

Guidelines For Minimum Response To Wireless 9-1-1 Calls



NENA Guidelines for Minimum Response to Wireless 9-1-1 Calls
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Group

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NENA's Operations Committee has developed this document. Recommendations for change to this document may be submitted to:

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1 Executive Overview

This document has been developed to serve as a model standard operating procedure for those Public Safety Answering Points (PSAPs) that receive wireless 9-1-1 calls.

To facilitate the handling of wireless 9-1-1 calls, the following information is provided:

- A description of the Phases of wireless 9-1-1 implementation and the type of information that is delivered to the PSAP with each Phase.
- Definition of the types of disconnected or silent 9-1-1 calls that a call-taker may encounter.
- Recommended action when a call taker receives a silent 9-1-1 call or the caller is disconnected.
- Guidelines for the use of discretion when a silent or disconnected call is encountered.
- Recommended action in the event an emergency service response is required.

Since local options are varied, this document also provides sections to describe the appropriate:

- Wireless call routing configuration
- Wireless trunking solution
- Wireless service providers emergency contact information

The availability of Wireless Number Portability began in November of 2003 by FCC Rule. The current revision to this document included the recommendation that PSAPs register with the NeuStar Integrated Voice Response (IVR) Unit to facilitate access to subscriber information for ported and pooled telephone numbers.

The Emergency Services Interconnection Forum (ESIF), a work group of the Alliance for Telecommunications Industry Solutions (ATIS) developed a template to be used by PSAPs requesting customer information under exigent circumstances. This form is attached in Exhibit B.

2 Introduction

2.1 Purpose and Scope

These guidelines have been developed to facilitate the handling of wireless 9-1-1 calls.

2.2 Reason to Implement

This document has been issued to serve as a model standard operating procedure for those Public Safety Answering Points that receive wireless 9-1-1 calls.

2.3 Benefits

Use of this Model Standard Operating Procedure will standardize the method of wireless 9-1-1 call handling across jurisdictional boundaries. This will:

- Provide consistency in call handling of wireless calls
- Improve service to wireless callers
- Facilitate access to subscriber information for ported and pooled telephone numbers

2.4 Technical Impacts Summary

Not applicable.

2.5 Document Terminology

The terms "shall ", "must " and "required" are used throughout this document to indicate required parameters and to differentiate from those parameters that are recommendations. Recommendations are identified by the words "desirable" or "preferably".

2.6 Reason for Reissue

NENA reserves the right to modify this document. NENA reserves the right to modify this document. With the advent of wireless number portability, PSAPs require the means to access subscriber information for ported mobile telephone numbers. Accordingly, this document is being re-issued to include the following:

- 2.6.1 Section 6 is modified to include the procedure to obtain the contact information for roaming wireless subscribers.

- 2.6.2 Information on accessing the North American Numbering Plan Administration (NANPA) data base for assignment of central office codes.
- 2.6.3 Section 7 is added to include the recommendation that PSAPs register with the NeuStar Integrated Voice Response (IVR) Unit to facilitate access to subscriber information.
- 2.6.4 Exhibit B, the Exigent Circumstances form, was developed by the Emergency Services Interconnection Forum (ESIF), a work group of the Alliance for Telecommunications Industry Solutions (ATIS).
- 2.6.5 Exhibit C is added to provide the NeuStar IVR access procedure.

2.7 Cost Factors

Not applicable.

2.8 Cost Recovery Considerations

Not applicable.

2.9 Acronyms/Abbreviations

The acronyms/abbreviations used in this document have not as yet been included in the master glossary. After initial approval of this document, they will be included. Link to the master glossary is located at:

http://www.nena.org/9-1-1TechStandards/nena_recommended_standards.htm

The following Acronyms are used in this document:	
ESIF	Emergency Services Interconnection Forum
NANPA	North American Numbering Plan Administration, the agency that tracks assignment of Area Codes and Central Office Codes
NPD	Numbering Plan Digits, part of the North American telephone numbering scheme. This is also known as the Area Code or Numbering Plan Area (NPA)

3 Overview

3.1 Phase 0 (Zero) – When Phase 0 has been implemented, a wireless 9-1-1 call is delivered to the PSAP with or without call-back or location information.

3.1.1 Utilizing 7 or 10 digit lines with caller ID the PSAP may receive the call-back telephone number.

3.1.2 In an Enhanced 9-1-1 environment the PSAP may receive the following information:

3.1.2.1 The tower-face or routing telephone number identifier

3.1.2.2 Location of the tower that is handling the call

3.1.2.3 Wireless service provider

3.1.2.4 Typically, carriers also note which direction antenna array on the tower is handling the call, although this is not part of the FCC requirement. Example: *“123-B North Spring Road, Cell Tower, NE”*

3.2 Phase I - When Phase I has been implemented, a wireless 9-1-1 call is delivered to the PSAP with the following information:

3.2.1 Wireless phone call back number.

3.2.2 Location of the tower that is handling the call.

3.2.3 Identification of the wireless service provider responsible for the tower that is handling the call.

3.2.4 Directional antenna array information as noted above.

3.3 Phase II - When Phase II is implemented, a wireless 9-1-1 call is delivered to the PSAP with the approximate location of the wireless caller based on the X,Y (longitude and latitude) coordinates determined by the system.

3.3.1 The X,Y coordinate is an estimate and the actual location of the wireless 9-1-1 caller may not be exactly as indicated.

3.3.2 The FCC requires that when a Phase II call does not generate a usable geographic location, the call should be delivered as a Phase I call, and include all Phase I information.

3.3.3 In the event Phase II information is not delivered with the initial call data, the call taker should wait “N” seconds before initiating a rebid. <<Insert the number of seconds a call taker should wait before initiating a rebid after consultation with the wireless carriers in your area.>>

3.4 Wireless 9-1-1 Call routing

<<describe the wireless routing configuration for your PSAP - check with your service providers for this information>>

3.5 Wireless 9-1-1 Trunks

<<insert the solution appropriate for your agency; select from or modify the following typical solutions or provide your own language as appropriate>>

Solution 1: Wireless and wireline 9-1-1 calls are received in the PSAP on separate 9-1-1 trunks. In the unlikely event of a failure of either system, the other should remain operational. This system also has the benefit of preventing a major accident or other emergency being reported by multiple wireless subscribers from jamming the entire 9-1-1 system. The number of wireless and wireline trunks at each PSAP is based on call volume and will be closely monitored.

Solution 2: All wireless and wireline 9-1-1 calls are received in the PSAP on the same trunks. This system has been implemented to insure that wireless calls are handled in the same manner as wireline calls

3.6 Documentation. Call takers will document with whom they spoke, the reason 9-1-1 was dialed (e.g., nature of the call, or accidental, misdial) and any other explanatory or “intuitive” observations discerned from the call. A disposition should be added to the call record for statistical analysis and documentation.

4 PHASE I OR II WIRELESS 9-1-1 DISCONNECT AND SILENT CALLS

- 4.1 Call back** The call taker will attempt to call back a wireless telephone when a 9-1-1 call is routed to the PSAP and the call disconnects before personnel can determine if assistance is needed. Personnel will call the number back once to make this determination. If the wireless phone is busy or there is no answer, additional attempts to contact the caller will not be made by communications personnel. If the callback attempt goes to voice mail, no message will be left.
- 4.2 Silent calls.** In compliance with Public Law 101-336, also known as the *Americans with Disabilities Act*, all silent calls will be interrogated with a TDD/TTY to determine if the caller is attempting to report an emergency using a special communications device for hearing impaired individuals.
- 4.3 Contact.** If contact is made with the caller, communications personnel will follow call-handling procedures established by the local agency to determine whether a public safety response is necessary.
- 4.4 Indicated Emergency .** Any evidence of an emergency situation requires that communications personnel initiate efforts to re-contact the caller to determine the nature of the incident and an accurate location for appropriate public safety response, according to procedures established by the local agency. If attempts to contact the caller are unsuccessful, a field public safety response will be initiated based on the caller location provided by the 9-1-1 system. Extraordinary attempts to locate a Phase I or II wireless 9-1-1 disconnect caller will only be made in the instance where an emergency is clearly indicated.

5 COMMUNICATIONS PERSONNEL DISCRETION

5.1 Discretion . Communications personnel should pay close attention to background noise, tone and word choice of caller as additional evidence to assist with determination of the status of the 9-1-1 call. The time of day and location of the caller may be additional clues to indicate whether a response is necessary. In any situation where the call taker believes an emergency situation may exist, an appropriate public safety response will be initiated.

5.2 Cancellation . Communications personnel may disregard a wireless 9-1-1 call if there is evidence that the call is one of the following situations:

- 5.2.1 9-1-1 Misdial. A call is classified as a 9-1-1 misdial when the caller stays on the line and admits to the misdial.
- 5.2.2 Unintentional 9-1-1 Call. A call is classified as unintentional when the 9-1-1 personnel can hear conversation, radio, etc. in the background and have listened sufficiently and checked with a TDD/TTY to determine that there is no indication of an emergency situation.
- 5.2.3 Children playing on the phone or prank 9-1-1 calls.

Note: Some agencies may require a response in these or similar situations.

6 RESPONSE NOTIFICATION

6.1 Response required. In the event the nature of the call requires an emergency service response (*i.e.: indicated emergency or agency policy*), the call taker should take the following action:

- 6.1.1 If the caller's location is not known but the phone number was displayed, the call taker should contact the Wireless service provider to do an account search for the residential address. Keep in mind that this may not be the location the caller was calling from since a wireless phone was used.
 - 6.1.1.1 The 24x7 contact information for those companies providing wireless service to our jurisdiction is located as Exhibit A to this document. Contact information for wireless service providers whose customers may roam in our area can be found in the NENA Company ID file. *See Section 7.4.2. for directions on accessing this data.*
 - 6.1.1.2 The exigent circumstances form (attached as Exhibit B) should be used on agency letterhead to make such request for information. The Emergency Services Interconnection Forum (ESIF), a working group of the Alliance for Telecommunications Industry Solutions (ATIS), developed this document.
- 6.1.2 If the approximate location is known, the call taker should inform the dispatcher (or emergency service personnel) of the 9-1-1 call source data.

6.2 Call source data . The dispatcher (or emergency service personnel) should be informed of the following:

- 6.2.1 The call was a wireless call.
- 6.2.2 Type of emergency (if available).
- 6.2.3 Specific caller information (if available), such as:
 - 6.2.3.1 Make, model and color of vehicle
 - 6.2.3.2 If location is provided:
 - 6.2.3.2.1 Street address
 - 6.2.3.2.2 Highway and mile marker
 - 6.2.3.2.3 Direction of travel

6.2.3.3 If no location is provided:

6.2.3.3.1 Longitude and latitude (converted to physical location)

6.2.3.3.2 Nearest landmark (center of search area).

6.2.3.3.3 Approximate search radius (if indicated).

6.2.4 Type of call (if no other information is available)

6.2.4.1 Silent

6.2.4.2 Hang-Up

6.2.4.3 Abandoned

6.2.4.4 Other

7 WIRELESS NUMBER PORTABILITY - NEUSTAR REGISTRATION

7.1 Wireless Number Portability. With the advent of Wireless Number Portability (WNP), customers gained the ability to keep their telephone number when changing carriers, or when they go from wireless to wireline or vice- versa.

7.1.1 It is important, therefore, for each PSAP to register with the NeuStar Integrated Voice Response (IVR) Unit. Registration will allow the PSAP to identify the current carrier from which subscriber information can be obtained by means of a telephone call. The provider's 24x7 contact information is also supplied. It should be noted that both wireless and wireline pooled/porting numbers are in IVR.

7.1.2 In addition, there are automated private web sites that provide NPA (Area Code)-NXX (Central Office Code) lookup capability. These sites have not been verified for accuracy or timeliness in updates.

7.2 Registration . PSAPs should register for this free service through the Internet at: http://www.nationalpooling.com/law_911_registration/. Upon registration, each PSAP is given an 8 digit security code to access the system.

7.3 Access . After calling the law enforcement access number, the PSAP operator enters the security code and the telephone number in question. (*See flow chart as Exhibit C.*) The PSAP will receive one of three responses:

7.3.1 The telephone number (TN) doesn't exist in their records. (Which means that the number is not ported or pooled).

7.3.2 The TN currently belongs to (Service Provider ID) - Voice Name. Contact (SP Name) at (Number).

7.3.3 The TN has been disconnected, and previously belonged to (Service Provider ID) - Voice Name.

7.4 Non-ported or pooled . If the TN doesn't exist in their records, the number has not been ported or pooled. To determine carriers and contact information for these number blocks, the records may be downloaded from the North American Numbering Plan Administration (NANPA) database and the NENA Company-ID files may be accessed as follows:

7.4.1 North American Numbering Plan Administration (NANPA) inquiry. Log on to http://www.nanpa.com/reports/reports_cocodes.html. Here you will find links to the following:

- 7.4.1.1 Central Office Code Availability Report - Provides an up-to-date list of central office codes (NXX) available for assignment by NPA (Numbering Plan Area) *i.e.*: *Area Code, a.k.a Numbering Plan Digits (NPD)*.
- 7.4.1.2 Central Office Code Utilized Report - Provides an up-to-date list of central office codes assigned or unavailable for assignment by NPA.
- 7.4.1.3 Central Office Code Assignment Records - Provides a daily updated listing of assigned, available and unavailable central office codes by NPA in a downloadable format.
- 7.4.2 NENA Company ID file. To determine the service provider 24/7 numbers, you may access the NENA company-ID file that contains that information for most wireless carriers that have implemented Phase I. Log on to: <http://www.nena.org/companyid/cid.asp>.

8 References

None.

9 Exhibits

Exhibit A. Wireless Service Providers Emergency Contact Information – sample (insert 24x7 emergency contact information (voice and fax) for your jurisdiction here)

Exhibit B. Exigent Circumstances Form

Exhibit C. NeuStar IVR Access Procedure

Exhibit A. Wireless Carriers Emergency Contact List (sample) (as of 11/2004)

<u>Carrier</u>	<u>Organization</u>	<u>24x7</u> <u>Telephone number(s)</u>
AT&T Wireless Service (ATTWS)	National Subpoena Request Center	800-635-6840 Fax: (888) 938-4715 from 0830-2000 hours Mon-Fri. After hours fax: (561)-640-1216
Cingular (CING)	Court Order and Subpoena Compliance - fax to: TCS NOC Cingular NOC	866-254-3277 866-856-0149 800-959-3749 800-298-3551
Nextel Partners (NXTP)	Syracuse NY office Network Operations	888-566-5398 703-433-4398 Option 4 from 0800-2300 hours Option 1 from 2300-0800 hours
Sprint PCS (SPPCS)	Corporate Security	888-877-7330 Option 1 for subscriber information
T-Mobile (TMOB)	Law Enforcement Relations	973-292-8911 Fax: (973) 292-8697
Verizon (VZW)	NOC (Network Operations Center) secondary	800-264-6620 908-306-4200

Exhibit B. Wireless 9-1-1 Emergency Information Request Form

To:

From: (INSERT LETTERHEAD)
(include agency main voice
and fax numbers)

This is an emergency request for information on the following wireless number:

(____)____-____

This agency received a 9-1-1 emergency call for assistance from the above wireless telephone number.

Date of Call	Time of Call 00:00- 24:00	Duration Min: Sec	Nature of Call
		:	

Based on that telephone call, we believe that one or more people face immediate danger of death or serious injury. We request that you promptly provide to the extent available the following information necessary to initiate the appropriate response. (Please use above fax & telephone numbers.)

____ Subscriber name, billing address, home & business phone numbers for the above number

____ Cell site or location information for the 9-1-1 call from the above number

Requesting Agency Information

Title	Employee	Signature	Date

Requesting Agency Case Number: _____ **Requesting Agency Dispatch Log #** _____

Exhibit C.

NeuStar IVR Access Procedure

