# 560 CMR 2.00: State 911 Department

# Standards for 911/Next Generation 911

# Appendix A

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### **Definitions and Abbreviations**

<u>911 Service Provider</u> means any entity that provides one or more of the following 911 elements: network, database or PSAP customer premises equipment.

<u>911 Service</u> 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. Massachusetts has replaced its legacy Enhanced 911 (E911) Services based system with a Next Generation 911 System (NG911).

<u>Abandoned Call</u> means a call placed to 911 in which the caller disconnects before the call can be answered by the PSAP.

<u>Aggregation Point</u> means a hardware device, software program or application that collects data or information from one or more end points.

<u>Alternate Route</u> means the capability of routing 911 payload to a designated alternate PSAP(s) when predetermined conditions inhibiting the processing of payload are occurring at the PSAP of Jurisdiction.

Americans with Disabilities Act or ADA means the Americans with Disabilities Act of 1990.

<u>Automatic Location Identification (ALI)</u> means a 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.

<u>Automatic Number Identification (ANI)</u> means a 911 service capability that allows for the automatic display of a telephone number used to place or route a 911 call.

<u>Behavioral Health Crisis</u> means any situation in which a person's behavior puts them at risk of hurting themselves or others and/or prevents them from being able to care for themselves or function effectively in the community.

<u>Call Back</u> means the action of a PSAP to attempt to initiate contact with a subscriber or end user by any means appropriate for rapid 2-way communications including but not limited to voice calls or text messages.

<u>Certified Emergency Medical Dispatch Resource (CEMDR)</u> means a limited secondary PSAP, primary PSAP, regional PSAP, regional secondary PSAP, secondary PSAP, RECC, wireless state police PSAP, or private safety department that is equipped to provide ANI and ALI displays and that is approved by the Department to provide emergency medical dispatch services for a PSAP or RECC through emergency medical dispatchers.

<u>Civic Address</u> means the location assigned by the <u>Municipal Addressing Authority</u> in accordance with NENA Next Generation 911- (NG911) United States Civic Location Data Exchange Format (CLDXF) Standard NENA-STA-004.1.1-2014, March 23, 2014.

Commission means the State 911 Commission.

<u>Communication Services</u> means and includes any of the following: (a) the transmission, conveyance or routing of real-time, two-way voice communications to a point or between or among points by or through any electronic, radio, satellite, cable, optical, microwave, wireline, wireless or other medium or method, regardless of the protocol used; (b) the ability to provide two-way voice communication on the public switched network; (c) wireless 911 service; (d) wireline 911 service; (e) interconnected VoIP provider service as defined by the regulations of the FCC regulations; (f) IP -enabled service; or (g) prepaid wireless service.

<u>Communication Service Provider (CSP)</u> means an entity that provides communication services to a subscriber or end user.

<u>Computer Aided Dispatch (CAD)</u> means a computer-based system, which aids PSAP telecommunicators by automating selected dispatching and record keeping activities.

Department means the State 911 Department.

<u>Device</u> means a mechanical or electronic device with the capability to initiate a 911 call/payload.

Director means the Executive Director of the State 911 Department.

<u>Dispatchable Location Information</u> means the location delivered to the PSAP with a 911 call that consists of the validated Location Database (LDB) street address of the calling party, plus additional location information such as: building name or number (if more than one building shares the same street address), floor number (if more than one floor), suite name or number, apartment name or number, and room name or number or similar location information necessary to adequately identify the location of the calling device. ERL Identifiers and Unit Identifiers are forms of dispatchable location information. For devices located in sleeping and/or living quarters, dispatchable location information shall include a room name or number.

<u>Dispatchable Location Discrepancy</u> means the form/process used by telecommunicators to report insufficient, erroneous, or lack of dispatchable location information.

<u>Emergency Medical Dispatch</u>: means the management of requests for emergency medical assistance by utilizing a system of: (a) tiered response or priority dispatching of emergency medical resources based on the level of medical assistance needed by the victim; and (b) pre-arrival first aid or other medical instructions given by trained personnel responsible for receiving 911 calls and directly dispatching emergency response services.

<u>Emergency Response Location or ERL</u> means a location, associated with one or more ANIs, established to provide a specific destination and search area for first responders.

<u>Emergency Response Location or ERL identifier</u> 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.

Emergency Call Routing Function means a functional element in NGCS (Next Generation Core Services) which is a LoST protocol server where location information (either civic address or geo-coordinates) and a Service URN serve as input to a mapping function that returns a URI used to route an emergency call toward the appropriate PSAP for the caller's location or towards a responder agency.

<u>Emergency Service Number</u> means A 3 to 5 digit number that represents one or more Emergency Service Zones (ESZs). An ESN is defined as one of two types: Administrative ESN and Routing ESN. ESNs and the MSAG are no longer used in Massachusetts.

Emergency Service Zone (ESZ) means a geographical area that represents a unique combination of Service Boundaries for emergency service agencies (e.g., Law Enforcement, Fire and Emergency Medical Service) that is within a specified 911 governing authority's jurisdiction as determined by the Department.

<u>Emergency Subscriber Lookup</u> means an action performed by Communication Service Providers, when requested by a PSAP during exigent circumstances, where the subscriber's contact, billing, or other information is provided to the PSAP.

**End User** means a person who uses communication services.

<u>NG911 ESInet</u> means a managed IP network that is used for emergency services communications, and which can be shared by all public safety agencies. It provides the IP transport infrastructure upon which independent application platforms and core services can be deployed, including, but not restricted to, those necessary for providing NG9-1-1 services. The term ESInet designates the network, not the services that ride on the network

<u>Exigent Circumstances</u> means circumstances that would cause a reasonable person to believe that an immediate action is necessary to ensure public safety.

FCC means the Federal Communications Commission.

<u>FCC Order</u> means all orders issued by the FCC under the proceeding entitled "Revision of the Commission's Rules to Ensure Compatibility with 911 Emergency Calling Systems" (CC Docket No. 94102; RM 8143), or any successor proceeding, including all other criteria established therein, regarding the delivery of wireless 911 service by a wireless carrier, and all orders issued by the FCC under the proceeding entitled "In the Matter of IP-Enabled Services; 911 Requirements for IP-Enabled Service Providers" (WC Docket No 05-196), or any successor proceeding, including all other criteria established therein, regarding the delivery of 911 service by an IP-enabled service provider.

<u>Final Route</u> means the final route is received at the PSAP of last resort where payload will ring until answered or terminated by the CSP.

<u>Fixed Device (e.g. wired telephones/desktop computers)</u> means devices that cannot be readily moved from one location to another by the user.

<u>i3</u> means to the Next Generation 911 (NG911) system architecture defined by NENA, which standardizes the structure and design of Functional Elements making up the set of software services, databases, network elements and interfaces needed to process multi-media emergency calls and data for NG911.

<u>Incumbent Local Exchange Carrier (ILEC)</u> means any local exchange carrier that was as of February 8, 1996, deemed to be a member of the Exchange Carrier Association as set forth in 47 C.F.R. §69.601(b) of the FCC's regulations.

<u>Interconnected VoIP service</u> means voice over the internet protocol services as defined by the FCC in 47 CFR 9.3.

<u>IP-enabled service</u> means a service, device or application which makes use of Internet Protocol, or IP, and capable of entering the digits 911, or by other means as approved by the Department, for the purposes of interconnecting users to the 911 system including, but not limited to, voice over IP and other services, devices, or applications provided through or using wireline, cable, wireless, or satellite facilities or any other facility that may be provided in the future.

<u>Limited secondary PSAP</u> means a PSAP equipped, at a minimum, with automatic number identification and automatic location identification display or printout capability. It receives 911 calls only if transferred from 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.

Interoperability means the capability for disparate systems to communicate with one another.

<u>Internet Protocol (IP)</u> means the method by which data is sent from one computer to another on the Internet or other networks.

<u>Kari's Law</u> means H.R. 582 - Kari's Law Act of 2017 (47 U.S.C. § 623). Kari's Law requires direct 911 dialing and notification capabilities in multi-line telephone systems (MLTS), which are typically found in enterprises such as office buildings, campuses, and hotels. The statute provides that these requirements take effect on February 16, 2020, two years after the enactment date of Kari's Law. In addition, Kari's Law and the federal rules are forward-looking and apply only with respect to MLTS that are manufactured, imported, offered for first sale or lease, first sold or leased, or installed after February 16, 2020.

<u>Location Information Server (LIS)</u> means a functional element that provides locations of endpoints. A LIS can provide Location-by-Reference, or Location-by-Value, and, if the latter, in geodetic or civic forms. A LIS can be queried by an endpoint for its own location, or by another entity for the location of an endpoint. In either case, the LIS receives a unique identifier that represents the endpoint, for example an IP address, circuit-ID, or Media Access Control (MAC) address, and returns the location (value or reference) associated with that identifier. The LIS is also the entity that provides the dereferencing service, exchanging a location reference for a location value.

<u>Local Exchange Service</u> means telephone exchange lines or channels that provide local access from the premises of a subscriber in the Commonwealth to the local telecommunications network to effect the transfer of information.

<u>Location Database (LDB)</u> means a server that retains all the current information, functionality, and interfaces of today's ALI and can utilize the new protocols required in an NG911 deployment.

<u>Location Validation Function (LVF)</u> means a functional element in a Next Generation Core Services (NGCS) that is a Location to Service Translation (LoST) protocol server where civic location information is pre-validated against the authoritative Geographic Information Services (GIS) database information.

<u>LoST Protocol</u> means a protocol that takes location information and a Service URN and returns a URI. Used generally for location-based call routing. In NG911, used as the protocol for the ECRF and LVF.

Mass GIS means the Massachusetts Bureau of Geographic Information

<u>Master Address Database (MAD)</u> means a database that is used for compiling, standardizing, editing and maintaining addresses for the Next Generation 911 system project. Master Address Database is the

definitive address source for 911's LDB, LIS, or equivalent. Massachusetts has replaced the Master Street Address Guide (MSAG) with the MAD and the LDB in our NG911 System.

<u>Master Street Address Guide (MSAG)</u> means a database of street names and house number ranges within their associated communities defining ESZs and their associated ESNs to enable proper routing of 911 calls. ESNs and the MSAG are no longer used in Massachusetts.

<u>Multi-line Telephone System (MLTS)</u> means a system comprised of common control units, telephone sets, control hardware and software and adjunct systems, including network and premises based systems, such as Centrex and VoIP, as well as PBX, Hybrid, and Key Telephone Systems (as classified by the FCC under 47 CFR Part 68), and the full range of networked communications systems that serve enterprises, including circuit-switched and IP-based enterprise systems, as well as cloud-based IP technology and over-the-top applications. Systems owned or leased by governmental agencies and nonprofit entities, as well as for-profit businesses are all included in Multi-line Telephone System.

<u>Municipal Addressing Authority</u> means the required municipal official, body, or delegate that is responsible for addressing within the municipality.

NENA means the National Emergency Number Association.

<u>Network components</u> 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 identification, including a PSAP.

<u>Next Generation 911 (NG911)</u> means an 911 system that incorporates the handling of all 911 calls and messages, including those using IP-enabled services or other advanced communications technologies in the infrastructure of the 911 system itself.

<u>Non-Fixed Devices</u> means devices (e.g. tablets/laptops/apps on smartphones) that can be readily moved from one location to another by the user. The device does not necessarily need to be unplugged to maintain a connection.

<u>On-premises</u> means within the property's physical boundaries any devices connected to the network or system and under the operational control of a single administrative authority. If a MLTS services multiple properties all are considered on-premise.

Payload means communication being received by a PSAP via the 911 system.

<u>Prepaid Wireless Telephone Service</u> means wireless service that is activated in advance by payment for a finite dollar amount of service or minutes that terminates either upon use by a customer and delivery by the wireless provider of an agreed-upon amount of service or minutes, unless the customer makes additional payments.

<u>Prepaid Wireless Telephone Service Provider</u> means an entity providing prepaid wireless telephone service at retail or wholesale.

<u>Presence Information Data Format – Location Object (PIDF-LO)</u> means a format that provides a flexible and versatile means to represent location information in a (Session Initiation Protocol (SIP) header using an eXtensible Markup Language (XML) schema.

<u>Primary PSAP</u> means a PSAP equipped with automatic number identification and automatic location identification displays and is the first point of reception of a 911 call. It serves the municipality in which it is located.

<u>Private Branch Exchange (PBX)</u> means a private telephone switch that is connected to the Public Switched Telephone Network.

<u>Private Safety Department</u> means an entity, except for a municipality or a public safety department, that provides emergency police, fire, ambulance or medical services.

<u>Public Safety Answering Point (PSAP)</u> 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.

<u>PSAP Administration</u> means the activities associated with managing a PSAP, such as personnel matters, the 911 grant process, scheduling work shifts, and training,

<u>PSAP Administrator</u> means a person or persons designated by a municipality (or in the case of a Regional PSAP, by two or more municipalities or governmental bodies or a combination thereof) to have the authority to function as the primary contact for communication between the PSAP and the Department concerning matters of PSAP Administration (as defined herein).

<u>PSAP Customer Premises Equipment (CPE)</u> means 911 call processing equipment located at a PSAP.

<u>PSAP of Jurisdiction</u> means the Primary, Regional PSAP, or RECC where payloads originating from a particular Emergency Service Zone (or combination of ESZs) are routed to.

<u>PSAP Operations</u> means the activities associated with telecommunicators at a PSAP answering and handling 911 payload and dispatching public safety resources, if required, per the circumstances relative to the 911 call.

<u>PSAP Supervisor</u> means a person or persons designated by a municipality (or in the case of a Regional PSAP - by two or more municipalities or governmental bodies or a combination thereof) to have the authority to function as the primary contact for communication between the PSAP and the Department concerning matter of PSAP Operations.

<u>Public Safety Department</u> means a functional division of a municipality or a state that provides firefighting, law enforcement, ambulance, medical or other emergency services.

RAY BAUM'S Act means Section 506 of the RAY BAUM'S Act (47 U.S.C. § 615 note), which requires that "dispatchable location" information is to be conveyed with 911 calls, regardless of the technology used, so that PSAPs will receive the caller's location automatically and can dispatch responders quickly and accurately locate the caller. Dispatchable location information includes the street address of the caller and additional information, such as a room or floor number, or similar information necessary to adequately identify the location of the calling party as quickly as possible.

<u>Regional Emergency Communication Center (RECC)</u> means a facility operated by or on behalf of 2 or more municipalities or governmental bodies, or combination thereof, as approved by the department, that enter into an agreement for the establishment and provision of regional dispatch and coordination of emergency services for all such municipalities or governmental bodies including, but not limited to, a

regional PSAP that provides 911 service and police, fire protection, and emergency medical services dispatch, including services provided by a private safety department. The regional PSAP portion of the center shall be equipped with automatic number identification and automatic location identification displays, as approved by the department, and is the first point of reception of a 911 call.

Regional PSAP means a PSAP operated by or on behalf of 2 or more municipalities or governmental bodies, or combination thereof, approved by the department, for the operation of 911 call taking and call transfer activities. A regional PSAP may also be engaged in, by agreement, the dispatching or control of public safety resources serving some or all of the municipalities or governmental bodies that comprise the regional PSAP, including where services are provided by a private safety department. If the regional PSAP serves all such municipalities or governmental bodies for the operation of 911 call taking and call transfer activities and dispatch services including where dispatch services are provided by a private safety department, it shall be considered a regional emergency communication center for the purposes of MGL, c. 6A § 18B. The regional PSAP shall be equipped with automatic number identification and automatic location identification displays, as approved by the department, and is the first point of reception of a 911 call.

Regional Secondary PSAP means a facility operated by or on behalf of 3 or more municipalities or governmental bodies, or a combination thereof, approved by the department, that enter into an agreement for the establishment and provision of regional dispatch and coordination of either police, fire protection or emergency medical services, or any combination thereof. A regional secondary PSAP is equipped with automatic number identification and automatic location identification displays. It receives 911 calls only when transferred from a primary or regional PSAP or on an alternative routing basis when calls cannot be completed to the primary or regional PSAP.

<u>Retail</u> means sales by a prepaid wireless telephone service provider directly to the end user or to a nonprepaid wireless telephone service provider through a voluntary contractual relationship in which the service is sold directly to the end user on behalf of the prepaid wireless telephone service provider.

<u>Ringing PSAP</u> means a PSAP equipped for receipt of voice communications only and may not operate 24 hours each day. It receives 911 calls that are transferred from the primary PSAP.

<u>Secondary PSAP</u> means a PSAP equipped with automatic number identification and automatic location identification displays. It receives 911 calls only when they are transferred from the primary PSAP or on an alternative routing basis when calls cannot be completed to the primary PSAP.

<u>Selective Routing</u> means the method to direct 911 calls to the appropriate PSAP using a call routing database derived from the geographical location from which the call originated.

<u>Service Boundary</u> means a geographic area represented by a polygon in a GIS system, spatial interface, Emergency Call Routing Function (ECRF) or other Emergency Services IP Network (ESInet) element that indicates the area a particular agency serves.

<u>Service URN</u> means a URN with "service" as the first component supplied as an input in a LoST request to an ECRF to indicate which service boundaries to consider when determining a response. A Request URI with the service URN of "urn:service:sos" is used to mark a call as an emergency call.

Subscriber means a person who uses communication services.

<u>Telecommunicator</u> means an emergency response coordination professional trained to receive, answer, assess, and prioritize emergency payload(s) requests for assistance.

<u>Telephone Company</u> means a person, firm, corporation, association or joint stock association or company, as defined in chapter 159, furnishing or rendering local telephone exchange service.

<u>Trunk</u> means, typically, a communication path between central office switches, or between the 911 Control Office and the PSAP.

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

<u>Uniform Resource Identifier (URI)</u> means a compact sequence of characters that identifies an abstract or physical resource. This specification defines the generic URI syntax and a process for resolving URI references that might be in relative form, along with guidelines and security considerations for the use of URIs on the Internet. The URI syntax defines a grammar that is a superset of all valid URIs, allowing an implementation to parse the common components of a URI reference without knowing the schemespecific requirements of every possible identifier. This specification does not define a generative grammar for URIs; that task is performed by the individual specifications of each URI scheme. A Location URI (Uniform Resource Identifier) is a URI which, when dereferenced, yields a location value in the form of a PIDF-LO. Location-by-reference in NG9-1-1 is represented by a Location URI

<u>Voice over Internet Protocol (VoIP)</u> means a type of IP-enabled service that allows for the two-way real time transmission of voice communications and has access to the public switched network.

<u>Wholesale</u> means sales by the prepaid wireless telephone service provider to a non-prepaid wireless telephone service provider that sells service on behalf of the prepaid wireless telephone service provider.

<u>Wireless Carrier</u> means a commercial mobile radio service, as defined in 47 U S C 332(d), including resellers and prepaid providers of wireless services.

<u>Wireless 911 service</u> means the service required to be provided by wireless carriers under, and governed by, FCC order.

<u>Wireless State Police PSAP</u> means a state police facility assigned the responsibility of primarily or entirely receiving wireless 911 calls and, as appropriate, directly dispatching emergency response services or transferring or relaying emergency 911 calls to other public or private safety departments or other PSAPs.

<u>Wireline Carrier</u> means an incumbent local exchange carrier or local exchange carrier operating in the commonwealth, or a telephone company, or any other person, corporation or entity that provides local exchange service.

<u>Wireline 911 Service</u> means service provided by a wireline carrier that connects a subscriber dialing or entering the digits 911 to a PSAP.

### Statement on PSAP Responsibilities and Non-Compliance

As defined herein, PSAPs have obligations to provide a standardized level of service for 911 callers. If the PSAP is not in compliance with the following standards, the PSAP, upon written notice from the Department, shall submit a remediation plan within 30 days. If the remediation plan is not acceptable to the Department, is not followed, or if there exists exigent circumstances which would jeopardize public safety, the Department may deny grant assistance, and may take further action including redirection of 911 payload until the PSAP is in compliance. If the PSAP remains not in compliance after 6 months following notification by the Department, indefinite redirection of payload may be determined by the Department, until such time as the PSAP becomes compliant, pursuant to MGL, c. 6A Section 18B, et. seq. Nothing in this paragraph shall prevent the Department from redirecting payload due to exigent circumstances.

### Section 1: Addressing, Data Development and Maintenance

#### **Responsibilities of Municipalities**

- 1. <u>Municipal Addressing Authority</u>: All municipalities shall assign, appoint, or designate a Municipal Addressing Authority that is responsible for addressing within the municipality.
- 2. The designated Municipal Addressing Authority is responsible to assign a unique civic address, which shall include the street address and a building name or number (if more than one building shares the street address) and a floor identifier (if more than one floor per building). Additional structures (ie garage, shed) and floor requirements for single family residences may be excluded as appropriate.
- 3. Every geographical point intended for public safety response should receive a unique civic address including geographical points where providing an address facilitates expedited location validation and/or emergency response including but not limited to lifeguard stations, public parks, athletic fields, beaches, gazebos, or snack stands.
- 4. Duplicate civic addresses shall not be permitted. A duplicate street name is acceptable as long as each civic address is unique.
- 5. The designated Municipal Addressing Authority shall provide Mass GIS (or <u>Department's</u> designee) with new civic addresses as well as changes, deletions, and additions to existing civic addresses on an as occurred basis for inclusion in the MAD.
- 6. The designated Municipal Addressing Authority shall collaborate with the PSAP and other public safety partners to ensure municipal addressing standards are consistent with providing sufficient <a href="Dispatchable Location Information">Dispatchable Location Information</a> for the MAD.
- 7. Each Municipal Addressing Authority shall work with Mass GIS on a yearly basis, at a minimum, to review the MAD for accuracy with the standard being 98% accuracy of the statewide Master Address Database.
- 8. Best practices developed by Mass GIS must be followed. The following have been adopted by the <a href="Department">Department</a>:
  - a. The street name in the address shall be the one from which the property is accessed either directly or via an un-named access road.
  - b. Address numbers shall be assigned based on where the structure driveway or other access intersects the named street. Address numbers shall be assigned in sequence with odd on one side, even on the other, and numbers on both sides increasing in the same direction.
  - c. If two or more developed properties are accessed via an un-named access road (<u>i.e.</u>, a shared driveway), that road shall be named and numbers assigned accordingly.
  - d. Addresses accessed from streets in neighboring communities shall respect the street name, address town name (<u>i.e.</u>, the name of the neighboring community), numbering sequence, and parity of addresses in the neighboring community.
  - e. Address numbers shall be assigned to each building or at a minimum to each cluster of buildings on a single property that share access.
  - f. Address numbers shall not be assigned to individual units in a multi-story building unless there is a clear ground level separation of unit entry such as a town-house or row-house configuration.

9. All other aspects of addressing shall be done in accordance with <u>NENA's</u> Civic Location Data Exchange Format (CLXDF) Standard.

#### Responsibilities of PSAPs, RECCs, and Regional PSAPs

- 1. Each telecommunicator shall promptly report insufficient, erroneous, or missing <u>dispatchable</u> location information according to the procedures defined by the <u>Department</u>.
- 2. Each telecommunicator shall promptly report dispatchable location errors and insufficiencies according to the procedures defined by the Department.
- 3. Each PSAP shall assist the Department in enforcing sufficient Dispatchable Location Information standards.

#### Responsibilities of Mass GIS (or State 911 Designee)

- 1. Mass GIS shall receive the <u>civic address</u> data provided by the various municipalities and shall incorporate this data into the MAD.
- 2. The Master Address Database shall be the definitive address source for 911 in creating the <u>LDB</u>. The LDB shall be hosted and managed by a third party designated by the <u>Department</u>.
- 3. Mass GIS shall work with each <u>Municipal Addressing Authority</u> on a yearly basis to review the contents of the MAD to ensure the requisite dispatchable location information is available.

### Responsibilities of Communications Service Providers (CSPs)

- Communications Service Providers shall validate their ALI database, location database, or LIS, using the <u>LVF</u> against the Massachusetts' <u>LDB</u>. This shall be done at the time of service order input or equivalent. Validation at the time of the 911 call is not acceptable.
- All records should be validated periodically, and at least quarterly. Records that have been
  previously validated against a MSAG must be validated against the LDB using the <u>Location</u>
  <u>Validation Function</u>. MSAG databases are inadequate for Dispatchable Location purposes and
  have been replaced in the Commonwealth with the LDB.
- 3. If the location fails validation, the Communications Service Providers shall take immediate action to correct their location data and successfully validate within 24 hours.
- 4. Communications Service Providers shall include necessary supplemental location information (beyond the building/floor/unit level) in their location databases when and as required. This supplemental location information shall be sufficient to comply with the <a href="Department's">Department's</a> standard for Dispatchable Location Information as defined.
- 5. Communication Service Providers shall develop a process for rectifying inaccuracies in their location databases and shall make all necessary corrections within 24 hours or the next business day when notified by the PSAP, Department or its 911SP.
- 6. Communications Service Providers shall correct any Dispatchable Location Discrepancies within 24 hours of notification by PSAP, Department or its 911 Service Provider.
- 7. Communications Service Providers shall communicate changes, deletions, and additions of location information to their Location Database 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 day.

- 8. All Communications Service Providers shall at all times be in compliance with the provisions of 560 CMR 4.00 et. seq., and shall be in compliance with the provisions of Kari's Law and Section 506 of The RAY BAUM's Act.
- 9. Communications Service Providers shall comply with the provisions of this section and shall within 90 calendar days from the effective date of these regulations, notify the Department of any requirements of the regulations that cannot be complied with, coupled with a written plan to meet compliance.
- 10. The Department may inform the public of non-compliant entities, require <u>Communication Service Provider (CSP)</u>'s to notify customers of their non-compliance and may refer noncompliant entities to the FCC for appropriate enforcement.

### Responsibilities of 911 Service Provider (911SP)

- 1. Make the <u>LVF</u> externally available for <u>CSPs</u>.
- 2. Transmit <u>payload(s)</u> to the correct PSAP of jurisdiction and display <u>Dispatchable Location</u> <u>Information</u> as defined in in these regulations.

### <u>Section 2: Designation of Emergency Service Zones (ESZs)</u>

#### **Responsibilities of Municipalities**

- 1. Each municipal <u>Public Safety Department</u> shall have a specific geographic response area defined as a Service Boundary.
- 2. Municipalities shall communicate updates to the Service Boundaries to the Department, MassGIS, and affected public safety partners.
- 3. A single or combination of Service Boundaries represent an <u>Emergency Service Zone</u>, which shall be used to route 911 <u>payload</u> to the PSAP of Jurisdiction.
- 4. The Massachusetts ESZ will include all the municipalities in Massachusetts, areas of the ocean and all Service Boundaries for Massachusetts Public Safety Departments.

### Responsibilities of MassGIS (or State 911 Designee)

- 1. Create, Store, and make available a Massachusetts statewide ESZ, including all Municipal <u>Public Safety Department</u> Service Boundaries for use in the NG911 system.
- 2. Create, Store, and make available the Statewide ESZ for use outside the NG911 system including use by CSPs and other authorized entities.

#### Responsibilities of Communication Service Providers (CSPs)

1. <u>CSPs</u> shall connect all 911 <u>payload</u> originating within the Massachusetts statewide ESZ to the appropriate 911 aggregation points as designated by State 911 Department's 911SP.

#### Responsibilities of 911 Service Provider (911SP)

1. The 911 system shall route <u>payload</u> to the PSAP of Jurisdiction using the callers location and predetermined rules.

### Section 3: Access to 911 and Dispatchable Location

### 3.1 Aggregation Points

### Responsibilities of 911 Service Provider (911SP)

- 1. The 911SP shall create and provide access to network aggregation points for CSPs.
- 2. The 911SP shall provide multiple aggregation points located within the Commonwealth, and at least one located outside of the Commonwealth.
- 3. The 911SP is responsible for delivering <u>payloads</u> including <u>Dispatchable Location Information</u> from the aggregation point to the PSAP.
- 4. The 911SP shall provide IP connectivity at the aggregation point.
- 5. The 911SP shall comply with the NG911/I3 data interoperability standard and format.

### Responsibilities of Communication Service Providers (CSPs)

- 1. <u>CSPs</u> shall connect to at least one aggregation point. CSPs must provide a level of redundancy relative to their service size. CSPs carrying more than 1% of the Commonwealth's total 911 call volume shall connect to more than one aggregation point.
- 2. CSPs shall provide adequate circuit capacity, and bandwidth etc., necessary for their customer base.
- CSPs shall meet or exceed <u>NENA's</u> standards on for i3 connectivity, including but not limited to 03-506, 08-752, NENA-STA-010.2-2016, and 08-001. CSPs shall meet or exceed the Internet Engineering Task Force (IETF) standards including but not limited to RFC 4119, RFC 3863, RFC 5139, and RFC 5491
- 4. CSPs shall ensure that any
- 5. that is unable to be delivered to an aggregation point and requires transferring shall be transferred to the PSAP of Jurisdiction.
- 6. ALL <u>payloads</u> must include the "NENA Company ID" of the originating CSP. All CSPs shall provide the State 911 Department with a 24x7 contact for the purposes of Emergency Subscriber Lookups during exigent circumstances.
- 7. CSPs shall comply with the NG911 /i3data interoperability standard and format.
- 8. CSPs shall connect Payload to the aggregation points using a dereferenced URI or PIDF-LO in the sip header or other mutually agreed technology that supports the <u>dispatchable location</u> being delivered with the payload.
- 9. If CSPs are not presently capable of complying with this section, a remediation plan must be submitted to the Department.

#### Responsibilities of State 911 Department

- 1. Ensure that all 911 payloads, including but not limited to: voice, SMS text, and TTY communications, are available for all 911 calls initiated within the Commonwealth.
- 2. Technical standards for data interoperability standard and format must be written to reflect these NG911/I3 requirements
- 3. Provide notice to PSAPs and the public of non-compliant CSPs.

### 3.2 Outages

#### Responsibilities of Communication Service Providers (CSPs)

- 1. Failure to connect a 911 <u>payload</u> to an aggregation point is considered reportable, and shall be reported to the Department.
- 2. Incidents affecting more than 3 out of 100 911 callers during a five-minute period require notification to the State 911 Department (or Designee) within one hour of initial incident.
- 3. <u>CSPs</u> shall provide the Department with a copy of any notification to the FCC that affected/potentially affected Massachusetts.

#### **Responsibilities of State 911 Department**

Upon request, provide a post-incident review if available to the State 911 Commission for outage incidents.

### **Responsibilities of 911 Service Provider (911SP)**

- 1. The <u>Department</u> may require the 911SP to report an outage to the FCC. If so, the 911SP will provide the Department with a copy.
- 2. The Department shall require the 911SP to make emergency notifications to PSAPs regarding system statuses and other urgent matters.

### 3.3 Location Based Payload Routing and Dispatchable Location

#### Responsibilities of Communication Service Providers (CSPs)

- 1. The payload's dispatchable location information shall be transmitted with the payload.
- 2. <u>Fixed on premises</u> Devices must automatically transmit:
  - a. The validated <u>civic address</u> of the building, structure, lot, or open space where the device initiating the 911 payload is located, and
  - b. a building name or number, if more than one building or residential unit shares the validated civic address,
  - c. a floor number, name, or floor identifier if there is more than one floor in any building,
  - d. a room name or number or room identifier if the device initiating the 911 payload is in a a sleeping room or residential unit in any structure other than a single-family residence.
  - e. Devices capable of initiating 911 payloads installed at swimming pools, athletic fields, beaches, parks, outdoor recreational facilities, and bike paths, etc. must transmit the validated civic address as well as supplemental location information sufficient to identify the specific location of the emergency at that address.
- 3. <u>Non-fixed devices</u> used on-premises must automatically transmit the same location information required for fixed on-premises devices. If automatic transmission of the required location information is not technically feasible, then the device must be capable of being manually configured to provide the same location information required for fixed on premises devices.
- 4. <u>Non-fixed Devices</u> used off-premises must automatically transmit the same location information required for fixed on premises devices. If automatic transmission of the required location information is not technically feasible, then the device must be capable of being manually

configured to provide the same location information required for fixed on premises devices or, failing that requirement, enhanced location information available, which may be co-ordinate based, consisting of the best available location that can be obtained from any available technology or combination of technologies, must be provided.

#### **Responsibilities of 911 Service Provider (911SP)**

- 1. 911SP shall meet or exceed NENA's standards, including but not limited to NENA-STA-004.1.1
- 2. Receive or Request location and route <u>payload</u> geospatially based on <u>dispatchable location</u> <u>information</u> to the Designated PSAP.
- 3. Display the Dispatchable Location Information as defined in Section 5.1
- 4. Ensure that a 911 caller reaches the appropriate PSAP within the Commonwealth in accordance with NG911/I3 standards of data interoperability and formatting with direction from the department.

### 3.4 Accessing 911

#### Responsibilities of End Users and Communication Service Providers (CSPs)

- 1. Automatic Alarms or Alerting <u>Device</u>s. No individual, entity, or device shall be allowed to initiate a 911 payload
- 2. automatically unless required by emergency circumstances and unless there is a reasonable expectation that personnel at the receiving PSAP can engage in a two-way conversation with either the individual who initiated the 911 payload or, if the call was initiated by an inanimate entity or device, there is a reasonable expectation of the transmission of actionable information with the payload, including a dispatchable location. The Department will determine what constitutes an emergency and require deactivation of devices that do not meet this standard.
- 3. Devices needed to request emergency assistance by a person who is disabled are exempt from this requirement if approved by the Massachusetts Office on Disability or the Department.
- 4. In an effort to reduce false 911 calls end users and MLTS operators should use any other digit than 9 to gain access to an outside line, for example 7 or 8.
- 5. In accordance with 560 CMR 4.00 every device that requires a prefix to gain access to 911 must have a sticker displaying instruction on how to dial 911 from that device.
- 6. Coin Free Dialing. Each telephone company and owner of a private coin telephone in Massachusetts shall convert each public or private coin or coinless telephone to dial tone first capability to allow 911 calls to be made without first inserting a coin or paying any other charge. Each provider of public or private coin or coinless telephones shall provide access to the 911 PSAP serving the geographic location of the coin phone, and prominently display instructions on how to use the service. Conversion of said telephone shall be made prior to cutover in the community where the instrument is located.

### 3.5 Disability Indicators

#### **Responsibilities of State 911 Department**

Provide a mechanism for PSAPs and Municipalities to allow and display notation in the NG911 Database and/or LDB concerning disabled persons living at certain addresses. This information shall be gathered by municipal agencies from disabled citizens who identify themselves and choose to have such information noted. Information on persons who may be convalescing from a short-term disability at their own residence or persons with permanent disabilities who may be temporarily living at a particular address should be retained on a locally maintained temporary advisory listing, PBX, ALI database, or local computer aided dispatch system (CAD) at the PSAP and other appropriate public safety facilities.

### Responsibilities of Municipalities, PSAPs, Regional PSAPs, and RECCs:

Submit information as defined by the Department. Municipalities are encouraged to use local mailings, local media, and other available vehicles to alert their citizenry to this feature. PSAPs, Regional PSAPs, and RECCs are encouraged to establish a policy to periodically (e.g. quarterly, annually) validate disability indicators stored in the NG911 database within their jurisdiction to ensure the accuracy of said indicators at a given civic address.

### **Responsibilities of 911 Service Providers (911SP)**

The 911SP shall make provisions in the ALI format to include specific codes to identify the possible existence of person(s) with disabilities and the nature of said disability at the ALI location. The codes shall be established by the Department.

### Section 4 Emergency Services IP Network (ESInet)

### 4.1 Resiliency and Reliability

#### **Responsibilities of 911 Service Provider (911SP)**

- To prevent the widespread loss of 911 service, the 911SP shall work toward eliminating any single point of failure that could compromise the reliability of the network. The 911SP shall endeavor to maintain 911 network integrity, minimize the probability of system degradation and failure, and minimize the negative effects of degradation or failure should it occur.
   The 911SP shall be sensitive to cost containment in fulfilling these goals and shall provide cost data to the <u>Department</u> where there are alternative means for accomplishing these goals.
- 2. Minimum Circuit Requirements. There shall be a minimum of two dedicated 911 circuits at each PSAP. The Department may require additional circuits or alternative connectivity.
- 3. A minimum of two dedicated circuits from each <u>communication service provider</u> to an Aggregation Point.

### 4.2 Alternate Routing

#### **Responsibilities of 911 Service Provider (911SP)**

Alternate and Final Routing of <u>Payloads</u>. The 911SP in cooperation with the PSAPs shall design the 911 network/system to allow for alternate and final routing capabilities.

### Responsibilities of PSAPs, RECCs, and Regional PSAPs

- PSAPs shall select a PSAP to act as an alternate route and communicate changes to the Department and the alternate, including any changes to the PSAP's CoOP plan referenced in Section 6.
- 2. If a Secondary PSAP or Regional Secondary PSAP is expected to receive alternate routed payload, then its telecommunicators must meet the training and operational standards of a Primary PSAP, Regional PSAP or RECC as defined in Section 9.

### 4.3 Mobile PSAP

### Responsibilities of 911 Service Provider and State 911 Department

- The <u>Department</u> shall provide a mobile PSAP to be utilized to provide uninterrupted 911 service when a PSAP is relocated, when feasible. Said mobile PSAP will also be used as an emergency 911 PSAP to restore service during disaster situations. Other uses may include telecommunicator training and public education.
- 2. The Department recommends that new buildings have the necessary shore lines for the Mobile PSAP to connect and operate.

### Section 5 PSAP, RECC, and Regional PSAP Equipment

### 5.1 Call Handling and Answering Positions

#### Responsibilities of 911 Service Provider (911SP)

#### **General Requirements**

- 1. <u>Barge-In Capability.</u> Customer premises equipment for all call takers, dispatchers and supervisory personnel shall provide barge-in capability. This capability shall be under the control of another call taker offering assistance and shall not require the original call taker to add on the other personnel.
- 2. <u>Call Monitoring.</u> All customer premises equipment shall be capable of listening, watching and/or monitoring all in-progress calls.
- 3. <u>Instant Playback Capability.</u> Each Primary PSAP, RECC, Regional PSAP and Secondary PSAP shall be equipped with CPE that allows instant playback of <u>payloads</u>.
- 4. <u>Call Status Indicator.</u> Each 911 payload will indicate incoming emergency calls by both audible and visual indicators.
- 5. <u>Call Detail Records</u>. Call Detail Records are stored digitally for a minimum period of three years.

- 6. <u>911 Payload Call Detail Records</u> shall include, at a minimum the following elements. When applicable the NG911 equivalent may be used.
  - a. Automatic number identification,
  - b. <u>Dispatchable Location Information</u>, including all updates,
  - c. Dispatchable Location update time,
  - d. Date and Time 911 payload was delivered to PSAP,
  - e. Time the payload was answered/responded to,
  - f. Answering username and Position identifier,
  - g. Call back number,
  - h. Time the payload is released by the PSAP or hung up by the caller,
  - i. Timestamped event log,
  - j. If applicable, the time the call was transferred, and the destination of the transfer,
  - k. If applicable, the time a call was abandoned,
  - I. If applicable, emerging 911 payload data,
  - m. If applicable, the time TTY was initiated and the two-way text communication, and
  - n. For Text to 911, the two-way text communication.
- 7. Call Detail Records shall also be retained on unanswered, silent, and abandoned calls.
- 8. <u>Payload Information</u>. The <u>payload</u> information shall be displayed immediately for all classes of service at the time the 911 call is presented to a position. The information shall include, at a minimum:
  - a. Automatic Number Identification,
  - b. Dispatchable Location (includes legacy ALI),
  - c. Customer Name,
  - d. Class of Service or Location Source,
  - e. Public Safety Agencies for the payload's location,
  - f. Persons with Disabilities Code,
  - g. Time,
  - h. **NENA** Company ID

#### **Automatic Call Distribution and Call Management Systems**

- 1. Automatic Call Distribution (ACD) functionality may be a component of the 911 System in PSAPs which require six or more answering positions. The ACD is used to distribute and sequence calls in a high-volume environment.
- 2. ACD functionality shall include comprehensive call management data that will assist in managing and staffing the PSAP on a day-to-day basis.

#### 911 Answering Positions

- 1. There shall be, at a minimum, two Answering Positions established at each primary PSAP, secondary PSAPs, Regional PSAPs, Regional Secondary PSAPs and RECCs.
- 2. Communities of up to 25,000 population may receive two answering positions; communities of 25,001 to 50,000 may receive up to three answering positions; communities of 50,001 to 100,000 may receive up to four answering positions and communities with 100,001 or more population shall be evaluated individually. Actual answering position levels shall be based on busy hour call volume and/or formula based upon service population, including seasonal and

- daily population fluctuations. These are general guidelines and may not necessarily dictate the number of actual positions approved by the <u>Department</u>.
- 3. Excluding wireless call centers, all positions where a 911 position is located should be fully operational including access to CAD and necessary radio equipment for the dispatching of resources. The Department reserves the right to remove 911 positions that are not fully capable of preforming all the telecommunicator's duties.

### **Equipment Safeguards**

- 1. Wherever practicable, service entrances for commercial power and telephone service shall be underground, at least to the respective utility's serving distribution facility. All commercial power and 911 circuits entering PSAPs shall be encased in protective sheathing.
- 2. Wherever practicable, wires and/or cables shall extend as directly as possible to the PSAP equipment in conduits, shafts, raceways or overhead racks and troughs of a type of construction affording protection against fire and mechanical damage. Where cables or wiring are exposed to unusual fire hazards, they shall be properly protected, in accordance with National Fire Protection Administration Regulations.
- 3. All facilities and equipment associated with 911 service shall be provided with protective measures to prevent accidental worker contact. Each protected termination shall be clearly identified.
- 4. Any individual working on 911 circuits or equipment at the Communication 911SPs central office (or similar), NG911 Data Centers, or the PSAP shall provide proper identification to the PSAP supervisor or 911SP official. Any such individual shall be logged in and give a brief description of all activities or functions to be performed. All 911 circuits or equipment shall be terminated on a separate and distinct termination block equipped with the latest technology to protect by visual warning, against tampering or any accidental interruption of service.
- 5. Modifications, changes, additions, or any alteration of State 911 Department provided equipment, including but not limited to wireless, bluetooth, or USB connected devices such as keyboards, mouse, headsets, etc. is strictly prohibited, unless prior written authorization has been obtained from the Department.
- 6. Consumables for the printer shall be the responsibility of the PSAP.
- 7. No reverse-software engineering or unauthorized access to information other than that which the PSAP should have access to is allowed. If a PSAP becomes aware of any such activity, the PSAP shall report the incident to the Department immediately.
- 8. The 911SP shall ensure that adequate surge protection, grounding, and lightning suppression devices are installed with the 911 equipment to protect it from unnecessary interruption or damage.
- 9. All wiring shall comply with Massachusetts and municipal wiring codes.

#### **Ancillary Equipment**

- Teletype (TTY). The <u>Department</u> shall equip each PSAP with TTY to meet the requirements of P.L. 101-336 (Americans with Disabilities Act of 1990) and should be sufficient to meet the needs of the population served by the PSAP. The TTY shall provide a record of the conversation.
- 2. The recorder shall have the capability of receiving Baudot tones without jeopardizing the integrity of the call with audible or inaudible tones that cause disruption in the TTY translation. Each recorder shall feature complete full function integrated standby capability.

- 3. The Department supplied audio recording device should have electronic voice storage, simultaneous record and playback capabilities, and be equipped with either reduced playback speed or message mark capabilities. The intent of this equipment shall be to record 911 and seven-digit emergency lines processed by the 911 system only.
- 4. Computer Aided Dispatch. The Department may provide computer aided dispatch interface capability to PSAPs.

#### **Help Desk**

The 911SP shall establish and maintain a dedicated 911 Service Help Desk. Access to this center shall be provided via a uniform statewide toll-free number with sufficient lines and operator staffing to provide adequate service response. The concept of the Help Desk is to provide a single point of contact for all participating PSAPs in the state through a dedicated service team. This team will be responsible for the management of service and maintenance requests for the entire 911 system.

# Responsibilities of PSAPs, RECCs, Regional PSAPs, Secondary PSAPs, and Limited Secondary PSAPs

- 1. Equipment Room. Any cost associated with remodeling or build-out of equipment room facilities is the responsibility of the PSAP. The PSAP may utilize applicable grant funds to cover the cost.
- 2. The PSAP must utilize the 911SP to move or install any 911 equipment at the position or in the equipment room. The PSAP may utilize applicable grant funds to cover the cost.
- 3. Equipment or Server rooms shall be climate controlled. PSAPs shall provide a secure location for all 911 equipment.
- 4. No 911 or seven-digit emergency lines shall terminate in equipment not approved by the Department and the 911SP. In addition, no non-emergency seven-digit lines should be terminated in 911 PSAP equipment, except as approved by the Department in accordance with their standards on interface. The 911 rack or cabinet shall only contain equipment approved by the Department.
- 5. Combined Telephone Answering Equipment. Where practicable, combined telephone handsets and/or headsets should be utilized by PSAP personnel required to answer both 911 <u>payload</u>/calls and emergency seven-digit calls. Equipment should be equipped with volume control devices for receiving and transmitting and shall also have the capability to use either handset or headset interchangeable with headset priority without modification.
- Emergency Power Provision. Each PSAP shall be equipped with an emergency power generator capable of providing for the essential power requirements of the facility to ensure continuous operation for a minimum of 24 hours during commercial power outages.
- 7. Sufficient fuel shall be available onsite for 12 hours operation at full load if a reliable source of supply is available, at any time, on two hours notice. If a source of supply is not reliable or readily available, or if special arrangements must be made for refueling as necessary, a supply sufficient for 24 hours operation at full load shall be maintained onsite.

8. The <u>Department</u> shall provide an adequate uninterruptable power supply (UPS), with power conditioning capability to power a Primary PSAP's, RECC's, and Regional PSAP's 911 equipment. UPS equipment will ensure that emergency calls in progress and subsequent calls will not be interrupted during commercial power fluctuations and outages. It shall supply constant power for a minimum of 30 minutes to allow for manual or automatic transfer from the public service AC power to localized auxiliary AC power.

### 5.2 Limited Secondary PSAPs

### **Responsibilities of Limited Secondary PSAP Operators**

- 1. Limited Secondary PSAP operators shall be responsible for providing and maintaining of voice telephone, data line(s) and necessary equipment.
- 2. Limited secondary PSAPs that perform EMD will be equipped per 560 C.M.R. 5:00 Et. Seq.
- 3. Limited Secondary PSAPs are required to possess and maintain an audio recording device that allows instant playback at their own expense. The <u>Department</u> does not recommend that PSAPs maintain a Limited Secondary PSAP
- 4. The audio recording device should have electronic voice storage, simultaneous record and playback capabilities, and be equipped with either reduced playback speed or message mark capabilities. The intent of this equipment shall be to record 911 and seven-digit emergency lines processed by the 911 system only.
- 5. Limited Secondary Operators shall provide an adequate uninterruptable power supply (UPS), with power conditioning capability to power the 911 equipment. UPS equipment will ensure that emergency calls in progress and subsequent calls will not be interrupted during commercial power fluctuations and outages. It shall supply constant power for a minimum of 30 minutes to allow for manual or automatic transfer from the public service AC power to localized auxiliary AC power

### 5.3 Audio Recording

#### Responsibilities of 911 Service Provider, PSAPs, and State 911

- 1. The Primary PSAP, RECC, or Regional PSAP must record 911 call audio and is the primary source of all audio records.
- 2. The Department shall provide an IP interface at the Primary PSAP, RECC, Regional PSAP and Secondary PSAPs. The purpose of this IP interface is to provide audio recording capability and/or broadcasting audio within the PSAP.
- 3. PSAPs shall be responsible to retain the 911 recording audio for a minimum of three years from the date of the call.

### Section 6 PSAP, RECC, and Regional PSAP Administration

#### Responsibilities of Municipalities, PSAPs, RECCs, and Regional PSAPs

- Municipal Coordinators. Every municipality participating in the 911 system shall coordinate with
  the PSAP of Jurisdiction to designate a person to serve as the local contact person with the
  Department and the 911SP for all issues regarding 911 service including the disability indicator.
  Any changes in the Municipal Coordinator shall be reported by the municipality in writing to the
  Department within ten business days.
- Continuation of Operations Plan (COOP). Each PSAP shall develop in cooperation with the
  Department a COOP in accordance with the law, standards and guidelines established by the
  Department. The COOP shall be submitted by each PSAP to the Department prior to the end of
  each fiscal year. Any changes in the COOP shall be reported by the PSAP in writing to the
  Department within ten business days.
- 3. Hours of Operation for Public Safety Answering Points. Each participating municipality shall establish, staff, and operate on its own or with one or more municipalities, a PSAP on a 24-hours a day, seven-day-a-week basis.
- 4. Ten-digit Telephone Numbers. The Department shall maintain at least one ten-digit emergency number for each PSAP, RECC, and Regional PSAP. The number may be used as a backup to 911, and shall be maintained long enough to ensure the continuity of operation for decommissioned PSAPs.
- 5. PSAP Security. PSAPs should be secured to prevent entry by the public or unauthorized personnel.
- 6. PSAPs shall provide personnel with ongoing appropriate training, including but not limited to, cyber security training and should utilize best practices to secure PSAPs.
- 7. Reporting of Equipment/System Failure. Each PSAP shall report any equipment or system failure to the Department's 911SP as soon as possible.
- 8. PSAP inspections. The Department or its designee may inspect each PSAP that utilizes 911 network components to determine if it meets the requirements of said PSAP standards and all other technical and operational standards required by law.
- 9. Each Regional 911 Communication District shall perform regular audits of the accounts of the records of the district. Upon the completion of each audit, the district board shall forward a copy of the audit to the mayor, the chairman of the board of selectmen or town council of each member municipality, the finance advisory subcommittee, the state auditor, the state 911 department and the division of local services, pursuant to MGL, c. 6A § 18T.
- 10. If the PSAP is not in compliance with the technical and operational standards, the PSAP, upon written notice by the Department, shall submit a remediation plan within 30 days. If the remediation plan is not acceptable to the Department, is not followed, or if there exists exigent circumstances which would jeopardize public safety, the Department may deny grant assistance, and may take further action including redirection of 911 payloads until the PSAP is in compliance. If the PSAP remains not in compliance after 6 months following notification by the Department, indefinite redirection of payload may be determined by the Department, until such time as the PSAP becomes compliant, pursuant to MGL, c. 6A Section 18B, et. seq. Nothing in this paragraph shall prevent the Department from redirecting payload due to exigent circumstances.

11. Each PSAP shall ensure that staff are trained to properly receive and process test calls, the required call back, and follow Department test call procedures. PSAPs shall accept test calls on Monday through Friday, excluding holidays, between the hours of 10:00 am and 2:00 pm, and also between the hours of 2:00 am and 5:00 am, unless exigent circumstances are impacting operations at the time of the test call. Test calls may be scheduled outside of these hours.

### Section 7 Security of Data, Confidentiality and Records Retention

- 1. Security of Data. The primary purpose of 911 payload data collected and disseminated by the 911 system is to assist public safety agencies in responding to emergency calls for service. Payload information provided in accordance with the 911 system shall be used only for the purpose of supporting the response to emergencies, requests for assistance, incidents or potential incidents, for training, analytics and quality assurance purposes as consistent with these regulations or approved by the Department or for use in any ensuing investigation or prosecution, including the investigation of false or intentionally misleading reports of incidents requiring emergency service. PSAPs should have a policy to ensure that these provisions are enforced. Additional use cases may be authorized by the Department.
- 2. The <u>Department</u> and PSAPs must provide reasonable protection, integrity, confidentiality, and availability for all payload data. Each PSAP shall establish personnel security clearance standards that are acceptable to the Department.
- 3. Each PSAP shall also establish policies and procedures for access, protection, confidentiality, and authorized disclosure of all payload data and personally identifiable information of people accessing and or utilizing the 911 System.
- 4. PSAPs shall comply with public record laws and regulations when responding to requests for records but will protect personally identifiable information and shall ensure the application of appropriate exemptions to such requests pursuant to MGL, c. 4 § 7(26). The PSAP is the custodial records keeper of every recording and data record associated with that PSAP.
- 5. Records Retention. All recording of 911 payloads shall be retained as required by MGL, c. 6A § 18G. Records of 911 payload information shall be retained for a period of at least three years. Destruction of records shall be done pursuant to Massachusetts General Laws.

### Section 8 Payload Handling, Answering Positions, and Staffing

### Responsibilities of PSAPs, RECCs, and Regional PSAPs

- As calculated on a monthly basis, 90% of all 911 payloads shall be answered within ten seconds, 95% of all 911 payloads shall be answered within fifteen seconds. Answer time is calculated from when the payload is delivered to the PSAP until the payload is answered. Each PSAP shall have sufficient staff in order to meet this standard.
- 2. The telecommunicator shall begin the Silent Call Procedure for calls when the line is open and the caller is not speaking. Municipalities and PSAPs are required to develop call handling procedures and urged to dispatch first responders if the PSAP receives no response. If a dispatchable location is determined, and the existence of an emergency cannot be excluded, a public safety response unit(s) shall be dispatched to the location. An emergency subscriber lookup may be completed as a best practice.

- 3. TTY Call Handling. Each PSAP shall establish procedures to handle calls from speech and hearingimpaired individuals via TTY. PSAPs shall test the TTY feature and keyboard that is part of the 911 equipment regularly in compliance with the ADA.
- 4. Each PSAP shall develop a documented quality assurance program to ensure that each telecommunicator is proficient at handling all payloads.
- 5. Payload transfer to another PSAP. PSAP's staffing levels and operational procedures should ensure that 90% of all 911 payloads that require a transfer should have the transfer initiated in no more than sixty (60) seconds from the answer time (payloads requiring interpreter services are excluded from this calculation). Telecommunicators shall, upon transferring the payload, remain on the line only long enough to verify that all appropriate parties have been connected, the person seeking assistance is speaking/interacting with the receiving PSAP, and upon hearing the validation of the caller's location. Off-net transfers may require the transferring PSAP to stay on the line for a longer period of time due to the lack of <a href="Dispatchable Location Information">Dispatchable Location Information</a> at the receiving location.
- 6. All hang up and abandoned payloads that require a call back, should have a PSAP initiated call back within 20 seconds 90% of the time.
- 7. PSAPs should have a minimum 6 full-time equivalent certified telecommunicators. No telecommunicator should be scheduled to be logged in for a period exceeding 18 consecutive hours. The provision is excluded during exigent circumstances.
- 8. If a PSAP fails to meet any of the preceding metrics, the Department may deny grant assistance, and may take further action including notifying the PSAP that continuing noncompliance may lead to redirection of 911 payload until the PSAP is in compliance. If the PSAP remains not in compliance after 6 months following notification by the Department, indefinite redirection of payload may be determined by the Department, until such time as the PSAP becomes compliant, pursuant to MGL, c. 6A Section 18B, et. seq.

### Section 9 Training and Public Education

### **Training**

- 1. Telecommunicators at Primary PSAPs, Regionals PSAPs, RECCs, Regional Secondary PSAPs, and Secondary PSAPs shall be trained and certified as per 560 CMR 5.00. Certifications shall include, but is not limited to, a two (2) day NG 911 equipment training and a forty (40) hour Basic Telecommunicator certification offered by the <u>Department</u> or a Department approved forty (40) hour Basic Telecommunicator certification. For existing Certified NG 911 telecommunicators: Sixteen (16) hours of Department-approved continuing education annually commencing July 1 of each Fiscal year and completed by June 30th, the last day of the Fiscal Year.
- 2. Telecommunicators at Limited Secondary PSAPs serving as the Certified Emergency Medical Dispatch Resource (CEMDR) provider shall be trained and certified in a Department approved Emergency Medical Dispatch (EMD) protocol. Additional required certifications shall include: a one (1) day NG 911 in-house equipment training and a forty (40) hour Basic Telecommunicator certification offered by the Department, or a Department approved forty (40) hour Basic Telecommunicator certification. Certified NG 911 telecommunicators shall complete sixteen (16) hours of Department approved continuing education annually commencing July 1 of each Fiscal Year and completed by June 30th, the last day of the Fiscal Year.

- 3. Annual Certification of Compliance Recordkeeping. PSAPs, Regional PSAPs, RECCs, Regional Secondary, Secondary, and Limited Secondary PSAPs serving as the <u>CEMDR</u> are required to ensure that telecommunicators are certified and to annually submit documentation of same. PSAPs, Regionals, RECCs, Regional Secondary, Secondary PSAPs, and Limited Secondary's serving as the CEMDRs are required to annually certify to the Department that they meet the EMD requirements of the 560 CMR 5.00 and the completion of sixteen (16) hours of Department approved continuing education.
- 4. A component of the certification of telecommunications and continuing education of telecommunicators shall be on the identification and response to callers experiencing behavioral health crises.

#### **Public Education Program**

- Public Education Program. Municipalities and/or PSAPs participating in the Massachusetts 911 Program shall develop a public education program aimed at the emergency service needs of the community.
  - Based on the non-English speaking population of a community, the Municipality or PSAP shall determine if 911 public education materials need to be developed in bilingual/secondary languages.
  - b. "9-1-1" The Designated Emergency Number. The digits "9-1-1" shall be the only published emergency number for municipalities. The advertisement of any emergency telephone number other than "9-1-1" is prohibited.
  - c. "9-1-1" shall also be the only published or advertised emergency number for those using TDD/TTY. The designation "9-1-1" shall only be used for emergency calls routed directly to a primary PSAP, Regional PSAPs, and RECC.
  - d. Advertised use in Massachusetts of the designation "9-1-1" in connection with any commercial product or service could lead to public confusion and is strictly prohibited.
  - e. Display of "9-1-1" on Emergency Vehicles and Signs. The digits "9-1-1" when displayed on emergency vehicles, signs, or other forms of advertisement shall be printed in plain block type numerals with a "dash" (-) appearing between each number. This will minimize any potential misinterpretation of the digits. The digits "9-1-1" shall be the only emergency number displayed on vehicles, signs, or other forms of advertisement and the municipality is responsible for the expense of signage.
- Public Education Materials. The <u>Department</u> shall assist municipalities with the 911 public
  education program through the distribution of materials in the form of handouts, brochures,
  and children's educational materials. PSAPs shall be responsible for working with the
  Department to ensure that an adequate educational campaign is maintained on a routine
  basis.
- 3. Telephone Book Listing. Publishers of telephone directories which contain emergency numbers shall annually publish the digits 911 as the official emergency number on the inside cover of the telephone books for the municipalities participating in the Massachusetts 911 Program. All carriers should, prominently displayed on their Homepage, publish a declaration indicating that, "In an emergency, Call 9-1-1."