



# **Enhanced Emergency Data**

## **Location and Medical ID Data for PSAPs**

September 2020

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# Overview

Enhanced Emergency Data allows users to share their location and Medical ID with emergency services when they make a 9-1-1 call, and can provide a civic address estimate for some calls.

## Enhanced Emergency Data (EED)

EED provides Public Safety Answering Points (PSAPs) with access to fast, accurate location estimates, and provides a modern, IP-based path for additional data such as a user's Medical ID, and, in some cases, a Emergency Response Area.

## Hybridized Emergency Location (HELO)

Apple devices contain a variety of location sensors. When a user initiates an emergency call, supported Apple devices can "fuse" information from various sensors, such as Global Navigation Satellite Systems (GNSSs) and Wi-Fi. This process takes advantage of proprietary methods and network-provided assistance data (if available), to quickly calculate a low-uncertainty, high-integrity estimate of the device's location. Apple calls this capability "Hybridized Emergency Location" or "HELO." Technologies such as HELO are often referred to as "Device-Based Hybrid" or "DBH."

## Medical ID Sharing

The Health app allows users to complete their Medical ID and choose whether to make it accessible to field responders even when a device is locked by enabling "Show When Locked." Additionally, by enabling "Share During Emergency Calls," users can choose to make data from their Medical ID available to the responding PSAP. Medical ID includes critical information that can help PSAPs provide improved response in an emergency. Apple cannot read a user's Medical ID data.

## Emergency Response Area (ERA)

By combining real-time location information provided by HELO with user-entered information such as a Home or Work address, ERA can provide responders with an estimated civic address that represents a good starting point from which to search for a user, when the user is likely to be at or near one of those locations. ERA also provides clear guidance on how large an area may need to be searched to account for the inherently-probabilistic nature of wireless location technologies.

# EED

Enhanced Emergency Data enriches emergency calls by allowing local Public Safety Answering Points to access location and Medical ID data using a secure, modern architecture.

EED extends the functionality of existing 9-1-1 systems by providing an alternative data path for location and a new path for additional data such as Medical ID. When a user makes a 9-1-1 call from an EED-enabled device, the device will provide a location estimate using both traditional carrier network functions, and a separate IP-based path offered by an integration service provider. For users who choose to share, the service can also deliver information from the user's Medical ID. When a call arrives at a local 9-1-1 center, location may be available via integrations with call-taking, dispatching, and mapping software. Medical ID and location may also be available via a web-based view. Apple provides EED service free of charge on a "best effort" basis, as a means of improving the emergency response experience for our users.

EED implements many features of an Identity Searchable Additional Data Repository (IS-ADR). This means a PSAP that serves a caller's location can use the caller's telephone number (a form of "identity") to search for additional data relating to the call, the caller, or the caller's location. For example, a user's Medical ID can contain their primary language. Knowing the caller's primary language can reduce the time required to select and conference-in a translator.

Supplemental location and Medical ID data can aid public safety responses, but should always be verified with the caller. In some cases, a person may call from another user's device, or call from their own device to request help for someone else. Telecommunicators and dispatchers should ensure that Medical ID data is relevant to a call by carefully querying the caller before looking at Medical ID data, and should verify that user-supplied data is current and correct before making use of it.

Apple provides Enhanced Emergency Data in collaboration with PSAP software providers, who manage integrations with common PSAP software packages for location, or provide PSAPs with web-based tools to view both location and Medical ID data.

# HELO

Hybridized Emergency Location provides fast and accurate location fixes when a user makes an emergency call.

## Network-Initiated Location Request

NILR is a globally-standardized transport mechanism that allows 2G and later mobile networks to securely acquire location data, like HELO fixes, from user devices during an emergency call, and route that data to local 9-1-1 centers. Networks that support NILR can also supply user devices with assistance data that may improve the speed and accuracy of location estimates. NILR is the current standard for carrier-based location delivery in the United States. All Apple devices with cellular capability support NILR.

## Advanced Mobile Location

AML is an alternative transport mechanism for emergency location data in countries that lack NILR support. AML uses the “Short Message Service” or “SMS” to send location data, like HELO fixes, in the clear, to a single national endpoint.

## Estimation versus transport

HELO is a measurement and estimation technology, and its availability is unrelated to the choice of transport mechanism (NILR or EED or AML). Because of its security, integrity, speed, and routing advantages, Apple’s preferred carrier location transport is NILR.

## Automatic Re-Bid

Both the NILR path and some EED integrations require that a telecommunicator or dispatcher “re-bid” or “re-transmit” to receive HELO data that may not be available at trunk seizure. All PSAPs should enable automatic rebidding to ensure that the most accurate location data will be retrieved once it becomes available.

## Background

### Timing

Apple devices begin trying to compute a location fix as soon as an emergency call attempt is detected. Once a call is established, devices send an initial EED message with either a location payload or an indication that no location is available. EED location payloads may not appear immediately upon PSAP trunk seizure. This occurs because the HELO process can require 8 - 22 seconds to produce a high-integrity fix, while 9-1-1 calls typically connect in 6 seconds or fewer.

After the first EED message, subsequent messages are automatically sent at regular intervals. For some PSAP software, these updates may appear automatically on a telecommunicator’s or dispatcher’s display(s). For other software, automatic or manual “re-bid” or “re-transmit” requests may be required to retrieve new data.

If a user makes two or more 9-1-1 calls in rapid succession, a PSAP may retrieve location data from a prior call when a subsequent call connects. PSAPs should carefully check the time stamp of each EED fix, and, as with any location technology, verify the caller’s location verbally to ensure that field responders are dispatched to the correct location. In the overwhelming majority of cases, the user’s location will not change significantly between calls. Additionally, new EED payloads should begin arriving soon after a subsequent call connects.

### Data contents

EED will deliver at least the following HELO elements to the clearinghouse, which may perform interworking required to accommodate differing representations in PSAP software:

- Mobile telephone number of the caller’s device in E.123 format.
- Signed latitude & longitude in decimal degrees, referenced to the WGS-84 ellipsoid (1 meter resolution).
- Signed height above or below the WGS-84 ellipsoid in meters.
- Horizontal and vertical uncertainties (search areas) in meters, with 0.1 meter resolution, calculated at 95% confidence.

## Location Performance

Apple conducts extensive internal testing to verify the performance of our devices and software. Before launching HELO, we verified that its performance meets or exceeds all regulatory requirements applicable to wireless carriers for 9-1-1 location accuracy. Additionally, Apple participated in a location accuracy testbed operated by CTIA: The Wireless Association in early 2018. The testbed subjected shipping hardware and software to indoor testing in a variety of environments in San Francisco and Atlanta. These included Dense Urban, Urban, Suburban, and Rural morphologies, and a mix of building types.

Our testbed results show that iPhone 7 and iPhone 8 already exceeded the FCC's 2021 horizontal location accuracy requirements<sup>1</sup> when using HELO. As shown in the table below, this result holds for all testbed morphologies. The first column indicates the "yield", i.e. the percentage of calls for which a HELO fix was returned in a given morphology. The second column shows the percentage of those calls that produced a fix within 50 meters of the device's actual position, as determined by a precise survey. Finally the third column shows the average measured error (in meters) for all HELO calls within a given morphology.<sup>2</sup>

HELO Performance - CTIA Testbed

Morphology	Yield %	% calls with Error ≤ 50m	Avg. Error (meters)
Dense Urban	89.1	85.2	32.7
Urban	96.7	87.9	30.7
Suburban	97.6	93.8	22.3
Rural	99.9	90.4	22.3

### Text-to-9-1-1

Apple devices running iOS 13 or later can provide HELO estimates via both the traditional NILR process and via EED when a user texts 9-1-1 from a network that has enabled NILR for text, and that allows simultaneous voice and data service.

### Location-Based Routing

Because HELO can often produce low-uncertainty location estimates very quickly, Apple devices can often provide an estimate to a carrier network at the start of an emergency call. This can allow the network to route the user's call to the PSAP responsible for the user's actual location, rather than the PSAP pre-assigned to the cell sector handling the call. This reduces the need for time-consuming transfers. PSAPs and carriers should coordinate closely to ensure routing maps are accurate.

### Network support

Since 2015, Apple has offered wireless carriers free access to HELO in response to traditional Network-Initiated Location Requests (NILR). HELO + NILR is available on iPhone 5s or later running iOS 9 or later and on Apple Watch. However, some networks cannot or do not support HELO via NILR, and network conditions may sometimes delay or impair the delivery of HELO data to Automatic Location Identification (ALI) servers, even when a good location estimate is available.

For example, some networks do not support simultaneous voice and data sessions. When a user makes an emergency call from such a network, their Apple device may still provide EED payloads, but only if a Wi-Fi connection is available.

HELO + EED is available on iPhone 6 and later running iOS 12 and later.

<sup>1</sup> *In re* Wireless E911 Location Accuracy Requirements (PS Docket No. 07-114), *Fourth Report and Order*, 30 FCC Rec'd 1259(2) (Feb. 3, 2015) (available at: <https://docs.fcc.gov/public/attachments/FCC-15-9A1.pdf>).

<sup>2</sup> Average error statistics were not provided in the CTIA Testbed final report. Apple calculated these figures based on the raw call records provided by the testbed administrator for each test point.

# Medical ID Sharing

Medical ID data can help PSAPs to triage calls and provide improved information about calls and callers to responders in the field.

## Background

With EED, users can now enable secure, automatic sharing of their Medical ID whenever they call or text 9-1-1. "Share During Emergency Call" works with calls placed from the Phone app or Siri, texts sent from Messages, and SOS calls including Fall Detection. This is in addition to the existing "Show When Locked" setting, which allows users to provide fast access to their Medical ID for field responders.

## Available Fields

If a user enables "Share During Emergency Calls," the following fields will be shared via EED when the user calls or texts 9-1-1, if the user has filled them out.

- Name
- Age (years)
- Medical Conditions
- Medical Notes
- Allergies & Reactions
- Medications
- Blood Type (A, B, AB, O; Rh +/-)
- Weight (kilograms)<sup>3</sup>
- Height (meters)<sup>3</sup>
- Primary Language
- Emergency Contacts (name, relation, and telephone number)

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<sup>3</sup> Users can enter height and weight values in the unit system applicable to the Region they specified during setup, later at Settings > General > Language & Region. The Enhanced Emergency Data service transmits height and weight in globally-standardized SI units. A downstream integration service provider may convert these fields to local customary units, if desired by a PSAP.

## Technical Details

When a user who has enabled “Share During Emergency Calls” places an emergency call, their device will encrypt their Medical ID data so that Apple cannot read it. The encrypted data is then sent to Apple along with the user’s location.

Apple checks the user’s location to ensure that no data is shared with an integration service provider or PSAP unless the PSAP that serves the user’s location has enabled the EED service. If it has, the location and encrypted additional data payload are forwarded to the integration service provider for delivery to the PSAP. If not, the data is securely discarded.

Payloads that are forwarded can be decrypted by an integration service provider after and delivered to a PSAP handling the user’s call over a secure connection.

Due to the sensitive nature of Medical ID information, Apple does not allow integration with downstream systems. Telecommunicators and dispatchers may, however, copy and paste relevant information into other systems, when data is relevant to a response.

“Share During Emergency Calls” is available on iPhone 6s and later running iOS 13.5 and later.

## Operational Considerations

Local PSAPs must opt-in to receive Medical ID data. Additionally, Apple requires that integration service providers enforce individual assignment of access permissions for telecommunicators and dispatchers who have a need to use this information when processing emergency calls and texts.

Medical ID data is manually entered and manually updated by users, and may be incomplete or out-of-date. Telecommunicators and dispatchers should receive training on the EED service, with a special emphasis on confirming that the user is calling from their own device, that they are calling for an emergency they are personally experiencing, and that their Medical ID data is accurate and current before using Medical ID data.

Local policies should prohibit the copying of information that is not directly relevant to a call into other systems such as Computer-Aided-Dispatching or call-taking software. Compliance with federal, state, local, territorial, and tribal data protection, privacy, and records retention laws is the responsibility of each agency that accepts Medical ID data.



# Emergency Response Area

An inferred civic address plus actionable uncertainty information can help responders efficiently search for a user when they are near a Home or Work address.

## Background

Unlike wireline devices that have a fixed service address, the precise location of a wireless device and its proximity to a civic address can only be estimated. However, combining hints provided by a user with learned locations and HELO estimates, iPhone or Apple Watch can infer when a user may be placing an emergency call from a location such as Home or Work, and provide a PSAP with both the address associated with that location, and an estimate of the area surrounding that address that may need to be searched in order to have a high probability of locating the caller. Apple calls this result a "Emergency Response Area," or "ERA."

## Technical Details

Each ERA consists of a civic address associated with a user's Home or Work, and a search area expressed in meters. Users can enter Home and Work addresses on "My Card" in the Contacts app. After one of these locations is entered by the user it can be provided to a PSAP during an emergency call when the user is nearby.

Wireless location estimation is a probabilistic process. This means that no estimate of a wireless device's location - whether expressed as geodetic coordinates or a civic address - can have zero uncertainty. To guide dispatchers in verifying a caller's location and assist field responders in locating the caller, Apple devices provide an estimate of the uncertainty associated with a civic address estimate, expressed in meters. This uncertainty can be thought of as a "search area," - an area that may need to be searched in order to provide a high likelihood of finding the caller. For civic-address-based location estimates, this search area may be significantly larger than the search area associated with a geodetic estimate produced during the same call, due to the non-zero size of the area referred to by an address, the uncertainty of the position associated with the address point's geodetic location, and the lack of detailed information on the interior layout of the built environment. Consequently, civic address information should only be used in concert with a geodetic location estimate that includes uncertainty or "search area" information of its own.

## Operational Considerations

Telecommunicators and dispatchers should always visually cross-check an ERA and its associated search area with a HELO-provided geodetic estimate and its search area, and should verify verbally with the caller whenever possible. Additionally, field personnel dispatched to either a geodetic or civic address should always be appraised of the area that they may need to search. This is particularly important for ERA, where the use of civic address alone could result in a field response to a home, apartment, building, or suite in which the caller may not be found. Local PSAPs should carefully coordinate with the field response agencies they dispatch in order to ensure responders are informed about the limitations of ERA, and trained in the use of search area information prior to operational use of these data. In practice, responders may need to knock on several doors or walk around within the identified search area in order to locate the caller.

# Privacy and Security

Apple believes privacy is a fundamental human right. EED is designed to improve user safety while ensuring transparency, security, and user control.

Because emergency contexts are especially sensitive, Apple takes extra steps to ensure that our products and services protect the confidentiality, integrity, and availability of our users' data during an emergency call. Among other means, EED protects user privacy and security using geofiltering, authentication, encryption, redundancy, data retention policies, and audits. A user may also change their participation choices with respect to EED service at any time.<sup>4</sup>

**Geofiltering** minimizes the potential for disclosure of users' emergency data even to trusted third parties. The user's location is queryable only if the call is handled by a 9-1-1 center enabled to accept EED; if not, the data is dropped. Geofiltering also controls 9-1-1 center access to an integration service provider's systems: Only a center whose jurisdiction covers the caller's location is able to retrieve EED information from an integration service provider.

**Authentication** ensures that EED messages will only be transmitted between systems that have established their identity using strong credentials. EED messages travel from user devices to Apple servers, then on to integration service providers, and finally to local 9-1-1 centers. Authentication is accomplished between Apple servers and integration servers using publicly-trusted certificates and authenticated key exchanges. Authentication (and periodic re-authentication) between integration service providers and local 9-1-1 centers or 9-1-1 authorities using individually-issued access credentials protects downstream data flows.

**Encryption** protects the confidentiality and integrity of users' data by preventing unauthorized third parties from viewing data, or altering it without detection. Apple devices, Apple servers, and integration service providers encrypt EED information using strong ciphers, and exchange keys using mechanisms that prevent the recovery of earlier information, even if later information is subsequently compromised. Apple encrypts data both in transit and at rest, and requires integration service providers to use strong encryption as well. In addition, Apple devices encrypt Medical ID data such that Apple cannot read it.

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<sup>4</sup> This behavior does not affect government-mandated support for NILR. Location estimates will *always* be queryable by NILR during a user-initiated emergency call.

**Redundancy** ensures that EED service will have a high likelihood of being available when a user makes a 9-1-1 call from a supported jurisdiction. Apple devices can use any available data path to transmit EED messages, meaning that EED delivery may succeed, even if no carrier-network data path is available. Apple also requires integration systems to maintain high availability for PSAP-facing systems.

**Data retention policies** govern the handling and storage of all data before it reaches a local 9-1-1 center. EED originates on the calling device, and is never logged while on Apple servers. Integration service providers are likewise required to immediately discard data, should any fail their own redundant geofilter checks. Once data is provided to a 9-1-1 center, state and local records retention policies may apply. Apple prohibits automatic querying of Medical ID data and direct integration of Medical ID data with other systems. Individual data fields may *only* be copied into other public safety systems manually, if they are relevant to an emergency response.

**Audits** verify that a party has implemented required and appropriate controls, and may verify that controls work as intended, and are adhered-to in practice. Apple conducts its own internal audits and requires integration service providers to undergo periodic control reviews and third-party audits. These ensure that an appropriate information security management system is in place, and that its prescribed controls are effectively and consistently applied.

**Location opt-out** capability ensures that a user provides consent to the use of EED during their emergency calls, and that integration service providers cannot receive data unless the local emergency services agency that serves the user's location has enabled the service. Although supplemental location data and Emergency Response Area are initially enabled if the user has enabled Location Services, they can be separately disabled in the Settings app of an iOS device at any time. However, disabling supplementary location data and Emergency Response Area will not affect regulated emergency location processes: Emergency location data requested by the user's carrier network will still be shared in accordance with the technology and policies of the network operator, and as required by law, when the user makes an emergency call.

**Medical ID opt-in** requires that a user consent in advance to the use of EED for Medical ID sharing during their emergency calls. Medical ID sharing is disabled by default, but can be enabled in the Health app of an iOS device at any time using the "Share During Emergency Calls" switch. Additionally, Medical ID information cannot be shared if the user has opted-out of location sharing, since Apple would be unable to prevent release of the user's information in areas where the local emergency response agency has not enabled EED.

# Other Features

## **Accessibility**

Apple is committed to providing accessible technologies to all. Many individuals who are deaf, hard-of-hearing, or speech impaired access telecommunications services using character-by-character calling services such as the legacy TeleTYpe / Telecommunications Device for the Deaf ("TTY/TDD") or Real-Time Text ("RTT"). EED is integrated directly into the iOS platform, and includes support for both TTY/TDD and RTT calls, supporting the conversational text flow that many users prefer. This is in addition to support for SMS-based "Text-to-9-1-1."

## **PSAP integration**

Integration service providers make EED location data available to 9-1-1 centers via an i3-compliant HELD/PIDF-LO interface (preferred), or via direct integration with major call-taking, computer-aided dispatching, and mapping systems. For 9-1-1 centers that lack compatible NG9-1-1 service or software, browser-based solutions are also available.

Medical ID data can be provided by direct integration with common PSAP software, or via a web interface. However, third-party integrations are not permitted, due to privacy and security considerations.

Apple is committed to bringing EED service to all U.S. PSAPs as quickly as possible. PSAPs interested in establishing EED service should contact an integration service provider.

## **Telecommunicator training**

Apple requires integration service providers to make available PSAP training materials that cover how to establish secure EED service, how to interpret and use location data, and how to de-conflict location data from multiple sources (e.g., caller interrogation, the NILR path, and EED). Additionally, Apple requires integration service providers to make available PSAP training materials that cover how to recognize when Medical ID data is available, how to confirm that any available Medical ID data relates to both the call and the caller, and how to query for Medical ID data, if it does.

PSAPs interested in starting the training process should contact their existing integration service provider.

# Frequently Asked Questions

Most PSAP and 9-1-1 authority questions should be directed to an integration service provider. Answers to a few of the most frequent questions are shown below.

## **Does EED replace Automatic Location Identification (ALI)?**

No. EED operates independently of the traditional 9-1-1 location process. Carrier-integrated location process will continue to receive the highest priority on Apple devices. EED simply provides an alternate path for location data. PSAPs should continue to query their existing Automatic Location Identification database at least twice during every call: Once at call connection and at least once after the call has been active for 30 seconds.

## **Is HELO or EED an implementation of Advanced Mobile Location (AML)?**

No. HELO is a measurement and estimation technology, not a location transport. Apple began offering HELO to wireless carriers using the traditional Network-Initiated Location Request transport and "Mobile Station - Based" (MSB) location determination in 2015.

AML is a transport protocol that conveys HELO data via a specially-formatted SMS text message to one national end-point in countries that lack globally-standardized NILR support. After testing, AML can be enabled in non-NILR countries via an iOS update..

EED is a new transport that uses a secure internet-protocol data connection to convey HELO data via an integration service provider, and standards-compliant NG9-1-1 methods to make that data available to PSAPs.

## **Is HELO available via the traditional NILR / ALI path?**

Yes. Apple makes HELO available to carriers with compatible network technology. For networks that support MSB NILR and have chosen to enable it, HELO fixes should be available via the Phase 2 process. PSAPs should enable automatic "re-bid" or "re-transmit" functions in their CPE or call taking software to ensure that available HELO fixes are retrieved. Because Phase 2 availability is dependent on many carrier-network and ALI-provider deployment choices and architecture details, PSAPs should consult with their ALI provider to determine the optimal timing for initial and subsequent automatic re-bids.

## **Is ERA available via the traditional NILR / ALI path?**

No. Mobile networks do not yet support NG9-1-1 mechanisms required to support this feature, such as PIDF-LO over SIP with both civic and geodetic location estimates. Additionally, some legacy ALI databases are not configured to support user (rather than tower) addresses for wireless calls.

### **Does EED require the user to install an app?**

No. EED is an inherent feature of iOS. HELO is available to any user running iOS 12 or later. Users can opt-in to sharing their Medical ID during emergency calls in the Health app in iOS 13.5 or later. (Medical ID information cannot be shared if HELO + EED is disabled via the Settings > Privacy > Location Services > System Services > Emergency Calls & SOS.) Finally, ERA will be available with iOS 14.

### **Does EED provide a “Dispatchable Location”?**

No. As defined by the FCC a Dispatchable Location must “adequately identify the location of the caller.” Locations from wireless devices, however, will *always* have a non-zero uncertainty, due to the probabilistic nature of the measurements used to estimate them. As the name implies, telecommunicators, dispatchers, and field responders should regard an Emergency Response Area address as the starting point of a search, not as an infallible declaration of a caller’s true location.

### **Why is “uncertainty” important?**

All practical location estimation technologies, including HELO, estimate user location by measuring noisy real-world signals. Estimates based on such measurements are limited in their accuracy and precision. Uncertainty is a numerical measure of this limitation - specifically, it represents an estimate of the expected errors that may affect the position estimate provided by HELO.

In its simplest form, horizontal uncertainty is expressed as the radius of a circle centered on the estimated location of the caller. Expressed this way, uncertainty can be thought of as a “search area” in which to locate a caller. A larger uncertainty implies a larger search area, or a larger chance for the caller to be found further away from the reported location. Conversely, a smaller uncertainty implies a smaller search area, or a higher likelihood of finding the caller near the reported location.

Apple reports uncertainty at 95% confidence. This means that the caller should be located *outside* the uncertainty circle no more than 1 out of 20 times, on average. Uncertainty allows a telecommunicator or dispatcher to visually compare location estimates received from multiple sources to cross-check their reasonableness, and to evaluate, in conjunction with caller interrogation, where to dispatch field responders.

### **Where does Medical ID data come from?**

Medical ID data is manually entered and manually updated by the user in the Health app. It is not supplied or verified by a healthcare provider or Apple, and should be verbally verified by the PSAP with the caller before use.

### **What if a user calls 9-1-1 for someone else, or a third party calls from the user’s phone?**

These situations can and will occur. PSAPs should require telecommunicators and dispatchers to verify that Medical ID data will be relevant to the call before querying for it. This means verifying that the caller is the user of the device being used to make the 9-1-1 call, that they are calling on their own behalf, and that the telecommunicator or dispatcher has a need to know information that might be included on the user’s Medical ID.

### **What logging, recording, privacy, or open-records requirements apply to EED?**

PSAPs should consult their state, territorial, or tribal authorities and local counsel to determine which laws may require EED retention. Local policies may require more than applicable laws, and should also be reviewed for consistency.

### **Is EED data logged?**

No. Apple verifies that a user's location falls within an area serviced by an integration service provider before forwarding any data. If it does not, all data is securely discarded. Medical ID information is encrypted by the user's device so that Apple cannot read it. If the user's location passes verification, both the location and encrypted Medical ID information are forwarded to one or more integration service providers who have been selected by the PSAP that serves the user's location. Apple does not log or record user data.

Apple requires integration service providers to repeat the location verification check when they receive data from Apple, and to immediately discard any data that originates outside the areas they service. Additionally, while integrated downstream systems may automatically query for location data associated with the telephone number of a 9-1-1 caller or for the location of all calls within the jurisdiction serviced by a PSAP, an integration service provider may *only* serve Medical ID information via a first-party interface in response to a manual query.

While Apple requires integration service providers' software to delete in-memory data at PSAPs after 12 hours, Apple's Enhanced Emergency Data service may cache user data for up to 24 hours. This allows a PSAP to conduct queries for data received during a 9-1-1 call, even if a dropped-call record remains active in a CPE or ACD queue. Apple prohibits integration service providers from any other logging, recording, or use of user data, and requires them to limit the access of employees to that data during the time it is available to PSAPs.

PSAPs may request that location data (only) be retained by an integration service provider in the same manner as location data retrieved via the NILR process. In such cases, Apple prohibits the integration service provider from itself obtaining rights to the retention or use of location data, and from selling or providing access to the data itself, or any information derived or aggregated therefrom, to anyone other than the government agency customer that initially received the data.

### **How can I get more information about EED?**

PSAPs interested in establishing EED service should contact an integration service provider.

Apple-specific questions may be referred to [helo@group.apple.com](mailto:helo@group.apple.com), however this mailbox is not monitored 24x7, and responses may be delayed.