

560 CMR 2.00: State 911 Department
Standards for Enhanced 911/Next Generation 911
Appendix A

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Definitions and Abbreviations

Abandoned Call:¹ means a call placed to 911 in which the caller disconnects before the call can be answered by the PSAP.

Alternate Route/PSAP: means the automatic redirection or “roll” of a 911 payload to a PSAP other than the Primary/Regional PSAP having jurisdiction to a designated alternative PSAP due to the Primary/Regional PSAP not being able to answer the 911 payload in an acceptable time or PSAP outage.

Americans with Disabilities Act or ADA:¹⁴ means the Americans with Disabilities Act of 1990.

Aggregation point: Hardware device, software program or application that collects data or information from one or more end points.

Automatic location identification (ALI)²: 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.

Automatic number identification (ANI)²: an enhanced 911 service capability that allows for the automatic display of a telephone number used to place or route a 911 call.

Call back: 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.

Certified Emergency Medical Dispatch Resource (CEMDR)¹: Certified Emergency Medical Dispatch Resource or Certified EMD Resource 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.

Civic Address: An address that includes a house/building number and a street name is considered a Civic Address. Civic Addresses include a community name that may or may not be recognized by the USPS. Civic Addresses may be used as Postal address if recognized by the USPS. A rural route delivery address or FPO or APO address is not considered a Civic Address. The location Civic addresses are assigned by the Municipal Addressing Authority, 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: The State 911 Commission.

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¹ 560 CMR 5.03
² M.G.L. c. 6A § 18A

Communication services:² 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 enhanced 911 service; (d) wireline enhanced 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.

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Communication service provider (CSP):² an entity that provides communication services to a subscriber or end user.

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Computer Aided Dispatch (CAD): A computer-based system, which aids PSAP Telecommunicators by automating selected dispatching and record keeping activities.

Department: The State 911 Department.

Device: A stationary or mobile mechanical or electronic device with the capability to initiate a 911 call/payload.

Director³: The Executive director of the state 911 department.

Dispatchable Location Information: 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.

Commented [RAV1]: ERL not defined in CMR or statute - added as new definition

Dispatchable Location Discrepancy: The form/process used by telecommunicators to report insufficient, erroneous, or lack of dispatchable location information.

Emergency medical dispatch³: 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.

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Emergency Service Zone (ESZ): A geographical area that represents a unique combination of emergency service agencies (e.g., Law Enforcement, Fire and Emergency Medical Service) that is within a specified 911 governing authority's jurisdiction.

Emergency Subscriber Lookup: 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: a person who uses communication services.

Enhanced 911 Fund: the fund established under section 35JJ of chapter 10.

Enhanced 911 service provider: any entity that provides 1 or more of the following 911 elements: network, database or PSAP customer premises equipment.

Enhanced 911 service³: 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.

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Enhanced 911 network features⁴: the components of enhanced 911 service that provide selective routing, automatic number identification and automatic location identification.

Enhanced 911 systems⁴: a distinct entity or geographical segment in which enhanced 911 service is provided, consisting of network routing elements serving as a control office and trunking connecting all central offices within a geographical segment, and including PSAPs and network used to deliver location

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³ M.G.L. c. 6A § 18A

⁴ M.G.L. c. 6A § 18A

data to PSAPs from a data base.

Emergency response location (ERL) means a location to which a 9-1-1 emergency response team may be dispatched. The location should be specific enough to provide a reasonable opportunity for the emergency response team to quickly locate a caller anywhere within it.⁵

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ESZ (Emergency Service Zone) is a geographical area that represents a unique combination of emergency service agencies (e.g., Law Enforcement, Fire, and Emergency Medical Service) that is within a specified 9-1-1 governing authority's jurisdiction.⁶ An ESZ may be closely aligned with, but may not be identical to corresponding town or city boundaries.

Exigent circumstances: Circumstances that would cause a reasonable person to believe that an immediate action is necessary to ensure public safety.

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FCC:⁷ the Federal Communications Commission.

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FCC order:⁷ all orders issued by the FCC under the proceeding entitled "Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems" (CC Docket No. 94-102; RM 8143), or any successor proceeding, including all other criteria established therein, regarding the delivery of wireless enhanced 911 service by a wireless carrier, and all orders issued by the FCC under the proceeding entitled "In the Matter of IP-Enabled Services; E911 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 enhanced 911 service by an IP-enabled service provider.

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Final Route/PSAP: means the Alternate Route/PSAP of last resort. Upon routing to the Final Route/PSAP, a 911 payload will no longer be redirected until disconnected.

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Fixed device: (e.g. wired telephones/ desktops) cannot be readily moved from one location to another by the user.

Governmental body⁷: shall include any governmental body as defined in section 11A of chapter 30A or section 23A of chapter 39.

Commented [RAV2]: Repealed, 2009, 28, Sec. 17

Commented [RAV3]: Repealed, 2009, 28, Sec. 20

i3:⁸ "i3" refers to the NG9-1-1 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 NG9-1-1, an Emergency Services IP network (ESInet), which is designed as an IP-based inter network (network of networks) shared by all agencies which may be involved in any emergency.

Commented [RAV4]: This is from M.G.L. c. 6A § 18A - however- the 2 cited statutes have been repealed.

Incumbent Local Exchange Carrier: (ILEC) 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.

⁵ Taken from Maine 06-625 CMR c 11 found at <https://www.maine.gov/sos/cec/rules/65/625/625c011.doc>

⁶ NENA-02-008

⁷ M.G.L. c. 6A § 18A

⁸ NENA-STA-010

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Interconnected VoIP service:⁷ voice over the internet protocol services as defined by the FCC in 47 CFR 9.3.

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IP-enabled service:⁹ 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 enhanced 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. "Limited secondary PSAP", 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: The capability for disparate systems to communicate with one another.

Internet Protocol (IP): The method by which data is sent from one computer to another on the Internet or other networks.

Kari's Law: 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.

⁹ [M.G.L. c. 6A § 18A](#)

LIS (Location Information Server): is 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.

Local exchange service:¹⁰ 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.

Location Database (LDB): A server that retains all of the current information, functionality, and interfaces of today's ALI and can utilize the new protocols required in an NG911 deployment.

LVF (Location Validation Function): is a functional element in an NGCS that is a LoST protocol server where civic location information is pre-validated against the authoritative GIS database information.

Mass GIS: refers to the Massachusetts Bureau of Geographic Information

Master Address Database (MAD): 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.

Master Street Address Guide (MSAG): A database of street names and house number ranges within their associated communities defining Emergency Service Zones (ESZs) and their associated Emergency Service Numbers (ESNs) to enable proper routing of 911 calls.

MLTS: Multi-line Telephone System. 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.

Municipal Addressing Authority: ~~All municipalities shall assign, appoint, or designate a Municipal Addressing Authority that is the municipal official, body, or delegate~~ responsible for addressing within the municipality, 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), ~~provide Mass GIS with new civic addresses as well as changes, deletions, and additions to existing civic addresses on an as-occurred basis for inclusion in the Master Address Database, collaborate with public safety partners to ensure municipal addressing standards are consistent with providing sufficient Dispatchable Location Information for the Master Address Database, and work with Mass GIS on a yearly basis to review the Master Address Database (MAD) for accuracy with the standard being 98% accuracy of the Master Address Database.~~

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¹⁰ M.G.L. c. 6A § 18A

NENA: National Emergency Number Association.

Network components:¹¹ 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.

Next generation 911:¹¹ an enhanced 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.

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Non-Fixed devices (e.g. tablets/laptops) can be readily moved from one location to another by the user. The device do not necessarily need to be unplugged to maintain a connection.

On-premises: 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: The combined package of communications made, by any medium, including but not limited to voice calls and text messages coupled with the associated data which a PSAP is capable receiving of via the 911 service initiated by a subscriber. The term *Payload* replaces the legacy term "911 call." - Communication capable of being received by a PSAP via the 911 system.

Prepaid wireless telephone service:¹¹ 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.

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Prepaid wireless telephone service provider:¹¹ an entity providing prepaid wireless telephone service at retail or wholesale.

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Primary PSAP:¹¹ 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.

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Private Branch Exchange (PBX): A private telephone switch that is connected to the Public Switched Telephone Network.

Private safety department:¹¹ an entity, except for a municipality or a public safety department, that provides emergency police, fire, ambulance or medical services.

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Public safety answering point (PSAP):¹¹ 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.

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PSAP Administration: The activities associated with managing a PSAP including personnel matters, the 911 grant process, scheduling work shifts, and training,

PSAP Administrator: A person or persons designated by a Municipality (or in the case of a Regional

¹¹ M.G.L. c. 6A § 18A

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).

PSAP customer premises equipment: enhanced 911 call processing equipment located at a PSAP.

PSAP Operations: The activities associated with Telecommunicators at a PSAP answering and handling 911 calls-payloads and dispatching public safety resources, if required, per the circumstances relative to the 911 call.

PSAP Supervisor: 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 (as defined herein).

PSAP Having Jurisdiction: The Primary PSAP or Regional PSAP having authority and responsibility over a defined geographical region and the ESZs contained within.

Public safety department: a functional division of a municipality or a state that provides fire fighting, law enforcement, ambulance, medical or other emergency services.

Regional emergency communication center: 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 enhanced 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: 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 enhanced 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 enhanced 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 section 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: 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.

Retail: sales by a prepaid wireless telephone service provider directly to the end user or to a non-prepaid 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.

Ringling PSAP: 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.

Secondary PSAP: 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.

Selective routing: 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.

Subscriber: a person who uses communication services.

Telecommunicator: A Telecommunicator is an emergency response coordination professional trained to receive, answer, assess, and prioritize emergency payload(s) requests for assistance.

Telephone company: a person, firm, corporation, association or joint stock association or company, as defined in chapter 159, furnishing or rendering local telephone exchange service.

Trunk: Typically, a communication path between central office switches, or between the 911 Control Office and the PSAP.

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.

Voice over Internet Protocol (VoIP): 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.

Wholesale: 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.

Wireless carrier: a commercial mobile radio service, as defined in 47 U S C 332(d), including resellers and prepaid providers of wireless services.

Wireless enhanced 911 service: the service required to be provided by wireless carriers under, and governed by, FCC order.

Wireless state police PSAP: 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.

Wireline carrier: 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.

Wireline enhanced 911 service: service provided by a wireline carrier that connects a subscriber dialing or entering the digits 911 to a PSAP.

Statement on PSAP Responsibilities

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 9-1-1 payload until the PSAP is in compliance. If the PSAP remains not in compliance after 6 months following notification by the Department, permanent redirection of payload(s) may be determined by the Department pursuant to MGLc 6A Section 18b, Et. Seq. Nothing in this paragraph shall prevent the Department from redirecting payload(s) due to exigent circumstances.

Section 1: Addressing, Data Development and Maintenance

Responsibilities of Municipalities:

1. Municipal Addressing Authority: All municipalities shall assign, appoint, or designate a Municipal Addressing Authority that is responsible for addressing within the municipality, as bound by G.L. c. 42.
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).
3. Duplicate civic addresses shall not be permitted.
- ~~3-4.~~ Duplicated street names shall not be permitted within the same city or town.
- ~~4-5.~~ The designated Municipal Addressing Authority shall provide Mass GIS with new civic addresses as well as changes, deletions, and additions to existing civic addresses on an as occurred basis for inclusion in the Master Address Database (MAD).
- ~~5-6.~~ The designated Municipal Addressing Authority shall collaborate with public safety partners, including the PSAP having jurisdiction and other public safety agencies to ensure municipal addressing standards are consistent with providing sufficient Dispatchable Location Information for the Master Address Database (MAD).
7. Each Municipal Addressing Authority shall work with Mass GIS ~~on~~ at minimum, on a yearly basis to review the Master Address Database (MAD) for accuracy with the standard being 98% accuracy of the Municipality's segment of the Master Address Database.
8. Errors discovered that prevent or inhibit the determination of an accurate dispatchable location such as missing or miss-plotted addresses, shall be corrected and submitted to Mass GIS as soon as practicable but in case longer than 3 business days from discovery.
- ~~6-9.~~ Errors discovered regarding compliance with addressing standards that do not inhibit the determination of a dispatchable location or the response of public or private safety agencies shall be resolved within a reasonable time in conjunction and coordination with Mass GIS, the PSAP having jurisdiction and other public safety entities, as well as the affected addressees.
- ~~7-10.~~ Best practices developed by MassGIS must be followed. The following have been adopted by the Department:
 - a. The street name in the address ~~should~~ shall be the one from which the property is accessed - either directly or via an un-named access road.

Commented [RAV6]: This statement rests the responsibility for compliance and performance on the PSAP. However, a considerable amount of the authorities provided this regulation is vested in "municipalities" if the municipality and the PSAP are not the same entity, this is incompatible. It is recommended that all responsibilities and authorities are vest or delegated to the PSAP with the requirements specific to municipalities clearly articulated. This is aligned with most other similar regulations (i.e. 105 CMR which regulates the EMS service, not the city, town or municipality broadly.

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- b. Address numbers ~~should~~shall be assigned based on where the structure driveway or other access intersects the named street. Address numbers should 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 (i.e., a shared driveway), that road ~~should~~shall be named and numbers assigned accordingly.
- d. Addresses accessed from streets in neighboring communities should respect the street name, address town name (i.e., 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 ~~should~~ not be assigned to individual units in a multistory building unless there is a clear ground level separation of unit entry such as a town-house or row-house configuration.

~~f.11.~~ All other aspects of addressing shall be done 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 and NENA Information Document for Development of Site/Structure Address Point GIS Data for 9-1-1 NENA-INF-014.1-2015, September 18, 2015 or successor standard.

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Responsibilities of PSAPs, RECCs, and Regional PSAPs:

1. Each [telecommunicator](#) shall promptly report insufficient, erroneous, or missing dispatchable location information according to the procedures defined by the [Department](#).
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 civic address data provided by the various Municipalities and shall incorporate this data into the [Master Address Database \(MAD\)](#)
2. The Master Address Database shall be the definitive address source for 911 in creating the [Location Database \(LDB\)](#).
3. The LDB shall be hosted and managed by a third party designated by the [Department](#).
4. Mass GIS shall work with each Municipal Addressing Authority on a yearly basis to review the [Master Address Database \(MAD\)](#) for accuracy with the standard being 98% accuracy of the Master Address Database.

Commented [RAV7]: Is this statewide or per ESZ/community? 2% error could represent an entire town on a statewide basis.

Responsibilities of Communications Service Providers (CSPs):

1. [Communications Service Providers](#) shall validate their ALI database, location database, or LIS, using the [Location Validation Function \(LVF\)](#) against the Massachusetts's LDB. This shall be done at the time of service order input or equivalent. Validation at the time of the 911 call is not acceptable.
2. Records shall be validated at the time of service order input or equivalent. All records should be validated periodically ~~2qw~~ and at least quarterly. Records that have been previously validated against a [Master Street Address Guide \(MSAG\)](#) must be validated against the [LDB](#) using the LVF. 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 [Department's](#) 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 E911 Service Provider.

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6. Communications Service Providers shall correct any [Dispatchable Location](#) Discrepancies within 24 hours of notification by PSAP, Department or its 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 [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 CSP's to notify customers of their non-compliance and may refer non-compliant entities to the FCC for appropriate enforcement.

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Responsibilities of Enhanced 911 service provider and Subcontractor(s)

1. Make the [LVF](#) externally available for [CSPs](#).
2. Transmit [payload\(s\)](#) to the correct PSAP of jurisdiction and display [Dispatchable Location Information](#) as defined in in these regulations.

Section 2: Designation of Emergency Service Zones (ESZs)

Responsibilities of Municipalities:

1. Each Municipal [Public Safety Department](#) shall have a specific geographic response area defined as an [Emergency Service Zone](#) (ESZ).
2. A single or combination of Emergency Service Zones shall be used to route 911 [payload](#)/calls to a Primary PSAP, RECC, or Regional PSAP.
3. A statewide ESZ will include all the municipalities in Massachusetts, areas outside of Massachusetts, where a Massachusetts public safety agency is the [primary first responder](#), and areas of the ocean.

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Responsibilities of MassGIS (or State 911 Designee):

1. Create, Store, and make available a statewide ESZ, including all Municipal Public Safety Department ESZs for use in the NG911 system.
2. Create, Store, and make available a statewide ESZ for use outside the NG911 system by CSPs.

Responsibilities of Communication Service Providers (CSPs):

1. [CSPs](#) shall connect all 911 [payload](#)/calls originating within the statewide ESZ to the appropriate 911 traffic aggregation points as designated by State 911 Department's E911 Service Provider.

Responsibilities of Enhanced 911 Service Provider:

1. The 911 system shall route [payload](#)/calls from the municipalities' ESZ to the designated PSAP, Regional PSAP, or RECC.

Section 3: Access to 911 and Dispatchable Location

3.1 Aggregation Points

Responsibilities of Enhanced 911 Service Provider:

1. E911SP shall create and provide access to network aggregation points for [Communication Service Providers](#) (CSPs).
2. E911SP shall provide multiple aggregation points located within the Commonwealth, and at least one located outside of the Commonwealth.
3. The E911SP is responsible for delivering [payloads](#) including [Dispatchable Location Information](#) from the aggregation point to the PSAP.
4. E911SP shall provide IP connectivity at the aggregation point.
5. Service Provider shall comply with the NG911/I3 data interoperability standard and format.

Responsibilities of Communication Service Providers (CSPs):

1. [CSPs](#) 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.
3. CSPs shall meet or exceed [NENA's](#) 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 IETF standards including but not limited to RFC 4119, RFC 3863, RFC 5139, and RFC 5491
4. CSPs shall ensure that any [payload](#) that is unable to be delivered to an aggregation point and requires transferring, that the transfers shall be made to the PSAP of jurisdiction.
5. ALL payloads 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](#).
6. CSPs shall comply with the NG911/I3 data interoperability standard and format.
7. 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 [dispatchable location](#) being delivered with the payload.
8. If CSPs are not presently capable of complying with 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

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3. Provide notice to PSAPs and the public of non-compliant CSPs.

3.2 Outages

Responsibilities of Communication Service Providers:

1. Failure to connect a 911 [payload](#) to an aggregation point is considered reportable and shall be reported.
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. CSPs shall provide the Department with a copy of any notification to the FCC that affected/potentially affected Massachusetts.

Responsibilities of State 911 Department:

1. The Department shall immediately notify, or require the Enhanced 911 Service Provider, or other entity, to notify affected PSAPs and Alternate PSAPs of any outage or service degradation affecting the ability of a PSAP to receive, answer or process 911 payloads. The Department shall in coordination with the PSAPs, develop a procedure for outage and degradation notifications to include alerting methods and messaging, which shall include at a minimum, the description of the know issues, the extent of failure or degradation, including which systems are still functional and an estimated time of repair.
2. Provide a ~~post-incident~~post-incident review to the State 911 commission for all outage incidents.

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Responsibilities of Enhanced 911 Service Provider:

1. The [Department](#) may require the Enhanced 911 Service Provider to report an outage to the FCC.
2. The Department may require the Enhanced 911 Service Provider to make emergency notifications to PSAPs regarding system statuses and other urgent matters.

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3.3 Location Based Payload Routing and Dispatchable Location

Responsibilities of Communication Service Providers:

1. The payload's [dispatchable location information](#) shall be transmitted with the [payload to the PSAP](#).
2. [Fixed](#) on [Premises Devices](#) (as defined in these Regulations) must automatically transmit:
 - a. The validated [civic address](#) (as defined in these Regulations) 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, and
 - c. a floor number, name, or floor identifier if there is more than one floor in any building, ~~and~~
 - d. a room name or number or room identifier if the device initiating the 911 payload is in a school, college, or university or 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. Non-fixed Devices Used On Premises (as defined in these Regulations) must automatically transmit the same location information required for fixed on premises devices as required by (cite Regulation section 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 as required by (cite Regulations section for Fixed on Premises Devices).
4. Non-fixed Devices Used Off Premises (as defined in these Regulations) must automatically transmit the same location information required for fixed on premises devices as required by (cite Regulation section for Fixed on Premises Devices). If automatic transmission of the required location information is not technically feasible, then the device must be capable of

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being manually configured to provide the same location information required for fixed on premises devices as required by (cite Regulations section 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.

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Responsibilities of Enhanced 911 Service Provider:

1. [CSPs](#) shall meet or exceed [NENA's](#) standards, including but not limited to NENA-STA-004.1.1
2. Receive or Request location and route payload geospatially based on [dispatchable location information](#) 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 NG911/13 standards of data interoperability and formatting with direction from the department.

3.4 Accessing 911

Responsibilities of End Users and CSPs:

1. Automatic Alarms or Alerting [Devices](#): No individual, entity, or device shall be allowed to initiate a 911 [payload](#) 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 may require deactivation of devices that do not meet this standard.
2. Devices needed to request emergency assistance by person who are disabled are exempt from this requirement if approved by the Massachusetts Office on Disability or the Department.
3. In an effort to reduce false 911 calls end users and [MLTS](#) operators ~~should~~ shall use any other digit than 9 to gain access to an outside line, for example 7 or 8.
4. 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.
5. Coin Free Dialing. Each telephone company and owner of a private coin telephone in the state shall convert each public or private coin or coinless telephone to dial tone first capability to allow 9-1-1 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 Enhanced 9-1-1 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.

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3.4 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, RECCs, and Regional PSAPs:

Submit information as defined by State 911. Municipalities are encouraged to use local mailings, local media, and other available vehicles to alert their citizenry to this feature.

Responsibilities of Enhanced 911 Service Provider:

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

Responsibilities of E911 Service Providers:

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

Section 4 Emergency Services IP Network (esiNET)

4.1 Resiliency and Reliability

Responsibilities of Enhanced 911 Service Provider:

1. To prevent the widespread loss of 9-1-1 service, the Enhanced 911 Service Provider shall work toward eliminating any single point of failure that could compromise the reliability of the network. The Service Provider shall endeavor to maintain 9-1-1 network integrity, minimize the probability of system degradation and failure, and minimize the negative effects of degradation or failure should it occur. The Service Provider shall be sensitive to cost containment in fulfilling these goals and shall provide cost data to the [Department](#) where there are alternative means for accomplishing these goals.
2. Minimum Circuit Requirements. There shall be a minimum of two dedicated bi-directional, fully functional (N+1) incoming 9-1-1 circuits at each PSAP. The Department may require additional dedicated 911 circuits or other means of connectivity on a case-by-case basis to mitigate additional risk or vulnerability of a PSAP or other reasons determined by the Department.
3. A minimum of two dedicated circuits from each Communication Service Provider to an Aggregation Point.

4.2 Alternate Routing

Responsibilities of Enhanced 911 Service Provider:

Alternate and Final Routing of [Payloads](#). The Service Provider in cooperation with the PSAPs shall design the 911 network/system to allow for alternate and final routing capabilities.

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

1. PSAPs shall select an [Alternate PSAP](#) and communicate changes to Alternate PSAPs to the Department, including any changes to the [PSAP's CoOP plan](#) referenced in [Section 6](#).
2. If a Secondary PSAP or Regional Secondary PSAP acts as an Alternate, it must meet the training and operational standards of a primary PSAP.

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4.3 Mobile PSAP

Responsibilities of Enhanced 911 Service Provider and State 911 Department:

~~1.~~ The [Department](#) shall provide mobile 911 answering point equipment to be utilized to provide uninterrupted 911 service when a PSAP is relocated, when feasible. Said mobile 911 answering point equipment will also be used as an emergency 911 PSAP to restore service during disaster situations. Other uses may include ~~dispatcher~~ [Telecommunicator](#) training and public education.

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1. The Department recommends that new buildings have the necessary shore lines for the Mobile PSAP to connect and operate.

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Section 5 PSAP, RECC, and Regional PSAP Equipment

5.1 Call Handling and Answering Positions

Responsibilities of Enhanced 911 Service Provider:

General Requirements

1. [Barge-In Capability](#). 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. [Call Monitoring](#). All customer premises equipment shall be capable of listening, watching and/or monitoring all in-progress calls.
3. [Instant Playback Capability](#). ~~To maintain system-wide reliability, e~~ Each Primary PSAP, RECC, Regional PSAP and Secondary PSAP shall be equipped with CPE that allows instant playback of [payloads](#).
4. [Call Status Indicator](#). Each 911 payload will indicate incoming emergency calls by both audible and visual indicators.
- ~~5.~~ [Call Detail Records](#). Call Detail Records are stored digitally for a minimum period of three years.

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- ~~5.~~
 - ~~6-a.~~ 911 Payload Call Detail Records shall include, at a minimum:
 - ~~(a)~~ Automatic number identification.
 - ~~(b)~~ [Dispatchable Location Information](#), including all updates.
 - ~~(b)~~

- ~~(c)~~ Dispatchable Location update time
- ~~(c)~~
- ~~(d)~~ Time 911 payload was delivered to PSAP
- ~~(d)~~
- ~~a-(e)~~ Time the payload was answered/responded to

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b-6. In the event of a voice call, the time the call was transferred, terminated and/or abandoned

e-a. Answering [Position](#) number

e-b. Date

e-c. Answering Username

e-d. Call back number

e-e. Timestamped event log

7. Call Detail Records shall also be retained on unanswered, silent, and abandoned calls.

8. [Payload Information](#). The payload 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. ~~Responding-ESZ Primary~~ Public Safety Agencies,
- 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.

9-1-1 Answering Positions

1. There shall be, at a minimum, two [Answering Position](#)s 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 [Department](#).
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 resources. The Department reserves the right to remove 911 positions that are not fully capable of performing 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~~ telephone lines, [critical circuits 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

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affording protection against fire and mechanical ~~damage~~ ~~injury~~. Where cables or wiring are exposed to unusual fire hazards, they shall be properly protected, in accordance with NFPA 1221.

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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 lines at the Service Provider central office or the PSAP location shall provide proper identification to the PSAP supervisor or Service Provider official. Any such individual shall be logged in and give a brief description of all activities or functions to be performed. All 911 lines 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 other attempt to alter 911 Program provided equipment is strictly forbidden, with the exception of those authorized in writing by the Department. Paper and ribbon changes of the printer shall be the responsibility of the PSAP.
6. 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.
7. The Service Provider 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~~.
8. All wiring shall comply with Massachusetts and municipal wiring codes.

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Ancillary Equipment

1. Teletype (TTY). The Department 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 911 Program 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 ~~or Enhanced 911 Service Provider/CPE Provider shall may~~ provide ~~computer-aided~~ ~~computer-aided~~ dispatch interface capability to PSAPs.

Help Desk

The E911 Service provider 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 will be the responsibility of the PSAP unless funding is awarded under eligible grant programs or other funds. Equipment rooms shall be climate controlled. PSAPs shall provide a secure location for all 911 equipment.
2. No 911 or seven-digit emergency lines shall terminate in equipment not approved by the Department and the Service provider. 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.
3. Combined Telephone Answering Equipment. Where practicable, combined telephone handsets and/or headsets should be utilized by PSAP personnel required to answer both 911 payload/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.
4. 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.
5. 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. (NFPA 1221)
6. The Department shall provide an adequate uninterruptable power supply (UPS), with power conditioning capability to power a Primary PSAP's, RECC's, and Regional'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 provision and maintenance 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 Department 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 Payload Recording

Responsibilities of Enhanced 911 Service Provider, PSAPs, and State 911:

1. The Primary PSAP, RECC, or Regional PSAP must record 911 calls-payloads and is the primary source of all call records.
2. State 911 shall provide an IP interface at the Primary PSAP, RECC, Regional PSAPs and Secondary PSAPs. The purpose of this IP interface is to provide audio recording capability and/or broadcasting audio within the PSAP. This interface shall pass all 911 payload data and communications received by the CPE in a standard format.

PSAPs shall be responsible to retain the 911 recording audio for a minimum of three years from the date of the call and as otherwise required by law.

Section 6 PSAP, RECC, and Regional PSAP Administration

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

1. Municipal Coordinators. Every municipality participating in the 9-1-1 system shall designate a person to serve as the local contact person with the Department and the 911 service provider for all issues regarding 9-1-1 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.
2. 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-hour~~24-hours a day, ~~seven-day-a-week~~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 9-1-1. The Department shall maintain all ten-digit emergency numbers of all decommissioned PSAPs which shall ring at the PSAP that assumed the duties from the decommissioned PSAP to ensure continuity of operations of decommissioned PSAPs.
5. PSAP Security. All access to the PSAPs should be secured to prevent entry by the public or unauthorized personnel.
6. PSAPs shall provide personnel with ongoing physical, informational and cyber security training

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Municipal Coordinators. Every Primary PSAP shall designate one person to serve as the local contact person with the Department and the 9-1-1 service provider for all issues regarding 9-1-1 service, including the approvals of 9-1-1 disability indicator requests. Regional Emergency Communications Centers and Regional PSAPs may designate one individual for their entire primary service area or separate individuals for each Municipality. There shall only be one (1) designated coordinator per Municipality, appointed by the primary PSAP. Limited secondary, private, and any other non-primary PSAP shall coordinate through the primary PSAP's designated Municipal Coordinator. The Primary PSAP shall report any changes in the Municipal Coordinator in writing to the Department within ten business days.

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Hours of Operation for Public Safety Answering Points. A primary PSAP shall be physically staffed with certified telecommunicators and operated in compliance with the provisions of this regulation on a twenty-four (24) hours a day, seven (7) days a week basis. Each Municipality shall operate a primary PSAP on its own or transfer this responsibility to another assenting municipality or governmental entity. The assenting Municipality or governmental entity that accepts responsibility from a municipality shall retain the authority and responsibility of 9-1-1 operations thereafter or transfer it in the same manner. In the event of a disaster, emergency, or exigent

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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 9-1-1 or for use by a reporting party who cannot access the center by dialing 9-1-1, including, but not limited to, out-of-state public safety agencies or alarm companies. The Department shall maintain all ten digit telephone numbers previously issued

Commented [RAV25]: Regional 911 Directors' recommended language:

PSAP Security. PSAPs shall be secured to prevent entry or visual or auditory observation by the public or unauthorized personnel. Members of the public may be permitted access into a PSAP upon authorization of the PSAP's director or similar official, provided that the PSAP takes appropriate steps to protect the overall security of sensitive information. PSAPs shall provide personnel with physical and cyber security training upon hire and

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 service provider as soon as possible.

8. Public Safety Answering Point 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 Emergency Communication District is required to produce internal financial audits, pursuant to M.G.L. 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 9-1-1 payloads until the PSAP is in compliance. If the PSAP remains not in compliance after 6 months following notification by the Department, permanent redirection of payload may be determined by the Department pursuant to MGLc 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.

Commented [RAV26]: This applies to a narrow subsection of RECCs (Chapter 6A 911 Districts) and is an unnecessary restatement of a statute. This provision is also out of the scope of this regulation's authority.

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 responding supporting the response, recovery and reporting of emergencies, criminal justice, requests for assistance, incidents or potential incidents emergency payloads, 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 uses case may be authorized by the Department.
2. The Department and PSAPs must provide protection and confidentiality 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, and unauthorized disclosure confidentiality of all payload data and personally identifiable information of people accessing and or utilizing the 911 System.
4. PSAPs shall comply with public records laws and regulations when responding to public requests requests for records information but will protect personally identifiable information and shall by applying ensure the applicable of appropriate exemptions to such requests pursuant to G. L. c. 4, § 7(26).
5. Records Retention. All recording of 911 payloads shall be retained as required by MGL Chapter 6a Section 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.

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Commented [RAV27]: Emphasis added but permissive. This conflicts with the section 3

Commented [RAV28]: Security of Data. PSAPs and any person possessing 9-1-1 payload data derived from the 9-1-1 system, shall protect 9-1-1 payload information from unauthorized disclosure, alteration, or misuse. 9-1-1 payload data may be disseminated to the extent required to support: (a) the response, mitigation, and/or recovery from an emergency incident, (b) the search for, pursuit, or apprehension of any person, (c) a governmental investigation, (d) prosecution, (e) or any other purpose authorized by law or in the interest of public safety. 9-1-1 payload data may be used by a PSAP for training or analytical purposes. 9-1-1 payload data may be transmitted to or through 3rd party applications or software for any lawful purpose or to provide access to authorized uses, provided that reasonable steps are taken to protect the 9-1-1 payload data from unauthorized dissemination.

Commented [RAV29]: Regional 911 Directors' recommended language:

911 Payload Data shall be considered confidential. Each PSAP shall take reasonable measures to ensure the protection and confidentiality for all payload data and the security of the PSAP facility. To that end, each PSAP shall establish personnel security clearance standards to determine initial and ongoing personal security suitability. State, national, and state-of-residency fingerprint-based background checks shall be conducted on all individuals with unescorted access to secure areas of a PSAP facility which shall include at a minimum, the PSAP and all spaces where 9-1-1 equipment is present, including 9-1-1 terminals, administrative positions, 9-1-1 servers, printers or where 9-1-1 audio is played or live monitored.

Commented [RAV30]: This needs to be defined.

Section 8 Payload Handling, Answering Positions, and Staffing

Responsibilities of PSAPs, RECCs, and Regional PSAPs:

1. As calculated on a monthly basis, 90% of all 9-1-1 [payloads](#) shall be answered within ten seconds, 95% of all 9-1-1 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 hearing-impaired individuals via TTY. PSAPs shall test the TTY feature and keyboard that is part of the 9-1-1 equipment regularly in compliance with the ADA.
4. Text to 9-1-1 Calls: Each PSAP shall develop a documented in-house quality assurance program to ensure that each [telecommunicator](#) is proficient at handling a text to 9-1-1 payload.
5. [Payload](#) transfer to another PSAP. PSAP's staffing levels and operational procedures should ensure that 90% of all 9-1-1 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 [ALI/Dispatchable Location Information](#) 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. ~~Except in exigent circumstances or the time period required to safely conclude the handling of an in-progress, active 911 payload, no person shall be authorized to answer or process 911 payloads beyond a cumulative of 16 hours in a 24-hour period and shall be afforded a minimum of 8 hours of opportunity to rest before being authorized to answer or process 911 payloads again. 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 9-1-1 payload until the PSAP is in compliance. If the PSAP remains not in compliance after 6 months following notification by the Department, permanent redirection of payload may be determined by the Department pursuant to MGLc 6A Section 18b, Et. Seq.

Section 9 Training and Public Education

Training

Commented [RAV31]: Regional 911 Directors' recommended language:

Payload transfer to another PSAP. PSAP's staffing levels and operational procedures should ensure that 90% of all 9-1-1 payloads that require a transfer to another PSAP or Certified EMD Resource provider have the transfer initiated within fifteen (15) seconds from the point where the telecommunicator could identify the requirement to transfer a payload and has the minimum amount of information required to safely transfer the call and dispatch locally dispatched units, if applicable. The time taken from answer time to the time at which a telecommunicator initiates a transfer should not exceed sixty (60) seconds from the answer time except where a call requires interpreter services, is a silent call, tty call, text message call, or where the caller is non-compliant with questioning. For incidents where an emergency response from multiple disciplines may be required including police, fire, EMS, and where a transfer is required, such as using an EMD resource, the telecommunicator may retain the call if it best provides for the safety and scene stabilization. Once primary safety concerns and scene stabilization issues have been addressed, the telecommunicator shall transfer to the appropriate PSAP, limited secondary PSAP, or ringing PSAP. Nothing in this section shall be construed as to permit a PSAP to delay a transfer of a call due to concurrent responses of multiple disciplines and shall only be used in the case of true safety concerns. The Department shall compile a job aid with instructions and training to illustrate the intent of this provision and assist in PSAPs' compliance.

Commented [RAV32]: This conflicts with 560 CMR 5.10(2)

..."A PSAP, RECC, public safety department, or private safety department that receives a request for emergency service outside of its jurisdiction shall immediately forward the request to the appropriate PSAP or public safety department responsible for the geographical area". ...

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 9-1-1 equipment training and a forty (40) hour Basic

Telecommunicator certification offered by the [Department](#) or a Department approved forty (40) hour Basic Telecommunicator certification. For existing Certified NG 9-1-1 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 9-1-1 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 9-1-1 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, Regionals, RECCs, Regional Secondary, Secondary, and Limited Secondary PSAPs serving as the [CEMDR](#) 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.

Public Education Program

1. Public Education Program. Municipalities and/or PSAP participating in the Massachusetts 9-1-1 Program shall develop a public education program aimed at the emergency service needs of the community.
 - a. Based on the non-English speaking population of a community, the Municipality/[PSAP](#)-shall determine if 9-1-1 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, 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.

2. Public Education Materials. The [Department](#) 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."