Second Public Review on substantive edits is shown below and highlighted. If necessary, the full document reflecting substantive edits may be downloaded at https://dev.nena.org/higherlogic/ws/public/document?document_id=16406&wg_id=a99b431f-54dc-4523-ba53-bd171f25e52d. Comments may also be submitted at this link by selecting “Add a Comment” from the arrow to the right of Document Actions.

NENA Standard for 9-1-1 Call Processing

This DRAFT document is not intended for distribution beyond the groups developing or reviewing the document. The document is also not intended to be used or referenced for development or procurement purposes until final publication. All draft material is subject to change and it is possible that the document itself may never be approved for publication.

NENA Standard for 9-1-1 Call Processing
ANS CANDIDATE NENA-STA-020.1-2019
DSC Approval: MM/DD/YYYY
PRC Approval: MM/DD/YYYY
NENA Executive Board Approval: MM/DD/YYYY
ANSI Approval: MM/DD/YYYY

Prepared by:
National Emergency Number Association (NENA) PSAP Operations Committee, 9-1-1 Call Processing Working Group

Published by NENA
Printed in USA
2.2 Call taking standards

2.2.1 Standard for answering 9-1-1 Calls

Ninety-five percent (95.0%) of all 9-1-1 calls arriving at the Public Safety Answering Point (PSAP) SHALL be answered within (\leq) fifteen (15) seconds. Ninety-nine percent (99.9%) of all 9-1-1 calls SHOULD be answered within (\leq) forty-twenty (40:20) seconds. A call flow diagram is available in Exhibit A.

The application of the standard SHALL begin at the time of Call Arrival and extend to the time of Call Answer at the point when two-way communication can begin.

The interval between Call Arrival and Call Answer should be evaluated, at a minimum, for each preceding month using a full month of data. Determining if a PSAP has successfully met the call interval metric of 95.0% in 15 seconds (and 99.9% in 40:20 seconds), should be based upon the one-month evaluation. An authority having jurisdiction (AHJ) may measure this metric on a weekly or daily basis for a more detailed analysis.

2.2.5.1 Location/Address Verification

The telecommunicator will SHALL verify all location information conveyed about the emergency in order to obtain the most accurate dispatchable location for emergency services response. Verification policies and associated procedures can vary based on dispatch center coverage topography and the unique characteristics of their call handling solutions.

2.2.6 Transferring emergency calls

When calls need to be transferred to another PSAP, the telecommunicator SHALL advise the caller which PSAP they are being transferred to, in addition to advising the caller to stay on the line while the call is being transferred, such as “Please do not hang up; I am connecting you with (name of the agency).” The telecommunicator will SHALL then initiate the transfer without delay. The telecommunicator SHALL stay on the line to announce the call to the transfer PSAP call taker/telecommunicator (a.k.a., “warm transfer” or “attended transfer”), and SHOULD relay the pertinent information, including, but not limited to:

- Location
- Callback number
- Nature of the call
- Known safety information

A local or regional policy MAY exist between primary and secondary PSAPs, or agencies that participate in a regional system, that addresses unattended call transfers; however, NENA recommends against unattended transfers.
2.2.8.5 Misrouted 9-1-1 calls

Calls may be received at a PSAP that are intended for another PSAP. These calls SHOULD be transferred to the PSAP having jurisdiction for the location of the emergency, if possible and appropriate, after advising the caller of the transfer. Direct transfer capability or other enhanced transfer/relay methods to other PSAPs SHOULD be available to the telecommunicator. Telephone numbers of neighboring PSAPs bordering the PSAP jurisdiction SHOULD be made available on a frequently called number list or by single button transfer for ease of operation. Out-of-area PSAP contact information may be found in the NENA PSAP Registry or via the NLETS system. Details of the misrouted SHOULD be sent to the GIS data providers of each involved jurisdiction, so they can review tier boundaries and check for technical errors.

2.2.8.6 Alternate Routed 9-1-1 calls

Alternate routed calls are activated automatically or sometimes manually when 9-1-1 calls cannot be delivered by the 9-1-1 network to the appropriate primary PSAP. Calls of this type are those routed to another PSAP based upon the Policy Routing Rules of the original receiving PSAP, the existing alternate routes established by legacy PSAPs, or those which are default routed. These calls SHOULD be transferred to the PSAP having jurisdiction for the location of the emergency, if possible and appropriate, after advising the caller of the transfer. If the PSAP having jurisdiction is unable to receive the call, local policy SHOULD dictate how to process the call. Direct transfer capability or other enhanced transfer/relay methods to other PSAPs should be available to the telecommunicator. Telephone numbers of neighboring PSAPs bordering the PSAP jurisdiction SHOULD be made available on a frequently called number list or by single button transfer for ease of operation. Out-of-area PSAP contact information may be found in the NENA PSAP Registry or via the NLETS system.
2.2.8.9 Repetitive Harassing 9-1-1 Callers.
Repetitive 9-1-1 callers create a type of denial of service (DoS) where their calls intentionally tie up a Telecommunicator as well as potentially block out legitimate 9-1-1 calls. In legacy 9-1-1 networks, E9-1-1 call locations have been used by PSAPs to assist law enforcement in investigating 9-1-1 abuse calls. In NG9-1-1 Core Services, new call blocking techniques can be utilized in accordance with local policy.²

² NENA-INF-023.1-2017 NENA Call Blocking Information Document

Exhibit A – Call Process Diagram
NENA Call Answering Interval for 9-1-1 Calls

- **Call Initiated**
  - Call Arrives at PSAP
  - Call Answered
  - Call Processed

  **NENA Call Answer Interval (911 calls)**
  - 90% answered in ≤ 15 seconds
  - 95% answered in ≤ 20 seconds

  **NFPA Answer Standard for 911**
  - 90% answered in ≤ 15 seconds
  - 95% answered in ≤ 20 seconds

- **Units Notified/Dispatched**
- **Units Arrive On Scene**

- **Call Transfer**
- **Continued Call Processing**

*Call network setup time (pre-arrival at PSAP) is not included in answering interval.

- "Call" includes text messages and non-human initiated alerts as defined in NENA STA-010.2 (formerly NENA 08-003).
- The NFPA standard is included here for context of other industry measurements. This NENA standard only addresses 9-1-1 call answering requirements to be measured between Step 2 and Step 3 in the above diagram.
- NENA Call Answer Interval is further clarified that calls should be answered in Less Than or Equal to (≤) either 15 seconds or 20 seconds as appropriate.
- The authority having jurisdiction defines what the jurisdiction considers to be an emergency call when applying the call answer standard.
- All operational steps in the lifecycle of a 9-1-1 call are provided for referential purposes only.