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# Wireless Features Description: Emergency Services

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# **Revision History**

Revision		Date
Rev. 0	Initial Publication (Note 1)	December 1999
Rev. A	Note 2	June 2007

# Notes:

- 1. S.R0006-0 v1.0 was published as a single part.
- 2. All parts of S.R0006-A v1.0 replace S.R0006-0 v1.0.

# Wireless Features Description: Emergency Services

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# 1 Emergency Services (9-1-1)

Emergency Services (9-1-1) permits a subscriber to dial  $\boxed{9}$  -  $\boxed{1}$  -  $\boxed{1}$  -  $\boxed{SEND}$  and be connected to a Public Safety Answering Point (PSAP) to request an emergency response from the appropriate agency (e.g., fire, police, ambulance, poison control center, or suicide prevention center)  $^{1}$ . The PSAP shall be the PSAP appropriate to the calling subscriber's current location.

A 9-1-1 call shall bypass any authorization restrictions or call origination restrictions features (e.g., Subscriber PIN Access (SPINA), Subscriber PIN Intercept (SPINI) features). The call shall automatically invoke Priority Access and Channel Assignment (PACA), and the call shall be given higher priority than normal calls.

Once the call is answered, the subscriber shall be able to communicate the type of emergency over a normal voice connection with the PSAP. (Encryption may be used over the air interface, but it must be removed on the connection to the PSAP.)

A 9-1-1 call does impact a subscriber's ability to originate or receive calls while the 9-1-1 call is in progress. Flash privileges (features controlled by activating the SEND key, such as, Call Waiting, Three-Way Calling, Conference Calling, and Call Transfer) are suspended during the 9-1-1 call, except to reconnect a call placed on hold to place the 9-1-1 call. When the 9-1-1 call is released, the subscriber's normal calling capabilities are restored. Release occurs when either the subscriber or PSAP disconnects. Special release controls may apply, as described in Emergency Services Reconnect (9-1-1RC).

## **Applicability to Telecommunications Services**

9-1-1 is applicable to voice and Teletype Devices for the Deaf (TDD) telecommunication services.

#### 1.1 Normal Procedures with Successful Outcome

#### **Authorization**

9-1-1 shall be generally available.

#### Deauthorization

9-1-1 shall not be withdrawn.

#### Registration

9-1-1 has no registration.

<sup>&</sup>lt;sup>1</sup> The services available may vary between communities.

#### Deregistration

9-1-1 has no deregistration.

#### Activation

9-1-1 has no activation.

#### **Deactivation**

9-1-1 has no deactivation.

#### Invocation

9-1-1 is invoked by the subscriber dialing 9 -1 -1 -SEND 2. The sequence may be dialed while the MS is idle, while the MS is engaged in a call, or while the MS has a call on hold.

If no air interface channels are available when 9-1-1 is invoked, the request may be delayed by automatically invoking Priority Access and Channel Assignment (PACA) for a level appropriate for a subscriber dialing 9-1-1.

#### **Normal Operation with Successful Outcome**

When 9-1-1 is invoked, the call is routed to the appropriate Public Safety Answering Point (PSAP). Routing decisions are based upon the current location of the invoking MS and possibly other factors, such as, the availability of a selective router, PSAP, or interconnecting trunks.

If 9-1-1 is invoked from within a call, the other party is placed on hold in a similar fashion to a subscriber attempt to invoke Three-Way Call (3WC) or Conference Call (CC).

Once 9-1-1 is invoked, the subscriber's normal flash privileges are suspended. If a call is on hold to make the 9-1-1 call, the held call can be joined to the 9-1-1 call in a Three-Way Call or Conference Call by the subscriber activating the SEND key. Once the call is joined, subsequent flash requests shall be ignored, until the call is released.

<sup>&</sup>lt;sup>2</sup> Additionally 9-1-1 should be permissively invoked by the subscriber dialing \* -9 -11 -11 -SEND .

#### **Call Detail Record**

The system should record call detail information for the following:

- a. 9-1-1 leg usage.
- b. PACA and air segment usage.

See *DMH* for the specific information to be included for each element.

# 1.2 Exception Procedures or Unsuccessful Outcome

# Registration

None identified.

# **Deregistration**

None identified.

#### **Activation**

None identified.

#### **Deactivation**

None identified.

#### Invocation

None identified.

# **Exceptions While Roaming**

None identified.

#### **Exceptions During Intersystem Handoff**

None identified.

# 1.3 Alternative Procedures

# 1.4 Interactions with Other Wireless Services

#### Asynchronous Data Service (ADS)

None identified, providing the PSAP and the emergency services network have the appropriate equipment.

# Call Delivery (CD)

None identified.

#### Call Forwarding—Busy (CFB)

Calls from an authorized emergency service bureau should not be forwarded. The network may not be capable of identifying the call as originating from an emergency service bureau and normal call forwarding may be provided.

# Call Forwarding—Default (CFD)

Calls from an authorized emergency service bureau should not be forwarded. The network may not be capable of identifying the call as originating from an emergency service bureau and normal call forwarding may be provided.

#### Call Forwarding—No Answer (CFNA)

Calls from an authorized emergency service bureau should not be forwarded. The network may not be capable of identifying the call as originating from an emergency service bureau and normal call forwarding may be provided.

#### Call Forwarding—Unconditional (CFU)

Calls from an authorized emergency service bureau should not be forwarded. The network may not be capable of identifying the call as originating from an emergency service bureau and normal call forwarding may be provided.

#### Call Transfer (CT)

If a subscriber with CT invokes 9-1-1 during a call or with a call on hold (thereby seemingly invoking CT), transfer shall not take place if the controlling subscriber disconnects. Also, a flash (an activation of the SEND key) while communicating with a PSAP is used to bridge the held party into the conversation rather than to disconnect the PSAP.

If 9-1-1 is invoked while idle, flash requests and attempts to a third number are ignored.

#### Call Waiting (CW)

CW is not possible once 9-1-1 has been invoked.

If 9-1-1 is invoked, subsequent incoming calls are ignored (unless the call is from a PSAP).

#### **Calling Name Presentation (CNAP)**

None identified.

#### Calling Number Identification Presentation (CNIP)

In cases where a calling subscriber has an arrangement that presentation of their CNI is marked presentation restricted, the serving MSC should deliver all available CNI information (including the presentation restricted indication) to the authorized emergency service bureaus.

## **Calling Number Identification Restriction (CNIR)**

In cases where a calling subscriber has an arrangement that presentation of his or her CNI is marked presentation restricted, the serving MSC should deliver all available CNI information (including the presentation restricted indication) to the authorized PSAPs.

# **Conference Calling (CC)**

If a subscriber with CC invoked invokes 9-1-1 for a call leg, or if a subscriber invokes the 9-1-1 call with a CC invocation feature code, the 9-1-1 call is allowed to proceed. A subsequent flash (an activation of the SEND key) while communicating with a PSAP is used to bridge the held party(-ies) into the conversation. No additional parties may be added to the conference call. The PSAP cannot be dropped with the Drop Last Party feature code.

# Data Privacy (DP)

None identified, providing the PSAP and the emergency services network have the appropriate equipment.

#### Do Not Disturb (DND)

Emergency Services takes precedence over DND. That is, a call from an authorized emergency service bureau should be able to override a subscriber's DND activation.

#### **Emergency Services (9-1-1)**

Not applicable.

#### Flexible Alerting (FA)

None identified, providing the PSAP has the appropriate equipment.

#### **Message Waiting Notification (MWN)**

None identified.

#### **Mobile Access Hunting (MAH)**

None identified.

#### **Network Directed System Selection (NDSS)**

Emergency calls are not subject to NDSS.

#### Non-Public Service Mode (NP)

Interaction is beyond the scope of this standard.

## Over-the-Air Service Provisioning (OTASP)

When OTASP is active, it takes precedence over all other calls and features. The user may terminate OTASP at any time in order to originate an emergency call.

#### Password Call Acceptance (PCA)

Emergency Services takes precedence over PCA. A call to or from an authorized emergency service bureau should not be refused by PCA. The network may not be capable of identifying the call as originating from an emergency service bureau and normal PCA may be provided.

#### **Preferred Language (PL)**

None identified.

#### **Priority Access and Channel Assignment (PACA)**

An emergency services (9-1-1) call shall automatically invoke the PACA feature when no air channels are available.

#### Remote Feature Control (RFC)

#### Selective Call Acceptance (SCA)

Emergency Services takes precedence over SCA. A call from an authorized emergency service bureau should not be refused by SCA. The network may not be capable of identifying the call as originating from an emergency service bureau and normal SCA may be provided.

#### Service Negotiation (SN)

None identified.

#### **Subscriber PIN Access (SPINA)**

Emergency Services takes precedence over SPINA. Calls to an authorized PSAP shall not be denied while SPINA is active. A call from an authorized PSAP should not be denied while SPINA is active. The network may not be capable of identifying the call as originating from an emergency service bureau and normal SPINA may be provided.

#### Subscriber PIN Intercept (SPINI)

Emergency Services takes precedence over SPINI. A call to an authorized PSAP shall not invoke SPINI.

#### **Three-Way Calling (3WC)**

If a subscriber with 3WC invokes 9-1-1 during a call or with a call on hold (thereby seemingly invoking 3WC), a flash (an activation of the SEND key) while communicating with a PSAP is used to bridge the held party into the conversation rather than to disconnect the PSAP. A subscriber disconnect with either the SEND or the END key before the PSAP answers, shall be treated to abandon the 9-1-1 call attempt. The subscriber shall be recalled for the held party.

#### **User Group (UG)**

None identified.

## **Voice Message Retrieval (VMR)**

None identified.

#### Voice Privacy (VP)

