

State of California

9-1-1 OPERATIONS MANUAL

CHAPTER I – STANDARDS

By Legislative authority (California Government Code, Section 53114.2), the Governor's Office of Emergency Services, Public Safety Communications, California 9-1-1 Emergency Communications Branch (CA 9-1-1 Branch) has established mandatory standards to provide the fastest, most reliable, and cost-effective telephone access to emergency services for any 9-1-1 caller in California.

The CA 9-1-1 Branch has the responsibility to monitor all emergency communication systems related to the delivery of a 9-1-1 call to ensure they comply with these standards. CA 9-1-1 Branch has the authority to audit and request data on any items being funded from the State Emergency Telephone Number Account (SETNA). The entire 9-1-1 Operations Manual (Manual) and other CA 9-1-1 Branch documents may be viewed and downloaded from the CA 9-1-1 Branch website, as follows:

<http://www.caloes.ca.gov/cal-oes-divisions/public-safety-communications/ca-9-1-1-emergency-communications-branch/ca-9-1-1-operations-manual>

A comprehensive range of recommended standards is offered on the National Emergency Number Association (NENA) website at: www.nena.org (select "Standards and Other Documents"). The website includes: NENA recommended technical standards for Public Safety Answering Point (PSAP) equipment and back-up power, PSAP security, PSAP operations, 9-1-1 networks, wireless carriers and many more topics.

MANDATORY STANDARDS

In the interest of public safety and successful delivery of 9-1-1 calls in the State of California, the following standards are required:

General Standards – These general standards are intended to maintain clarity for the public in the proper use of "9-1-1" in a manner that supports fast and reliable access to emergency services in California. (*These standards are in alphabetical order with no priority of compliance.*)

- 1. 9-1-1 Misuse** – Individuals who knowingly and intentionally disrupt or report a false crime to 9-1-1 may be charged a fine of \$1,000 to \$10,000 and/or jail time for less than one (1) year (Penal Code Section 148.3). Individuals that willfully use 9-1-1 for any purpose other than reporting emergencies may be charged progressive fines from \$50 to \$250 (Penal Code Section 653y). Examples of this misuse include calls to 9-1-1 for driving directions, directory assistance, and to report the grass along the freeway needs to be mowed.
- 2. 9-1-1 Numeral Usage** - The numerals "9-1-1" shall not be used in any way that may confuse or be misleading to the public.
- 3. 9-1-1 Published Number** - The primary published emergency telephone number shall be 9-1-1 and will be the only number on the "Emergency" page of the telephone directory.

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4. **Automatic 9-1-1 Dialing** - Alarm companies or other entities that do not qualify as a public safety agency (a public agency that provides law enforcement, fire, medical or other emergency services) shall not program equipment to automatically dial 9-1-1.
5. **Proper Use and Display of “9-1-1”** - Private companies, such as ambulance or other service providers, shall not use the numerals 9-1-1 in the name of their company nor may they list 9-1-1 in the telephone directory without written authorization from the PSAPs that will be affected by the listing. When 9-1-1 is authorized, the ambulance companies must also list a seven-digit telephone number for non-emergency calls.

CA 9-1-1 Network Standards - All equipment and service providers offering 9-1-1 functionality (by means of wireless, Voice over Internet Protocol (VoIP), and other technologies in the California 9-1-1 Network) shall accommodate the most recent CA 9-1-1 Branch policies and procedures provided in this Manual and on the CA 9-1-1 Branch website. Funding from the SETNA by the CA 9-1-1 Branch is contingent upon adherence to the following mandatory standards. (*These standards are in alphabetical order with no priority of compliance.*)

1. **9-1-1 Lines/Trunks** - All 9-1-1 lines/trunks in the California 9-1-1 Network that are funded by the CA 9-1-1 Branch must be pre-approved by the CA 9-1-1 Branch. All 9-1-1 lines/trunks in the California 9-1-1 Network that are directly billed to and paid for by the public safety agency must meet “tariff” conditions and must be reviewed by the CA 9-1-1 Branch before service is established.
2. **Circuit Protection** - Protected 9-1-1 circuits shall not be opened, grounded, short-circuited, or manipulated in any way unless the appropriate PSAP has released the circuit.
3. **Emergency Service Number (ESN)** - Every primary PSAP will have ESNs exclusively for routing landline 9-1-1 calls and ESNs exclusively for routing wireless 9-1-1 calls.
4. **Grade of Service** - Network service providers shall take periodic service measurements on the 9-1-1 trunk groups to ensure a minimum grade of service of P.01. This means no more than one (1) busy signal per 100 attempts. These measurements shall also be taken at the request of public safety agencies. Participating public safety agencies and the CA 9-1-1 Branch will be notified of the results of Probability (P) Grade of Service measurements out of compliance.
5. **Outage Notification** - All equipment and network providers shall provide 9-1-1 Outage Notification Procedures to the CA 9-1-1 Branch for implementation in the event of a 9-1-1 outage where the outage may cause a significant impact to the delivery of 9-1-1 calls in California. Examples include the following:
 - a. Inability of the PSAP to process 9-1-1 emergency calls; that is, the loss of a PSAP’s ability to perform the required 9-1-1 call transfers or communications due to 9-1-1 equipment or network failure.
 - b. Inability of the public to contact their local or regional PSAP by dialing “9-1-1”.

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- c. Community isolation: any situation that disrupts the ability of an area or community to communicate outside their local area over the 9-1-1 communications network is considered a PSAP isolation.
6. **Trunking** - PSAP line/trunk requirements shall be determined by the number of 9-1-1 calls and specific transfer functions. All 9-1-1 calls shall receive the same level of priority and call handling. The CA 9-1-1 Branch shall authorize added or reduced trunking based upon call volume analysis. See # 1, "9-1-1 Lines/Trunks" standard.

Public Safety Answering Point (PSAP) Standards – PSAP funding from the SETNA by the CA 9-1-1 Branch is contingent upon adherence to the following mandatory standards. *(These standards are in alphabetical order with no priority of compliance.)*

1. **Automatic Location Identification (ALI) Format** - PSAPs shall accommodate the most current ALI standard for the State of California, currently "Format 04", in any equipment replacement or upgrade.
2. **Call Answer Time Within Ten (10) Seconds** - During the busiest hour of any shift, ten (10) seconds shall be the maximum amount of time in which incoming 9-1-1 calls are to be answered. The CA 9-1-1 Branch realizes that unpredictable spikes may occur and will take abnormalities into consideration when reviewing statistics.
3. **Call Data Reporting (CDR) Connectivity** - PSAPs shall accommodate connectivity of 9-1-1 call-taker Customer Premise Equipment (CPE), funded by the CA 9-1-1 Branch, to the CDR system within 30 days of system installation. Any intentional manipulation to the 9-1-1 call data may result in reduction of CA 9-1-1 Branch funding to PSAP.
4. **Call Transfers** – When transferring a 9-1-1 call, procedures will be developed for advising the 9-1-1 caller that the call is being transferred and to remain on the line. Every effort should be made to minimize the number 9-1-1 call transfers.
5. **Hours of Operation** - Each PSAP funded by the CA 9-1-1 Branch shall be staffed with 9-1-1 call-taker(s) and committed to answer 9-1-1 calls 24 hours per day, every day of the year, for a minimum of five (5) years. Exception to this requirement is supported for "grandfathered" PSAPs (agencies that received CA 9-1-1 Branch CPE funding prior to December 2001 with limited hours of operation). However, we encourage all PSAPs funded by the CA 9-1-1 Branch in "grandfathered" status to consider consolidation or extend to full compliance with this standard.
6. **Network Connections** - Each PSAP shall have a minimum of two (2) trunks to a Selective Router (S/R) and trunks will be augmented based upon maintaining a typical P.01 grade of service and call volume. (This requirement exceeds the minimum recommendations by NENA.)
7. **Non-published Emergency Number(s)** - Each PSAP shall have a minimum of one (1) non-published ten digit 9-1-1 number for emergency call transfers.

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8. **Protective Devices** - All facilities and equipment associated with 9-1-1 service shall be provided with protective devices to prevent accidental workman contact. Each protected termination shall be clearly identified. Protected 9-1-1 circuits will not be opened, grounded, short-circuited, or manipulated in any way unless the appropriate PSAP has released the circuit.
9. **Transfer Numbers** - PSAPs shall provide their 10-digit emergency numbers to entities requiring a backup number to route to, or other service providers not delivering calls into the 9-1-1 network.