Data Development Requirements:

560 CMR 2.00 Appendix A establishes requirements for E911 Databases. The Regulation states:

(1) Database

(a) Database Development. All municipalities that elect to participate in the Enhanced 9-1-1 system shall work with the telephone company to verify street names, number ranges, and emergency service zones (ESZ). The designated Municipal Coordinator and the telephone company shall ensure that changes, deletions, and additions to the Master Street Address Guide (MSAG) database should be made on an as occurred basis. Each city or town must review the MSAG yearly to ensure accuracy of the data and the emergency service zones.

(b) Selective Routing and ALI Database Update Requirements and Reports.
After establishment of the service, it is the municipalities responsibility to verify the accuracy of the routing information contained in the master address file and to advise the telephone company of any changes in the street names, establishment of new streets, changes in address numbers used on existing streets, closing and abandonment of streets, changes in police, fire, EMS, or other appropriate agencies, jurisdiction over any address, annexations and other changes in municipal and county boundaries, incorporation of new communities, or any other matter that will affect the routing of Enhanced 9-1-1 calls to the proper PSAP.
The telephone company shall make every reasonable effort to update Selective Routing and ALI data on a daily basis so that the number of records "not found" shall not exceed one percent of the total number of database lookups per quarter. Any records not updated within the 24 hour period shall be updated within three business days of receipt with the exception of records containing "special" fields which may require verification.

Note: Since the completion of the upgrade of the 9-1-1 System in the Commonwealth from E911 to NG911, the following significant changes affecting compliance with the Regulations have occurred:

1. The MSAG no longer formally exists. The upgrade to NG911 included the integration of the old civic address data from the MSAG into a new Master Address Database (known as the "MAD"). Accordingly, updates to the ALI Database are entered into the MAD (and not the MSAG) and validation of new or updated addresses must be against the MAD.
2. The role of the "telephone company", which formerly hosted the MSAG, has been eliminated. The MAD is now hosted by MassGIS. Updates to the ALI Database are now communicated to MassGIS and validation of new addresses and changes to the ALI Database are now made against the MAD.
3. The Selective Routers have been retired. Civic addresses are validated against address points in the Location Database (LDB) and calls are routed geospatially.

Interpretation: A simple way to interpret the Regulation in light of the changes caused by the transition from E911 to NG911 would be to substitute the "MAD" for the "MSAG" and "MassGIS" for the "telephone company" in the wording of the Regulation.

In the NG911 system, each municipality continues to be responsible to work with MassGIS to “verify street names, number ranges, and emergency service zones (ESZ).” And the designated Municipal Coordinator is still responsible to work with MassGIS to “ensure that changes, deletions, and additions to the” 911 Database are “made on an as occurred basis.”

Be aware that In the NG911 system, the required ALI Database maintenance process is more precise. New addresses receiving landline telephone service need to be validated individually against the MAD rather than simply checked against the ranges in the MSAG. Accordingly, all new, changed, and deleted addresses must be incorporated into the MAD as they occur – even if the change would not have previously required an MSAG update.

MUNICIPAL COORDINATOR AND LIASON BEST MLTS PRACTICES

The Commonwealth has a new NG911 system with powerful call routing capabilities. Advancements in technology have produced new devices capable of making emergency "calls" even though they are not physically tethered to traditional MLTS hard-wired networks. New federal laws regulating multi-line telephone systems have recently been enacted. The MLTS 911 landscape is changing and these changes are designed to save lives! All of the things mentioned above depend upon or focus on accurate location information.

The State 911 Department MLTS Regulations (560 CMR 4.00) require (1) enhanced 911 level ANI and ALI, (2) a telephone station specific callback number, and (3) PSALI to the individual station level location information, or an ERL at a minimum. This document is meant to assist the MLTS community in complying with the existing MLTS Regulations issued by the Commonwealth and the FCC and these Regulations will be enforced. We expect MLTS Operators to respond and to begin bringing their MLTS into full compliance with the location requirements of the Regulations. These efforts will require MLTS Operators to add required ANI, ALI, Callback Number information, and location information to their MLTS records.

Once MLTS Operators bring their Database records into compliance with the Regulations, they will have to interact with the Municipal Coordinators in their respective municipalities to make sure that the records match. This effort will likely result in additional location information (such as Building Names/Numbers, Floor Numbers, Suites, Room Names/Numbers, etc.) as well as other changes to the MAD and validation against the MAD.

It is the responsibility of the Municipal Coordinators to communicate new addresses, changes, and edits to MassGIS. Following are some guidelines that will assist you.

How to Handle New Addresses and Address Changes for Your Municipality

When your PSAP was upgraded to the NG911 system, one of the major changes was the way 911 calls are routed to your PSAP. In NG911, determining the actual geographic location of the caller is a critical first step in the process of routing the call to the correct PSAP. To help make this work, MassGIS mapped over three million civic addresses from the Emergency Service List and other sources. These mapped addresses are stored in the Master Address Database (the "MAD"). The "MAD" is a critical element of the Location Database (the "LDB") and the "LDB" provides the geographic information required by the NG911 system to route 911 calls to the correct PSAP.

In the NG911 system, the "MAD" must be continuously updated to include new addresses, and edited for changed or deleted addresses. Because MassGIS maintains the "MAD", it is essential that they learn about any new, changed, or retired, addresses as soon as they are approved by the local municipal authority.

How do I communicate address changes to Mass GIS?

Browse to https://www.mass.gov/service-details/how-does-massgis-learn-about-new-addresses
You will see that there are three ways to keep MassGIS informed of address changes, as follows:

1. Notify MassGIS by email: Send updates about each new, changed, or retired, address via email to: **Notify911Address@mass.gov** If you choose this method, you can help ensure new addresses are added to the NG911 system quickly by providing additional information that MassGIS staff could use in identifying a new address location. Helpful information includes:
    a. A description of the location such as nearest cross streets.
    b. If the new address is part of a subdivision, especially if there are new streets, attach a plan or other site map to the email.

2. Browse to: https://www.mass.gov/forms/next-generation-9-1-1-address-edit-form and fill out the online form. Any available scans of site plans or other mapping can be attached to address updates submitted via this online form.

3. Use "FDC Lite": MassGIS is encouraging individuals who are municipal building and fire inspectors, to report locations of new addresses using a smartphone/tablet app called **"Field Data Collection – Lite" ("FDC Lite").** Per MassGIS: *"Address locations can be reported through FDC Lite when a building foundation is approved or at the time of final inspections prior to issuing a Certificate of Occupancy for new construction. This option is the quickest (a minute or less per address) and most efficient way to ensure* new *addresses are added to the NG 9-1-1 system; the app is also highly advantageous in terms of the quality of the information received by MassGIS. An internet enabled tablet or smartphone is required to use the app. Address changes or retired addresses cannot be reported through the application.*"

Where Can I Get Map Data for My Municipality?

Answer: From MassGIS

MassGIS has created a "master address database" (the "MAD") that is used for compiling, standardizing, editing and maintaining addresses for the Next Generation 911 system. MassGIS' goal is to provide municipalities, residences, businesses, and application developers with the most comprehensive list of standardized addresses for cities and towns throughout the Commonwealth.

Address sources include the Voter Registration List from the Secretary of the Commonwealth, site addresses from municipal departments (primarily assessors), and customer address lists from utilities. In addition, the MAD was validated for completeness using the Emergency Service List (a list of telephone landline addresses) from Verizon.

The MAD contains both tabular and spatial data, with addresses being mapped as point features. As of April 19, 2019, the MAD contains 3.2 million address records and 2.2 million address points. The database is very dynamic with changes being made daily so the data available for download will be refreshed weekly.

Mass GIS Data Products:

Data exports from the MAD available for download include:

Basic Address List - A tabular listing of addresses without units or MassGIS' master address ID. Download it from the MassGIS website at:

https://docs.digital.mass.gov/dataset/massgis-data-master-address-data-basic-address-list

Advanced Address List - A tabular listing of all addresses to the building/floor/unit level, when that information is available; the street name is parsed to its various parts. This export includes the MassGIS master address ID and the site name. A geographic community name is appended to the street name field when a neighborhood OR sub-community value exists due to multiple MSAG communities or an address community name. Download it from the MassGIS website at:

https://docs.digital.mass.gov/dataset/massgis-data-master-address-data-advanced-address-list

Basic Address Points - Points features with each point having an address to the building/floor/unit level, when that information is available. Where more than one address is located at a single location multiple points are included (i.e. "stacked points"). The points for the most part represent building centroids. Other points are located as assessor parcel centroids. Download it from the MassGIS website at:

https://docs.digital.mass.gov/dataset/massgis-data-master-address-data-basic-address-points

Statewide Address Points for Geocoding - Basic address points with fields added to facilitate geocoding inside ArcMap. Includes a statewide file geodatabase and address locators. Download it from the MassGIS website at:

https://docs.digital.mass.gov/dataset/massgis-data-master-address-data-statewide-address-points-geocoding

EXHIBIT A

560 CMR 4.00: REGULATIONS GOVERNING ENHANCED 911 SERVICE FOR MULTI-LINE TELEPHONE SYSTEMS

4.01: Purpose

The purpose of 560 CMR 4.00 is to establish regulations to carry out the provisions of M.G.L. c. 6A, §18J to require that, beginning July 1, 2009, any new or substantially renovated multi-line telephone system shall provide the same level of enhanced 911 service that is provided to others in the commonwealth.

4.02: Scope and Applicability

560 CMR 4.00 applies to all new or substantially renovated multi-line telephone systems beginning July 1, 2009.

4.03: Definitions

Automatic location identification or ALI means an enhanced 911 service capability that allows for the automatic display of information relating to the geographical location of the communication device used to place a 911 call.

ALI Database means the set of ALI records residing on a computer system.

Automatic number identification or ANI means an enhanced 911 service capability that allows for the automatic display of a telephone number used to place or route a 911 call.

Business or entity multi-line telephone system means a multi-line telephone system that provides service to a corporation, trust, organization, partnership, cooperative, joint venture, incorporated or unincorporated association, whether for profit or not for profit and whether created by or organized under the laws of the commonwealth or under laws other than those of the commonwealth.

Call back number means a number used by a PSAP to contact the location from which the 911 call was placed. This number shall allow a call from the PSAP to reach the station used to originate the 911 call, or the number of a switchboard operator, attendant, or other designated onsite individual with the ability to direct emergency responders to the 911 caller's location 24 hours a day, 7 days a weeks, 365 days a year.

Centrex means a system that is central office based and has feature characteristics similar to a private branch exchange.

Commonwealth means the Commonwealth of Massachusetts.

Department means the state 911 department.

Direct Inward Dialing means the ability for an outside caller to be connected directly to an internal telephone extension without having to pass through a switchboard operator or attendant.

Emergency response location or ERL means a location to which emergency response services may be dispatched.

Emergency response location or ERL Identifier means an additional location identification that provides specific location identification within a building, structure, complex, or campus such as a floor name or number, wing name or number, building name or number, unit name or number, room name or number, or office or cubicle name or number.

End user means a person who uses communication services.

Enhanced 911 service means a service consisting of communication network, database and equipment features provided for subscribers or end users of communication services enabling such subscribers or end users to reach a PSAP by dialing the digits 911, or by other means approved by the department, that directs calls to appropriate PSAPs based on selective routing and provides the capability for automatic number identification and automatic location identification.

Enhanced 911 network features means the components of enhanced 911 service that provide selective routing, automatic number identification and automatic location identification.

Governmental agency multi-line telephone system means a multi-line telephone system that provides service to an agency, department, executive office, board, commission, division or authority of the commonwealth, or any of its branches, or of any political subdivisions thereof; each board, commission, committee or subcommittee of any district, city, region, or town, however elected, appointed, or otherwise constituted; and the governing board of a local housing redevelopment or similar authority.

Hotel/motel multi-line telephone system means a multi-line telephone system that provides service to a hotel, motel, resort, inn, lodge, bed and breakfast or other similar accommodation with 20 or more rooms intended or designed to be used, or used, rented or hired out to be occupied for sleeping purposes.

Hybrid key telephone system means a type of multi-line telephone system designed to provide both manual and pooled access to outside lines.

Key telephone system means a type of multi-line telephone system designed to provide manual direct selection of lines for outgoing calls through keys offering identified access lines.

Multi-line telephone system means a system comprised of common control units, telephones and control hardware and software providing local telephone service to multiple end-use customers. Multi-line telephone system includes VoIP and includes network and premises based systems such as centrex, private branch exchange or pbx, and hybrid key telephone systems, but does not include key telephone systems.

Multi-line telephone system operator means a person or entity that owns, leases, or rents and manages or operates a multi-line telephone system through which an end user may place a 911 call through the public switched network.

Network components means any software or hardware for a control switch, other switch modification, trunking or any components of a computer storage system or database used for selective routing of 911 calls, automatic number identification and automatic location.

New means any multi-line telephone system acquired, installed, introduced, established, or replaced on or after July 1, 2009.

Private branch exchange or PBX means a private telephone switch that is connected to the public switched telephone network.

Private switch automatic location identification or PSALI means a service option that provides enhanced 911 service features for multi-line telephone systems.

Public safety answering point or PSAP means a facility assigned the responsibility of receiving 911 calls and, as appropriate, directly dispatching emergency response services or transferring or relaying emergency 911 calls to other public or private safety agencies or other PSAPs.

Primary Public Safety Answering Point or Primary PSAP means a facility equipped with ANI and ALI displays, and is the first point of reception of a 911 call. It serves the municipality in which it is located, and other cities and towns as may be determined by the department.

Public switched telephone network means the network of equipment, lines, and controls assembled to establish communication paths between calling and called parties in North America.

Regional PSAP means a PSAP that is operated by or on behalf of two or more municipalities of the commonwealth as a Primary PSAP for, at a minimum, the inter-municipal operation of enhanced 911 call taking and call transfer activities. Such facility may also be engaged in, pursuant to inter-municipal agreements in force, the dispatching, or control of public safety resources serving several jurisdictions.

Residential unit means a private home, townhouse, condominium, apartment, mobile home, cabin, cottage, or residential unit in a governmental public housing facility.

School means a private or public educational institution, college, or university, whether day or residential.

School multi-line telephone system means a multi-line telephone system that provides service to a school campus, complex, or facility, including the portions of a dormitory, sleeping unit, living unit, apartment building, boarding hall, structure, or facility suitable for use as a housing facility for students, faculty, officers, or employees.

Shared residential multi-line telephone system means a multi-line telephone system that provides service to residential subscribers or end users.

Station means a specific telephone station on a multi-line telephone system.

Substantially Renovated means (1) having the increased capacity of incoming lines or stations of a multi-line telephone system by more than 50 per cent of its previous capacity on or after July 1, 2009, regardless of whether the increased capacity results from one action or from multiple actions, or a series of or combination of actions that occur over time and that, taken together, result in an increased capacity of incoming lines or workstations by more than 50 per cent of its capacity as existed at the time of the first such action taken on or after July 1, 2009; or (2) having all or substantially all of the hardware, structural, or operating components of a multi-line telephone system upgraded, rehabilitated, altered, or replaced on or after July 1, 2009.

Subscriber means a person who uses communication services.

Unit Identifier means a room name or number, unit name or number, or equivalent designation of a portion of a structure or building. For buildings or structures used, rented, occupied or hired out for sleeping or residential purposes or containing living quarters, a unit identifier means a room name or number or unit name or number.

VoIP or Voice Over Internet Protocol means a type of internet protocol-enabled service that allows for the two-way real time transmission of voice communications and has access to the public switched network.

Workspace means an indoor area, structure or facility or a portion thereof, occupied by one or more employees during the course of employment, or other enclosed spaces where the employer has the right or authority to exercise control over the space.

4.04: Standards Governing Multi-Line Telephone Systems

Beginning July 1, 2009, all new or substantially renovated multi-line telephone systems shall provide to end users or subscribers the same level of enhanced 911 service that is provided to other end users or subscribers in the commonwealth. The service shall include, but not be limited to, ALI and ANI that meets, at a minimum, the applicable standards set forth in this part

4.04. Beginning July 1, 2009, each operator of a new or substantially renovated multi-line telephone system shall provide (1) a Call Back Number; and (2) PSALI to the station level, or an ERL Identifier. For structures or buildings located in the commonwealth, such information shall be transmitted to the appropriate jurisdictional PSAP.

If a multi-line telephone system requires a caller to dial a prefix, such as the digit 9, before dialing any outgoing call, the multi-line telephone system operator shall make a diligent effort to ensure that subscribers or end users are aware of the procedures for calling for emergency assistance. This requirement shall apply to all multi-line telephone system operators, even if such operator is providing service subject to an authorized waiver.

(1) Shared Residential Multi-Line Telephone Systems

Each operator of a shared residential multi-line telephone system shall transmit to the PSAP one ANI and one ALI for each residential unit.

(2) Business or Entity, and Governmental Agency Multi-Line Telephone Systems

Each operator of a business or entity multi-line telephone system and each operator of a governmental agency multi-line telephone system shall transmit to the PSAP the street address and an ERL Identifier that provides at least the building and floor location of the caller.

Each operator of a business or entity multi-line telephone system and each operator of a governmental agency multi-line telephone system shall, for buildings having their own street address or a common street address and containing workspace of 22,500 square feet or less, transmit to the PSAP at least one ANI and at least one ERL Identifier that provides a street address and a unit identifier for each building.

Each operator of a business or entity multi-line telephone system and each operator of a governmental agency multi-line telephone system shall, for buildings having their own street address or a common street address and containing workspace of more than 22,500 square feet, transmit to the PSAP at least one ANI per 22,500 square feet of workspace and at least one ERL Identifier per 22,500 square feet of workspace that provides a street address and a unit identifier for each building.

The operators of the following multi-line telephone systems shall not be required to provide more than one ERL Identifier:

(a) A business or entity or governmental agency multi-line telephone system with workspace less than 7,000 square feet and located on a single contiguous property;

(b) A business or entity or governmental agency multi-line telephone system with fewer than 49 stations and occupying not more than 22,500 square feet and located on a single contiguous property.

The square footage measurement includes, but not is limited to, hallways, lobbies, conference rooms, restrooms, breakrooms, elevators, laboratories, warehouse space, and other areas where the employees or the public have access on a regular basis, but does not include wall thickness, shafts, heating or ventilation spaces, mechanical or electrical spaces or other areas not ordinarily accessible to employees or the public.

Each operator of a business or entity multi-line telephone system and each operator of a governmental agency multi-line telephone system shall, for multi-line telephone system telephones provided to users for use off-premises beyond the workspace of such business or entity or governmental agency, provide written instructions that clearly and accurately inform each user how to place an emergency call from the multi-line telephone system telephone.

(3) Hotel/Motel Multi-Line Telephone Systems

Each operator of a hotel or motel multi-line telephone system shall ensure that the system clearly identifies the street address and a unit identifier of the caller through the delivery to the PSAP of ANI, an ERL Identifier, or both, and that provides the PSAP with the ability to retrieve the ALI. Each operator of a hotel/motel multi-line telephone system shall be subject to this subsection (3) and shall not be subject to the requirements applicable to operators of business or entity or governmental agency multi-line telephone systems set forth above in subsection (2).

(4) School Multi-Line Telephone Systems

Each operator of a school multi-line telephone system shall ensure that the system clearly identifies the street address and a unit identifier of the caller through the delivery to the PSAP of ANI, an ERL Identifier, or both, and that provides the PSAP with the ability to retrieve the ALI. Each operator of a school multi-line telephone system shall be subject to this subsection (4) and shall not be subject to the requirements applicable to operators of business or entity or governmental agency multi-line telephone systems set forth above in subsection (2).

4.05: ALI Database Maintenance

Each operator of a multi-line telephone system, except those granted a waiver from the requirements of 560 CMR 4.00, shall update the ALI Database with Master Street Address Guide validation as soon as practicable for new multi-line telephone systems or within one business day following completion of the substantial renovation of an existing multi-line telephone system.

To the extent that the operator of a multi-line telephone system assigns the direct inward dialing number of the station or ERL as the ALI Database record indicator, updates to the ALI Database shall match the direct inward dialing number ALI Database record indicator. The updates shall provide valid address and callback information for such multi-line telephone system.

4.06: Waivers

The operator of a multi-line telephone system may seek a waiver from the requirements of 560 CMR 4.00 from the department. The multi-line telephone system operator shall provide notice to the department that it seeks such a waiver stating the grounds thereof and setting forth information in support of its request for a waiver. The proponent of the waiver shall demonstrate that compliance with the requirements of 560 CMR 4.00 is technologically infeasible or of excessive cost without public benefit. The department may deny a request for a waiver, grant a waiver upon a showing that compliance with the requirements of 560 CMR 4.00 is technologically infeasible or of excessive cost without public benefit, or grant a waiver with such conditions as are necessary to ensure the public safety.

4.07: Recordkeeping and Enforcement

Each operator of a multi-line telephone system shall maintain, and shall make available to the department for inspection, its books and records in a manner that will permit the department to determine compliance with the provisions of 560 CMR 4.00.
Primary or regional PSAPs may require the operator of a multi-line telephone system to conduct testing to confirm that such multi-line telephone system provides the same level of enhanced 911 service that is provided to others in the commonwealth.

4.08: Severability

If any provision of 560 CMR 4.00, or the application thereof, is held, adjudged, or deemed invalid, such finding of invalidity shall not affect other provisions or application, and to that end the provision of 560 CMR 4.00 are severable.

REGULATORY AUTHORITY

M.G.L. c. 6A, § 18J, M.G.L. c. 30A

EXHIBIT B

560 CMR 2.00: STATE 911 DEPARTMENT STANDARDS FOR ENHANCED 9•1•1

Appendix A

DEFINITIONS

Abandoned Call: a call placed to 9-1-1 in which the caller disconnects before the call can be answered by the PSAP attendant.

ADA: Americans with Disabilities Act of 1990.

Agency: the organization responsible for administering, directing and managing the affairs and business of the Board, under the direction of an Executive Director.

Alternate Routing: the capability of automatically rerouting 9-1-1 calls to a designated alternate location(s) if all 9-1-1 trunks from a central office or to a PSAP are in a "make busy" mode or out of service. May also be activated upon request, or automatically if detectable, when 9-1-1 equipment fails or the PSAP itself is disabled.

Alternative Local Exchange Carrier (ALEC): [also known as CLEC - Competitive Local Exchange Carrier] a company which provides local telephone exchange service in competition with Bell Atlantic.

American Sign Language (ASL): a visual language based on hand shape, position, movement, and orientation of the hands in relation to each other and the body.

Answering Position: an appropriately equipped location within a PSAP that is used to receive incoming 9-1-1 calls.

Approved by the Board: a simple majority vote by members of the Statewide Emergency Telecommunications Board taken at a public meeting of the Board at which quorum of the Board is present.

ASCII: an acronym for American Standard Code for Information Interexchange which employs an eight bit code for the purpose of transmitting data.

Audible Signal: a sound which indicates an incoming 9-1-1 call.

Auto Dial: a PSAP function which allows an attendant to dial an outgoing programmable telephone number with a single button.

Automatic Call Distributor (ACD): equipment that distributes incoming calls to available PSAP attendants in the order the calls are received, or holds calls until an attendant becomes available.

Automatic Number Identification (ANI): an Enhanced 9-1-1 service capability that allows for the automatic display of the telephone number used to place a 9-1-1 call.

Automatic Location Identification (ALI): an Enhanced 9-1-1 service capability that allows for the automatic display of information relating to the geographical location of the telephone used to place a 9-1-1 call.

Average Busiest Hour: the one hour period during the week statistically shown over time to be the hour in which the most emergency telephone calls are received.

Barge-In Capability: the capability for multiple PSAP operators to establish simultaneous access to any emergency line or trunk in prior use for the purpose of assisting fellow personnel with difficult calls.

Baudot: a seven bit code, only five of which are information bits. Baudot is used by text telephones to communicate with each other.

Board: the Statewide Emergency Telecommunications Board.

CAD Interface: the means of automatically introducing the ALI data into a computer aided dispatch (CAD) system, rather than manually entering the information.

Call Relay: disposition of a 9-1-1 call by the notation of pertinent information by the PSAP attendant who forwards the information to the appropriate agency.

Call Referral: disposition of a 9-1-1 call by advice to the caller of the appropriate numbers to call other than 9-1-1.

Call Transfer: the extending of a 9-1-1 call by a PSAP attendant to connect the caller with the appropriate agency.

Central Office: a telephone company facility that houses the switching and trunking equipment serving telephones in a defined area.
Central Office Modification: hardware and/or software changes to a telephone company central office to specifically accommodate Enhanced 9-1-1 service.

Central Office Upgrade: scheduled hardware and/or software changes to a telephone company central office to improve the overall telephone service from that site.

Computer Aided Dispatch (CAD): a computer-based system intended to increase the efficiency and accuracy of public safety call handling and dispatching.

Dedicated Trunk: a telephone circuit used for one purpose only; i.e., transmission of 9-1-1 calls.

Dedicated Network: a point to point or multipoint network where resources (switching or transmission facility) are reserved for a particular customer or type of traffic.

Default Routing: the capability to route a 9-1-1 call to a designated (default) answering point when the incoming 9-1-1 call cannot be selectively routed due to an *ANI* failure, garbled digits, or other cause.

Duplicate Street Name: a street name in which the name and any associated designator is exactly the same (example: Pine St. and Pine St.; NOT Pine St. and Pine Rd.)

Diverse Routing: the practice of routing calls through different circuit paths in order to prevent total loss of the 9-1-1 system in the event an individual circuit is disabled.

DMS: Data Management System, a system of manual procedures and computer programs used to create, store and update the data required for selective routing and ALI information in support of Enhanced 9-1-1.

DPU: (Massachusetts) Department of Public Utilities.

DPU Annual Report: the document that the telephone company must file with DPU concerning the residential directory assistance revenues and related programs funded from those revenues, including Enhanced 9-1-1.

Emergency Service Zone: a defined geographical territory consisting of a specific combination of law enforcement, fire, and emergency medical service coverage areas.

EMS: Emergency Medical Services. Municipal based or private, under municipal contract or volunteer rescue squads or hospital based Advanced Life Support agency/providers, whose sole purpose is to provide EMS to a municipality or group of municipalities.

BLS: Basic Life Support. An EMS agency providing a level of basic life support service to a community.

ALS: Advanced Life Support. Advanced EMS provided by Paramedics or EMTs with advanced training and who may not necessarily be part of a community's BLS service.

Enhanced 9-1-1 Equipment: equipment located at the PSAP or controller type equipment located at the telephone company central office that provides or supports Enhanced 9-1-1 capability.

Fixed Transfer: the capability of a PSAP attendant to transfer a 9-1-1 call using a single button.

FX: Foreign Exchange

Foreign Exchange: a service connecting a telephone to a remote exchange providing the equivalent of local service from the distant exchange.

Host-Remote: the relationship between conventional central office switching equipment and a Remote Switching Unit (RSU) in another facility which usually has limited capability and may not be able to function independently if connecting links from the host office are interrupted.

Identical Street Name: (see Duplicate Street Name)

Instant Playback Recorder: a device that allows for the instant playback of the audio portion of the last 9-1-1 call.

Logging Recorder: a device which records date, time, voice, and TDD/TT communications, and other transactions involved in the processing of calls to the PSAP.

MCO: Maintenance Control Office

Municipality: any city or town in Massachusetts

MSAG: Master Street Address Guide

NET: New England Telephone and Telegraph Company or Bell Atlantic or successors.

PBX: Private Branch Exchange, a private telephone system allowing communications within a business and between a business and the outside world.

Public Safety Answering Point (PSAP): a facility assigned the responsibility of receiving 9-1-1 calls and, as appropriate, directly dispatching emergency response services or transferring or relaying emergency 9-11 calls to other public or private safety agencies.

A Primary Public Safety Answering Point is equipped with automatic number identification and automatic location identification displays, and is the first point of reception of a 9-1-1 call. It serves the municipality in which it is located, and in other cities and towns as may be determined by the Board. It is recommended as a system goal, that a primary PSAP be located in a centralized, consolidated radio dispatch facility that serves all public safety agencies in a region or municipality.

Secondary Public Safety Answering Point: a facility equipped with automatic number identification, automatic location identification displays and all other features common to primary PSAPs. It receives 91-1 calls only when they are transferred from the primary PSAP or on an alternate routing basis when calls cannot be completed to the Primary PSAP.

Limited Secondary Public Safety Answering Point: a facility equipped, at a minimum, with *ANI*/ALI display/printout capability. It receives 9-1-1 calls only when they are transferred from the primary PSAP or on an alternate routing basis when calls cannot be completed to the primary PSAP. Data sent to a limited secondary PSAP cannot be re-routed to another location and may not necessarily be transmitted simultaneously with the voice call.

Public Switched Network: a multipoint network which provides the capability to establish connections to essentially all customers regardless of location.

Redundancy: having one or more "backup" systems available in case of failure of the main system.

Regional PSAP: a PSAP which is operated by or on behalf of two or more municipalities of the

Commonwealth as a Primary PSAP for, at a minimum, the inter-municipal operation of Enhanced 9-11 call taking and call transfer activities. Such facility may also be engaged in, pursuant to intermunicipal agreements in force, the dispatching, or control of public safety resources serving several jurisdictions.

Ringing Public Safety Answering Point: a facility equipped for the receipt of voice communications only, and may not necessarily operate 24 hours each day. It receives 91-1 calls that are transferred from the primary PSAP.

Selective Routing: the method to direct 9-1-1 calls to the appropriate PSAP based upon the geographical location from which the call was placed.

Shall: indicates a mandatory obligation to act.

Should: indicates a recommendation or that which is advised but not required.

Silent Call: a 9-1-1 call received at a PSAP and no audible voice or tone is received.

Supervisory Call Monitoring: the capability for supervisory personnel to listen to calls in progress for purposes of quality assurance and training.

Tandem: a switching system in the Enhanced 9-1-1 telephone network that establishes 9-1-1 call routing.

TDD/TT/TTY: a telecommunications device consisting of modems that permit typed telephone conversations with or between deaf, hard of hearing or speech impaired people.

TDD Call Diverter: a device that monitors and detects Baudot tones and then automatically routes the TDD call to a specified position.

TDD Detector: a device that monitors a trunk for Baudot tones and upon recognition, indicates the receipt of that type of call with a response sequence.

Telephone Company: includes all persons, firms, corporations, associations and joint stock associations or companies, as defined in M.G.L. c. 159 furnishing or rendering local telephone exchange service.

Text Telephone (TT): a machine that employs graphic communication in the transmission of coded signals through a wire or radio communications system. TT is interchangeable with the term "TDD" or "telecommunications device for the deaf." Trunk: incoming 9-1-1 circuit.

Trunk Seizure: the point at which a call is assigned to a trunk and acknowledgment is provided by the 9-1-1 call processing equipment.

Uninterruptible Power Supply (UPS): a system designed to provide power, without delay or transients, during a period when the normal power supply is incapable of performing acceptably. (NFPA 1221)

EXHIBIT C: KARI'S LAW

Public Law 115–127
115th Congress
Feb. 16, 2018 [H.R. 582] Kari's Law Act of 2017

An Act

To amend the Communications Act of 1934 to require multi-line telephone systems to have a configuration that permits users to directly initiate a call to 9–1–1 without dialing any additional digit, code, prefix, or post-fix, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Kari's Law Act of 2017''.

SEC. 2. CONFIGURATION OF MULTI-LINE TELEPHONE SYSTEMS FOR DIRECT DIALING OF 9–1–1.

(a) IN GENERAL.—Title VII of the Communications Act of 1934 (47 U.S.C. 601 et seq.) is amended by adding at the end the following:

''SEC. 721. CONFIGURATION OF MULTI-LINE TELEPHONE SYSTEMS FOR DIRECT DIALING OF 9–1–1.

''(a) SYSTEM MANUFACTURE, IMPORTATION, SALE, AND LEASE.—
A person engaged in the business of manufacturing, importing, selling, or leasing multi-line telephone systems may not manufacture or import for use in the United States, or sell or lease or offer to sell or lease in the United States, a multi-line telephone system, unless such system is pre-configured such that, when properly installed in accordance with subsection (b), a user may directly initiate a call to 9–1–1 from any station equipped with dialing facilities, without dialing any additional digit, code, prefix, or post- fix, including any trunk-access code such as the digit '9', regardless of whether the user is required to dial such a digit, code, prefix, or post-fix for other calls.

''(b) SYSTEM INSTALLATION, MANAGEMENT, AND OPERATION.—
A person engaged in the business of installing, managing, or operating multi-line telephone systems may not install, manage, or operate for use in the United States such a system, unless such system is configured such that a user may directly initiate a call to 9–1–1 from any station equipped with dialing facilities, without dialing any additional digit, code, prefix, or post-fix, including any trunk-access code such as the digit '9', regardless of whether the user is required to dial such a digit, code, prefix, or post-fix for other calls.

''(c) ON-SITE NOTIFICATION.—A person engaged in the business of installing, managing, or operating multi-line telephone systems shall, in installing, managing, or operating such a system for use in the United States, configure the system to provide a notification to a central location at the

facility where the system is installed or to another person or organization regardless of location, if the system is able to be configured to provide the notification without an improvement to the hardware or software of the system.

''(d) EFFECT ON STATE LAW. - Nothing in this section is intended to alter the authority of State commissions or other State or local agencies with jurisdiction over emergency communications, if the exercise of such authority is not inconsistent with this Act.

''(e) ENFORCEMENT. - This section shall be enforced under title V, except that section 501 applies only to the extent that such section provides for the punishment of a fine.

''(f) MULTI-LINE TELEPHONE SYSTEM DEFINED. - In this section, the term 'multi-line telephone system' has the meaning given such term in section 6502 of the Middle Class Tax Relief and Job Creation Act of 2012 (47 U.S.C. 1471).''.

EFFECTIVE DATE. - The amendment made by subsection (a) shall apply with respect to a multi-line telephone system that is manufactured, imported, offered for first sale or lease, first sold or leased, or installed after the date that is 2 years after the date of the enactment of this Act.

Approved February 16, 2018.