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HOW IT WORKS: THE GOVERNMENT EMERGENCY TELECOMMUNICATIONS SERVICE

INTRODUCTION

The Government Emergency Telecommunications Service (GETS) is an easy-to-use calling card program that provides authorized national security and emergency preparedness (NS/EP) users improved call completion on the public landline networks. It is a nationwide program providing authorized personnel priority calling during an emergency or crisis situation when the landline networks are congested and the probability of completing a call is reduced. GETS interoperates with selected government and private networks and services (FTS Network; the Defense Switched Network; and the Diplomatic Telecommunications Service), and allows calls to or from international locations. The GETS card can be used with common telephone equipment, including standard desk sets, secure telephone equipment, facsimile, modems, and cellular and satellite phones.

Calls placed through GETS will receive priority over normal calls, allowing users to communicate even during the highest levels of network congestion and do not preempt or terminate other calls already in process. GETS also provides priority calling to cell phones on most major carrier networks. There is no charge to enroll in GETS or to make calls to the familiarization/test line. When making GETS calls, subscribers can be charged the equivalent of long distance phone rates.

GETS CALL PROCESSING

GETS leverages existing features of commercial local and long distance telecommunications service networks along with selected enhancements that are developed and implemented in accordance with Federal Communications Commission rules and follow industry standards. Carriers complete GETS calls using whatever network facilities are available following an emergency event. GETS calls receive priority treatment only within the domestic phone network in the United States, including its territories.

GETS features include:

- Access to only authorized users via a Personal Identification Number (PIN)
- Priority over normal calls
- Capability of using all surviving routes in a damaged network
- Access from any location in the United States and abroad

Approximately 85 percent of the local telephone lines across the nation are GETS capable. GETS service is available from the three largest nationwide long distance carriers: AT&T, Sprint, and Verizon.

GETS enhancements to the local and long distance networks include priority treatment features and enhanced routing, which are described in more detail in the next sections. GETS makes maximum use of available communications resources within the networks when outages or congestion occur. GETS also takes advantage of the evolving technological capabilities of the public phone network. Many local and long distance carriers are converting parts of their networks to Voice over Internet Protocol technology, which involves new hardware and software.

The Department of Homeland Security Office of Emergency Communications has been working closely with the telecommunications carriers and industry standards bodies to ensure that GETS enhancements function in this new environment.

GETS CALLS TO AND FROM LANDLINE PHONES

When a caller dials a GETS access number from a landline phone, the local carrier recognizes it as a priority call and processes it using special GETS handling instructions. These instructions include information on multiple ways to route the call to a GETS long distance carrier. When the call reaches a GETS long distance carrier, that carrier authenticates the call by prompting the caller to enter a 12-digit PIN and the intended destination number. The long distance carrier routes valid calls to the terminating local exchange carrier or wireless carrier using priority features deployed within the long distance network. Finally, the local exchange or wireless carrier receiving the call completes the call to the destination number. GETS calls terminating in GETS-enhanced landline networks also receive priority treatment in the terminating network.

GETS CALLS FROM AND TO WIRELESS PHONES

Wireless phones can be used to place and receive GETS calls. Callers using the Wireless Priority Service (WPS) to place GETS calls receive priority in both the wireless and landline networks. From a WPS-enabled phone, users should dial *272 + 710-627-4387 + SEND to place these calls. Callers making GETS calls from non-WPS enabled wireless phones will receive some enhanced capabilities, but will not receive priority treatment in the wireless network's critical call set up process. **GETS and WPS calls terminating in wireless networks that provide WPS will receive priority treatment through the terminating network, regardless of whether the destination device is WPS-enabled.**

GETS PRIORITY FEATURES

A GETS call receives special handling within the local and long distance networks through priority treatment and enhanced routing, as discussed in the following sections.

UNIQUE GETS AREA CODE

The North American Numbering Plan Administration assigned the unique 710 Numbering Plan Area (NPA) code for use with GETS. This non-geographic area code is valid in most local, long distance, wireless carriers, foreign carriers, as well as non-traditional carriers such as cable companies and internet telecom service providers, including Skype and Vonage. Entering the 710 area code alerts carriers to apply GETS priority features within their networks.

To ensure proper access to GETS, the telecom managers for hotels, office buildings, and other private branch exchanges must ensure that their networks allow 710 area code calls to be routed to the GETS long distance carriers. Similarly, pay phones, which are increasingly routed to a presubscribed carrier, must be programmed to route 710 calls to one of the GETS long distance carriers. For help with 710 area code access, contact User Assistance at 800-818-4387 or 703-818-4387.

ACCESS CONTROL THROUGH PINS

GETS was designed to ensure that only authorized users access the service through the distribution, use, and control of PINs. Each GETS user is provided a GETS card with a unique 12-digit PIN that must be used to access the service. After a GETS access number has been dialed, the user will be prompted to enter the PIN.

If the PIN is valid, the call will be processed. If the PIN is not valid (for example, it was entered incorrectly), the caller will be prompted to reenter it. After three unsuccessful attempts, the call will be discontinued.

HIGH PROBABILITY OF COMPLETION

The high probability of completion feature designates a GETS call as such by putting a GETS marker on it in the telephone network signaling system. This marker accompanies the call through each portion of the phone network as the call is being routed. The marker tells the network to use GETS handling instructions at each point that the network must decide how to route the call, thus giving it priority over normal calls.

ENHANCED ROUTING

The local carriers and GETS long distance carriers have implemented enhanced routing services to aid GETS call completion in congested networks. This provides GETS users with improved call completion capabilities over normal users. These capabilities, described in more detail below, include:

ALTERNATE CARRIER ROUTING

Alternate carrier routing provides a GETS call automatic alternate routing to the GETS long distance carriers. For example, if one GETS carrier cannot be reached, the call will automatically be directed to another GETS carrier. In the local networks, normal calls are typically routed to only one long distance carrier, whereas alternate carrier routing allows GETS calls to attempt to access all three GETS long distance carriers (AT&T, Sprint, and Verizon) without the user having to hang up and dial each one individually.

CALL QUEUING AND RETRY

GETS calls routed through networks experiencing high congestion may encounter situations where resources required to complete calls are unavailable. This can happen at several points on the route between a call's origination and destination. Normal calls would not be completed under these conditions; however, GETS call queuing and retry features allow a GETS call to wait for or retry a number of times for the resources needed to complete the call. For example, if a local carrier receives an *All Circuits Busy* message from the long distance carrier while attempting to route a GETS call (see Figure 1), the GETS call will queue in the local carrier network for the next available connection (known in the industry as a 'trunk') to the long distance carrier.

As network resources become available, the GETS calls are processed on a first come, first served basis. Callers can wait in queue for a minute or longer, and there is no recorded announcement to indicate when calls are placed in queue. In cases of severe congestion and national need, network resources, such as trunks between local carriers and GETS long distance carriers, may be reserved for GETS and NS/EP traffic use only.

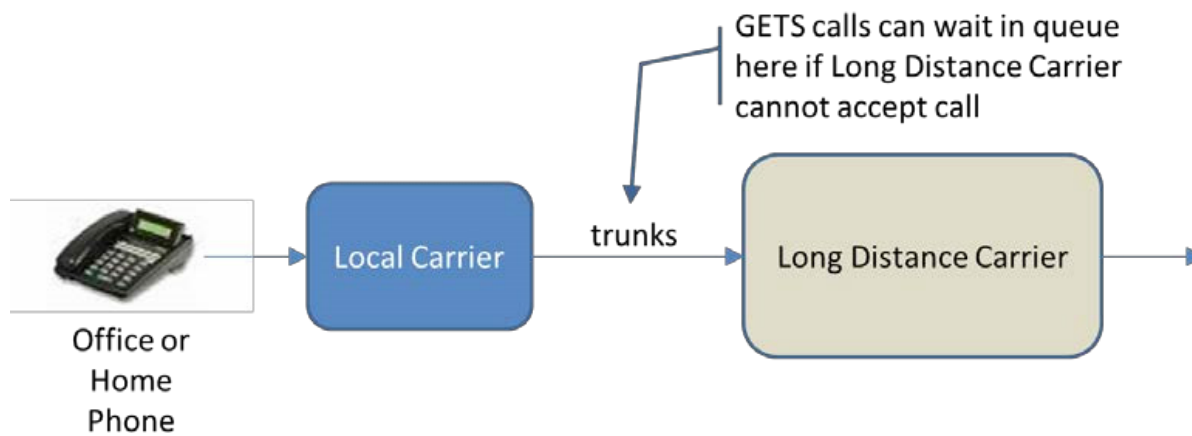


Figure 1. GETS Trunking

EXEMPTION FROM NETWORK MANAGEMENT CONTROLS

The exemption from network management controls feature allows GETS calls to be processed and avoid the restrictive measures that carriers use to protect their networks during times of extreme congestion. When call volume exceeds the designed capacity of the network, phone companies use network management controls to prevent a certain percentage of calls from originating from, or terminating in congested areas. Though normal calls may be blocked during the times these measures are implemented, GETS calls are still processed.

DEFAULT ROUTING

If a technical problem in the local carrier prevents the call from receiving its full set of special handling instructions during the initial setup stage of a GETS call, it will automatically go to a GETS long distance carrier for processing. This provides a fail-open operation where the call will at least be processed, as opposed to being blocked, even if it does not receive all the priority features it normally would have.

ALTERNATE ACCESS NUMBERS

GETS is normally accessed by dialing the GETS universal access number, 1-710-627-4387. However, sometimes it is not possible to use this number, usually because the caller is calling from a building where the telephone system is not properly configured to allow calls to the 710 area code. Whenever possible, report problems reaching the 710-627-4387 number to User Assistance at 800-818-4387 or 703-818-4387.

If calls using the GETS universal access number are not successful, callers can access the GETS long-distance carriers through the use of alternate access numbers. These alternate access means include dialing the respective carrier access code (if supported by your telecommunications service provider) or dialing the carrier's GETS toll-free number (s). These alternate access numbers appear on the back of the GETS card:

- AT&T: 1-888-288-4387 or 1-877-646-4387
- Sprint: 1-800-257-8373 or 1-855-333-4387
- Verizon: 1-800-900-4387

FOR ADDITIONAL INFORMATION

For more information, please contact the DHS Priority Telecommunications Service Center at 866-627-2255 or support@priority-info.com.