NØRTEL

DMS-10 Family

600-Series Generics

Communications Assistance for Law Enforcement
Act Call Data Channel Message Definitions

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Contents

Section 1: Introduction

Scope and purpose of this publication

U.S. Public Law 103-414, the Communications Assistance for Law Enforcement Act (CALEA) of 1994 was enacted to amend Title 18, United States Code, to make clear a telecommunications carrier's duty to cooperate in the interception of communications for law enforcement purposes.

The purpose of this Nortel technical publication (NTP) is to provide detailed descriptions of the information messages that are used by the DMS-10 CALEA feature to convey the basic information for reporting the disposition of a call. These messages are output by a DMS-10 Digital Switching System on a Call Data Channel (CDC) and are destined for a Law Enforcement Agency's Collection Function (CF).

For a complete description of the CALEA feature, see NTP 297-3601-105, *Features and Services Description*.

Organization

This document comprises the following sections:

- Section 2: Overview
- Section 3: Message Descriptions
- Section 4: Message ASN.1 Definitions
- Section 5: Message Encoding

Section 2 provides a brief overview of the protocols used to transport CDC messages. Section 3 describes the basic information messages, section 4 defines these messages using Abstract Syntax Notation One (ASN.1) notation, and section 5 describes the encoding of these messages.

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Section 2: Functional Overview

Feature Synopsis

The DMS-10 CALEA feature is designed to provide the capability to intercept and monitor the voice and voice-band data transmissions associated with a designated subject line, and to provide the relevant call identifying information to authorized Law Enforcement Agencies (LEAs).

The CALEA feature will provide Law Enforcement Agencies with the ability to monitor calls terminating to and originating from a subject's line in the DMS-10 switch. The DMS-10 will provide the call content (voice or data) over Call Content Channels (CCC) to the LEA Collection Function (CF). The call identifying information, such as the calling party or redirecting party, will be provided over a Call Data Channel (CDC) to the LEA CF. This document describes the information messages output on a CDC.

Call Data Channel Protocol

The CDC messages will be routed to the LEA CF from the DMS-10 switch using the Transmission Control Protocol (TCP)/Internet Protocol (IP) protocol stack. This messaging will only occur in the direction from the DMS-10 to the LEA CF. The DMS-10 will not be able to receive any type of CDC messages from the LEA. The TCP protocol is connection oriented requiring connections to be established before data can be transferred. The DMS-10 will be responsible for establishing these TCP connections with the LEA collection function.

Call Data Channel Activation/Deactivation

A particular CDC TCP connection will be established with the LEA CF when the first surveillance using the CDC is activated. This CDC connection will be torn down when the last surveillance using the CDC is deactivated. After a particular CDC connection has been established, it can be shared by all surveillances using the same CDC (i.e., destined for the same LEA CF).

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Section 3: Message Description

3.1 CDC Message Descriptions

With the exception of the ConnectionTest message the following messages are used to report call identifying events. The messages include parameters that are either:

— Mandatory (M): must be provided in every instance of the message.

— Conditional (C): must be provided in certain conditions otherwise this parameter is not provided.

For information on the ASN.1 definition for each of the following messages refer to section "Message ASN.1 Definitions" on page 4-1.

3.1.1 Answer

For a call originated by a subject, the Answer message is generated and delivered to an LEA's Collection Function when the DMS-10 switch detects one of the following:

- An answer indication (e.g., off-hook, flash on call waiting call) from a terminating line that is receiving ringing treatment (e.g., power ringing, call waiting tone, etc.).

- An answer indication from an outgoing trunk circuit using standard inband signaling formats.

- An answer message (ANM) from an outgoing trunk circuit using ISDN User Part (ISUP) signaling.

- A connect message (CON) from an ISDN facility (PRI or BRI).

For calls terminating to a subject, the Answer message is generated and delivered to an LEA's Collection Function when the DMS-10 switch has an indication of answer from the subject or Monitored Replacement Party (MRP).

In a basic two-party call, the switch detects answer after the call connection is established with cut-through in both directions within the switching network. In certain cases when full cut-through is not possible, answer detection occurs at the same time as cut-through in the switching network of the subject's switch (e.g., answer on a call waiting call).

For both the originating and terminating calls, the Answer message is generated and delivered to an LEA's Collection Function on a per call-leg basis.

The following parameters shall be part of the Answer message (see Table 3-A:):

Table 3-A: Answer Message Parameters

Parameter	M / C	Usage
CaseIdentity	M	Identifies the Intercept Subject.
IAPSystemIdentity	C	Identifies the system containing the IAP.
TimeStamp	M	Identifies the date and time of the access.
CallIdentity	M	Uniquely identifies a call for a given surveillance.
Answering PartyIdentity	C	Included, when known, to identify the answering party or agent.
BearerCapability	C	Indicates the requested bearer service for the answer. Include if known or presumed.

3.1.2   CCClose

The CCClose message is generated and delivered to an LEA's Collection Function on the release of a CCC and hence indicates the end of communications delivery on that CCC.

For each CCC that is opened with the CCOpen message, a CCClose message shall be sent when the CCC is no longer required for content delivery. Early release of the CCCs by the LEA is not supported. The CCCs remain for the duration of the call.

Note: *For the scenario when the CCOpen is sent for a call and then the DMS-10 restarts, the CCClose will not be sent for the call. The CallIdentity and CaseIdentity will be lost as a result of the restart. As a result of not having the CDC number we will not be able to route the message to the appropriate Collection Function (CF). Without the correct CallIdentity the CF will not be able to correlate the CCClose message to the previously sent CCOpen message.*

The following parameters shall be part of the CCClose message (see Table 3-B:):

Table 3-B: CCClose Message Parameters

Parameter	M / C	Usage
CaseIdentity	M	Identifies the Intercept Subject.
IAPSystemIdentity	C	Identifies the system containing the IAP.
TimeStamp	M	Identifies the date and time of the access.
CCCIdentity	M	Identifies the call content channels used to deliver a particular call leg (the CCC trunk's physical location used by the DMS-10).

3.1.3   CCOpen

The CCOpen message is generated and delivered to an LEA's Collection Function to report the assignment of a CCC.

For circuit-switched calls, the CCOpen message is generated prior to cut-through of communications between the subject and associate. The CCOpen message is sent when a two-way connection is found in the DMS-10 Network. For example, when terminating to a line, the CCOpen message is generated when the line begins ringing. It will not be generated if call content delivery is not required (i.e., terminating to a busy line does not result in the generation of the CCOpen message). The CCOpen message does not indicate that content is provided on the CCC. Content is provided after an Answer occurs.

For packet-switched calls, the CCOpen message is generated and delivered to an LEA's Collection Function when the surveillance is activated that includes semi-permanent (nailed-up) connection used for ISDN B-channel packet-mode data.

For semi-permanent (nailed-up) connections, the CCOpen message is generated and delivered to an LEA's Collection Function when the surveillance is activated that includes the nailed-up connection.

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The following parameters shall be part of the CCOpen message (see Table 3-C:):

Table 3-C: CCOpen Message Parameters

Parameter	M / C	Usage
CaseIdentity	M	Identifies the Intercept Subject.
IAPSystemIdentity	C	Identifies the system containing the IAP.
TimeStamp	M	Identifies the date and time of the access.
Content Type: CallIdentity	M	 Included for circuit-mode calls to identify a particular call instance for the CCC.
CCCIdentity	M	Identifies the call content channels used to deliver a particular call leg (the CCC trunk's physical location used by the DMS-10).

3.1.4   Change

The Change message is generated and delivered to an LEA's Collection Function to report a change in call identity when during the course of a call it is merged with another call, or split.

The Change message is triggered when two or more call identities are merged into one call identity or a call identity is split into two or more call identities.

For example, a subject (Centrex/residential line with three-way calling provisioned) who is already involved in a call wishes to initiate a three-way call. When the subject performs the switch hook-flash, a new CCC is assigned and a Change message indicating the call identity of the consultation call is generated (i.e., the call identity is split into two call identities). When the subject performs the switch hook-flash to conference the three parties, a conference circuit is obtained and a two-way path between the controller (subject) and the conference circuit is established. At this point, the two call identities are merged into the first call identity and the CCC used for the consultation call is released.

The following parameters shall be part of the Change message (see Table 3-D:):

Table 3-D: Change Message Parameters

Parameter	M / C	Usage
CaseIdentity	M	Identifies the Intercept Subject.
IAPSystemIdentity	C	Identifies the system containing the IAP.
TimeStamp	M	Identifies the date and time of the access.
Previous Calls	M	Identifies the call identities previously used in messages. Any call identity that was previously used and not mentioned as a resulting call identity is released and may be assigned to other calls.
Resulting Calls	M	Identifies the call identities and CCC identities in each of the resulting calls. Unique call identities may be generated by the Change message which is used to correlate subsequent messages with the delivered content.

3.1.5   Origination

The Origination message is generated and delivered to an LEA's Collection Function when either:

- the switch has received all called party address digits from the subject and has translated them to determine a destination route within the same switch (e.g, line, treatment, announcement), or to an external network (e.g., terminating trunk), or

- the switch performs a translation of digits received from a database (e.g., 800 and AIN database query results) and determines a destination route within the same switch or to an external network, or

- a feature code is dialed by the subject, or

- an originating call attempt ends prematurely (e.g., partial dial, no digits dialed).

The following parameters shall be part of the Origination message (see Table 3-E:):

Table 3-E: Origination Message Parameters

Parameter	M / C	Usage
CaseIdentity	M	Identifies the Intercept Subject.
IAPSystemIdentity	C	Identifies the system containing the IAP.
TimeStamp	M	Identifies the date and time of the access.
CallIdentity	M	Uniquely identifies a call for a given surveillance. A unique call identity may be generated for the Origination message which is used to correlate other messages up to and including the Release message. An exception is possible when such an attempt is considered part of an ongoing call (e.g., three-way calling or conference calling for some systems).
Calling PartyIdentity	C	Included when more specific than the intercept subject identity associated with the case identity to identify the originating number.
Called PartyIdentity	C	Included when known to identify the called party. This shall not be present for calls that were partially dialed or could not be completed by the switch.
Input	M	Included when the specific user or translation input is known. This may be present without information when a call is attempted without input (e.g., hot line).
TransitCarrierIdentity	C	Included when the transit network selection is known to identify it.
BearerCapability	C	Indicates the requested bearer service for the origination. Included if known or presumed.

3.1.6   Redirection

The Redirection message is generated and delivered to an LEA's Collection Function when a terminating call attempt from an appearance in the switch encounters:

• the subject's appearance with call forwarding active,

• a non-idle subject appearance with call forwarding busy line active,

• a no-answer condition for the subject's appearance and call forwarding do not answer active and the call is redirected,

- another supported service variation of the call forwarding feature on the subject's appearance which results in the call being forwarded to another DN,

- the subject transfers, through the use of a call transfer service, a call to another party, or

- an AIN trigger assigned to the subject causes a redirection.

In the cases listed above, the CALEA feature continues to monitor the call after the redirection and treats the redirected-to-party as an MRP.

A redirection message shall be delivered whenever an incoming call attempt, directed towards the subject, is redirected to a different network address (e.g., the forwarded-to party's DN) by the subject's service.

The following parameters shall be part of the Redirection message (see Table 3-F:):

Table 3-F: Redirection Message Parameters

Parameter	M / C	Usage
CaseIdentity	M	Identifies the Intercept Subject.
IAPSystemIdentity	C	Identifies the system containing the IAP.
TimeStamp	M	Identifies the date and time of the access.
CallIdentity	M	Uniquely identifies a call for a given surveillance.
Redirected-to PartyIdentity	M	Identifies the redirected party.
TransitCarrierIdentity	C	Included when the transit network selection is known to identify it.
BearerCapability	C	Indicates the bearer service for the termination. Include if known or presumed.

3.1.7   Release

The Release message is generated and delivered to an LEA's Collection Function when either:

- The subject is no longer involved in the call (e.g., subject goes on-hook) and the network connection associated with the subject's call leg is released and becomes idle, or

- The MRP is no longer involved in the call and the network connection associated with the replacement appearance's call leg is released and becomes idle, or

- an unusual condition has resulted in the end of monitoring (e.g., surveillance deactivation).

A Release message shall be delivered whenever a call or call attempt has ended and all connections associated with the subject or its services have been released. A Release message results in the release of the CallIdentity associated with the call attempt.

The following parameters shall be part of the Release message (see Table 3-G:):

Table 3-G: Release Message Parameters

Parameter	M / C	Usage
CaseIdentity	M	Identifies the Intercept Subject.
IAPSystemIdentity	C	Identifies the system containing the IAP.
TimeStamp	M	Identifies the date and time of the access.
CallIdentity	M	Uniquely identifies a call for a given surveillance.
Release	*C*	*Used to provide an indication that monitoring has ended as a result of an unusual event (e.g., surveillance deactivation).*

> *Note: The ReleaseReason parameter is included in the Release message and is an extension of the J-STD-025 standard.*

3.1.8   TerminationAttempt

The TerminationAttempt message is generated and delivered to an LEA's Collection Function upon subject switch detection of an incoming circuit-switch call attempt to the subject's line, regardless of the disposition of the line (e.g., busy or idle) or whether the call is subsequently redirected or not completed for any reason.

The following parameters shall be part of the TerminationAttempt message (see Table 3-H:):

Table 3-H: TerminationAttempt Message Parameters

Parameter	M / C	Usage
CaseIdentity	M	Identifies the Intercept Subject.
IAPSystemIdentity	C	Identifies the system containing the IAP.
TimeStamp	M	Identifies the date and time of the access.
CallIdentity	M	Uniquely identifies a call for a given surveillance. A unique call identity may be generated for the TerminationAttempt message which is used to correlate other messages up to and including the Release message. An exception is possible when such an attempt is considered part of an ongoing call (e.g., three-way calling or conference calling for some systems).
Calling PartyIdentity	M	Identifies the calling party to the extent known.
Called PartyIdentity	C	Included when more specific than the subject identity associated with the CaseIdentity to identify the called party.
BearerCapability	C	Indicates the bearer service for the termination. Included if known or presumed.
RedirectedFrom-Information	C	Included when the incoming call has information about previous redirection(s).
Last Redirecting Party		Identifies whence the call came.
Original Called Party		Identifies the intended destination.
Number of Redirections		Identifies the number of hops.

3.1.9   ConnectionTest

The ConnectionTest message will be used to perform the following functions:

- To test the connectivity of a particular CDC. It will be used when a test was manually invoked via overlay SURV and periodically to perform maintenance on the CDCs.

- To inform the LEA that a particular CDC connection was lost and had to be rebuilt. The message will be sent over the CDC whose connection was lost after the connection is reestablished.

The following parameters shall be part of the ConnectionTest message (see Table 3-I:):

Table 3-I: ConnectionTest Message Parameters

Parameter	M / C	Usage
IAPSystemIdentity	C	Identifies the system containing the IAP.
TimeStamp	M	Identifies the date and time that the test was invoked.
Memo	C	Includes informative text such as: "CDC CONNECTION REESTABLISHED".

3.1.10 Connection

The Connection message is generated and delivered to an LEA's Collection Function when:

- the intercept subject's service changes connections to allow participants to be added to a call under surveillance; or

- there are party hold, drop, join changes to a conference communication during a subject-initiated conference call.

This message, either alone or in combination with the ConnectionBreak message, can be used to satisfy the requirement to report the participants to a subject-initiated conference call. When the Connection message is used alone, it identifies all participants able to communicate with each other in a call.

Note: The U.S. Court of Appeals for the District of Columbia has dismissed this message which is part of the FCC's order on CALEA. However, this ruling is, in turn, being appealed. Depending upon the outcome, delivery of this message will be controlled by a DMS-10 feature bit. This message will not be encoded and sent to the LEA if the feature is not activated.

The following parameters shall be part of the Connection message (see Table 3-J:):

Table 3-J: Connection Message Parameters

Parameter	M / C	Usage
CaseIdentity	M	Identifies the Intercept Subject.
IAPSystemIdentity	C	Identifies the system containing the IAP.
TimeStamp	M	Identifies the date and time that the event was detected.
CallIdentity	C	Included when known to uniquely identify a call, call appearance, or call leg within a system.

ConnectionInformation
One or more of:
    ConnectedParties
 	
    NewParties
	M	
		
		Identifies parties able to communicate to each other in a call.
		Identifies one or more parties added to a call.

3.1.11 ConnectionBreak

The ConnectionBreak message is generated and delivered to an LEA's Collection Function when:

- the intercept subject's service changes connections to remove participants from a call under surveillance; or

- there are party hold or drop changes to a conference communication during a subject-initiated conference call.

This message, in combination with the Connection message, can be used to satisfy the requirement to report the participants to a subject-initiated conference call.

> *Note: The U.S. Court of Appeals for the District of Columbia has dismissed this message which is part of the FCC's order on CALEA. However, this ruling is, in turn, being appealed. Depending upon the outcome, delivery of this message will be controlled by a DMS-10 feature bit. This message will not be encoded and sent to the LEA if the feature is not activated.*

The following parameters shall be part of the ConnectionBreak message (see Table 3-K:):

Table 3-K: ConnectionBreak Message Parameters

Parameter	M / C	Usage
CaseIdentity	M	Identifies the Intercept Subject.
IAPSystemIdentity	C	Identifies the system containing the IAP.
TimeStamp	M	Identifies the date and time that the event was detected.
CallIdentity	C	Included when known to uniquely identify a call, call appearance, or call leg within a system.

ConnectionBreakInformation
One or more of:
  RemovedParties
  RemainingParties
  DroppedParties
	M	
		
		Identifies parties removed from a call.
		Identifies parties remaining in a call.
		Identifies parties permanently disconnected from a call.

3.1.12 DialedDigitExtraction

The DialedDigitExtraction message is generated and delivered to the LEA when DTMF digits are dialed by the intercept subject after the call is cut-through to another service provider; for example, for processing and routing (i.e., after a two-way path has been established).

Only calls originated by a subject will be monitored for post cut-through digits; calls to a subject are not monitored due to DDE resource limitations.

Digits will be accumulated and reported in the DialedDigitExtraction message when:

- a maximum of 32 digits have been received;
- 20 seconds have elapsed since the first digit was received;
- a call identity is split into two call identities or two call identities are merged into one call identity (i.e., before a Change message is generated);
- an MBS Automatic Dial (AUD) feature key is pressed; or
- the call is released.

The DialedDigitExtraction message is triggered when a DTMF tone is generated by the subject. DTMF tones generated by an associate or Monitored Replacement Party will not be detected and reported.

Note: The U.S. Court of Appeals for the District of Columbia has dismissed this message which is part of the FCC's order on CALEA. However, this ruling is, in turn, being appealed. Depending upon the outcome, delivery of this message will be controlled by a DMS-10 feature bit. This message will not be encoded and sent to the LEA if the feature is not activated.

The following parameters shall be part of the DialedDigitExtraction message (see Table 3-L:):

Table 3-L: DialedDigitExtraction Message Parameters

Parameter	M / C	Usage
CaseIdentity	M	Identifies the Intercept Subject.
IAPSystemIdentity	C	Identifies the system containing the IAP.
TimeStamp	M	Identifies the date and time that the triggering event was detected.
CallIdentity	M	Identifies a call for a given surveillance.
Digits	M	Identifies the DTMF tones transmitted by the subject.

3.1.13 NetworkSignal

The NetworkSignal message is generated and delivered to an LEA's Collection Function when a network message that provides call-identifying information is originated and applied by the IAP switch to an intercept subject. The following triggering events are defined:

- Alerting Signals

    — Ringing (normal alerting) is applied indicating an incoming call attempt to the intercept subject.

    — Reminder (splash) ring is applied to notify the intercept subject when a terminating call has been redirected.

    — Distinctive ringing is applied to allow classification of incoming calls to the intercept subject based on the called number or based on the calling number.

    — Call waiting tone is applied indicating an incoming call to the intercept subject while the subject is in the communications state with another call.

— Distinctive call waiting tone is applied to allow classification of incoming calls to the intercept subject, while the subject is in the communications state with another call, based on the called number or based on the calling number.

— Alerting tone is applied indicating an incoming call attempt to the intercept subject.

— Distinctive alerting tone is applied to allow classification of incoming calls to the intercept subject based on the called number or based on the calling number.

— Barge-in tone is applied indicating someone is about to barge-in on the intercept subject's active call.

- Tones

  — Dial tone is applied indicating an intercept subject has gone off-hook and the IAP is ready to accept address information from the intercept subject.

  — Recall dial tone (e.g., second dial tone or special dial tone) is applied indicating that an IAP is ready to accept address information or other information from an intercept subject.

  — Ringback tone or Audible alerting is applied indicating an intercept subject-originated call attempt has progressed and the called party is being alerted.

  — Busy tone is applied indicating an intercept subject-originated incomplete call attempt.

  — Reorder tone or Congestion tone is applied indicating an intercept subject-originated incomplete call attempt.

  — Receiver Off-Hook (ROH) tone is applied indicating the intercept subject has left the phone receiver off hook and the line is receiving permanent signal treatment. This tone is also used in place of ringing when an operator system needs to alert an off-hook line.

  — Confirmation tone is applied indicating the IAP has received information and has processed the request, such as the activation or deactivation of a feature or service.

  — Message waiting tone is applied indicating an incoming call was redirected to Voice Mail and that the caller left a message for the intercept subject.

  — Denial tone (single 2.0 seconds burst of 480 Hz tone added to a 620 Hz tone) is applied towards the intercept subject indicating denial of a feature request.

  — Warning tone (a single 0.1 second burst of 480 Hz tone) is applied toward the intercept subject.

- Terminal Displays

    — Alphanumeric display information associated with a circuit-mode call is delivered to the intercept subject, such as text provided in the Q.931 display information element (e.g., calling name, redirecting name).

    — Signaling information is delivered to the intercept subject identifying calling name and number and redirecting party name and number.

    — Message waiting indication (e.g., MWI lamp) - visual indication of a message waiting notification.

- Other

    — Standard announcement is applied toward the intercept subject as applicable per ANSI-41.

    Note: The U.S. Court of Appeals for the District of Columbia has dismissed this message which is part of the FCC's order on CALEA. However, this ruling is, in turn, being appealed. Depending upon the outcome, delivery of this message will be controlled by a DMS-10 feature bit. This message will not be encoded and sent to the LEA if the feature is not activated.

The following parameters shall be part of the NetworkSignal message (see Table 3-M:):

Table 3-M: NetworkSignal Message Parameters

Parameter	M / C	Usage
CaseIdentity	M	Identifies the Intercept Subject.
IAPSystemIdentity	C	Identifies the system containing the IAP.
TimeStamp	M	Identifies the date and time that the event was detected.
CallIdentity	C	Included when known to uniquely identify a call, call appearance, or call leg within a system.
Signal	M	Identifies the audio signals, visual signals, or displayed text applied by the accessing system that would normally be sensed by the intercept subject.
One or more of the following: AlertingSignal		Included when alerting is applied to the intercept subject's terminal to indicate it's type.
SubjectAudibleSignal		Included when audible signal is applied toward the intercept subject.
TerminalDisplayInfo		Included when messages that may be displayed on the intercept subject's terminal are sent by the IAP including display messages, called number, calling party numbers, redirecting numbers, etc.
Other		Included as an alternative means of reporting the signaling information.

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3.1.14 **SubjectSignal**

The SubjectSignal message is generated and delivered to an LEA's Collection Function when:

- the intercept subject, using the facilities under surveillance, dials or signals to control services provided by the serving system;

- sufficient input has been received (e.g., the receiving IAP network element acts on the subject-initiated input); or

- the call attempt is abandoned with partial input (e.g., the inter-digit timer expires or a subject abandons the call).

The signal may be in-band or out-of-band and may be call-associated or non call-associated. However, digits dialed post cut-through as defined in "DialedDigitExtraction" message are not detected by this function and are thus not provided in a SubjectSignal message.

> *Note: The U.S. Court of Appeals for the District of Columbia has dismissed this message which is part of the FCC's order on CALEA. However, this ruling is, in turn, being appealed. Depending upon the outcome, delivery of this message will be controlled by a DMS-10 feature bit. This message will not be encoded and sent to the LEA if the feature is not activated.*

The following parameters shall be part of the SubjectSignal message (see Table 3-N:):

Table 3-N: SubjectSignal Message Parameters

Parameter	M / C	Usage
CaseIdentity	M	Identifies the Intercept Subject.
IAPSystemIdentity	C	Identifies the system containing the IAP.
TimeStamp	M	Identifies the date and time that the event was detected.
CallIdentity	C	Included when known to uniquely identify a call, call appearance, or call leg within a system.
Signal	M	Identifies the signal or dialing the IAP detects as originating from the intercept subject. Include to report specific subject-initiated input when detected at the IAP.
One or more of the following:		
SwitchhookFlash		Included when the user requests a switch-hook flash.
DialedDigits		Included when digits are dialed.
FeatureKey		Included when a particular feature key was pressed.
OtherSignalingInformation		Included when other signaling information is initiated by the intercept subject.

3.2   CDC Parameter Descriptions

This section defines the parameters used by the messages introduced in section 3.1, "CDC Message Descriptions" on page 3-1. An indication of which message(s) use the parameter is also provided.

3.2.1   AlertingSignal

This parameter defines the pitch and cadence of the alerting (ringing) signal. The AlertingSignal parameter is included in the NetworkSignal message.

3.2.2   AudibleSignal

This parameter is used to report the type of audible tone that is generated by the IAP switch and applied to the intercept subject. The AudibleSignal parameter is included in the NetworkSignal message.

3.2.3   BearerCapability

This parameter is used to indicate a requested bearer service to be provided by the network or the destination. The BearerCapability parameter is included in the Answer, Origination, Redirection, and TerminationAttempt, messages.

3.2.4   CallIdentity

This parameter is used to uniquely identify a particular call within the context of the subject switch. A CallIdentity may be created with an Origination, TerminationAttempt, or Change message. A CallIdentity may be released with a Release or Change message. A released CallIdentity can be reused in subsequent calls.

Call identities are created on the first event related to a new call instance. Certain call events (e.g., call waiting, three-way calling) are not considered as new call events but part of an ongoing call. Call data messages for such call events shall use the Call Identity of the ongoing call.

The Call Identity sequence numbers will contain a maximum of five digits. The valid range for CallIdentity sequence numbers for surveilled calls made through normal originations and terminations (i.e. for CALEA, calls originating from and/or terminating to a subject) is from 1 to 29999. The system counter starts off at one and is incremented for each call until it reaches 29999. The next CALEA call will reset the sequence number back to one.

Nailed-up connections such as CONN and BCON are long duration calls by nature and thus could cause the same CallIdentity sequence number to be used at the same time if they were to be included in the system counter. Therefore, two separate ranges of numbers are reserved that are outside the domain of the system counter range. This will allow CONN's and BCON's to have fixed unique CallIdentity sequence numbers. The start value for CONN sequence numbers is 30000. The start value for BCON sequence numbers is 31000.

3.2.5   CaseIdentity

This parameter contains a case identifier assigned by the LEA for a particular surveillance. The CaseIdentity will be designated by the LEA and provided to a service provider at the time of provisioning of a surveillance. The CaseIdentity parameter is included in all messages except for the ConnectionTest message.

3.2.6   CCCIdentity

This parameter identifies the CCCs used to convey call content. Only separated CCC pairs are supported by the DMS-10 CALEA feature. Each CCC is identified with a VisibleString which contains the trunk location associated with the CCC. The CCCIdentity parameter is included in the CCOpen, CCClose, and Change messages.

3.2.7   IAPSystemIdentity

The IAPSystemIdentity parameter identifies the system containing the Intercept Access Point (IAP). This parameter is a conditional parameter in all messages.

The IAPSystemIdentity parameter will be populated with:

- the office's Common Language Location Identifier (CLLI) code when it has been assigned in overlay CNFG, SYS prompting sequence, CLLI prompt,

  or when the CLLI code is not assigned:

- the office's Engineering and Administrative Data Acquisition System (EADAS) identification mnemonic when it has been assigned in overlay CNFG, SYS prompting sequence, ID prompt.

If neither field has been assigned then this parameter will not be included.

3.2.8 PartyIdentity

This parameter identifies a party to a call or call attempt. The PartyIdentity is included in the Answer, Origination, Redirection, TerminationAttempt, Connection, and ConnectionBreak messages.

3.2.9 RedirectedFromInformation

This parameter is used to report information about the last redirecting party and the original redirecting party on calls that are redirected to the subject. The RedirectedFromInformation parameter is included in the TerminationAttempt message.

3.2.10 ReleaseReason

The ReleaseReason parameter is included in the Release message and is an extension of the J-STD-025A standard. It identifies the reason for which a call has been released.

Examples of when the ReleaseReason parameter would be included are:

- Switch capacity for the "total number of simultaneous intercepted calls" is exceeded;

- All CCCs provisioned are in use (i.e., CCC group exhaustion);

- Switch capacity for the "number of CCCs per final call leg" is exceeded;

- Call's bearer capability is not compatible with the CCC's equipment or configuration;

- DMS-10 Network blockage encountered;

- Switch capacity for the "maximum number of Call Identities per call leg" is exceeded.

3.2.11 TerminalDisplayInfo

The TerminalDisplayInfo parameter is used to report information that is displayed on the intercept subject's terminal. The TerminalDisplayInfo parameter is included in the NetworkSignal message.

3.2.12 TimeStamp

This parameter identifies the date and time that the call data intercept access point detected the triggering event and not the time the message is sent. The TimeStamp parameter is included in all messages. The precision of the time stamps reported will include milliseconds.

The format of the parameter is 'YYYYMMDDhhmmss.mmm', where:

- YYYY is the year (2000-2099),
- MM is the month (01-12),
- DD is the day (01-31),
- hh is the hour (00-23),
- mm is the minute (00-59),
- ss is the second (00-59),
- "." is the decimal separator, and
- mmm is the millisecond (000-999).

3.2.13 TransitCarrierIdentity

The TransitCarrierIdentity parameter identifies an interexchange carrier and is included in the Origination and Redirection messages.

Section 4: Message ASN.1 Definitions

The protocol used to deliver CDC messages is based on the CCITT X.400 recommendations. Messages are defined using the Abstract Syntax Notation One (ASN.1) (as defined in the *Abstract Syntax Notation One (ASN.1), Recommendation X.208*). Messages and parameters are encoded according to the *Basic Encoding Rules (BER) for Abstract Syntax Notation One (ASN.1)* set forth in Recommendation X.209. The use of the term OPTIONAL in the ASN.1 definitions can relate to Conditional parameters.

4.1 CDC Message Definitions

The following ASN.1 encoding defines the LAES messages:

```
Laesp DEFINITIONS EXPLICIT TAGS ::=
BEGIN

LAESMessage ::= CHOICE {
        answer          [1] Answer,
        ccClose         [2] CCClose,
        ccOpen          [3] CCOpen,
        change          [4] Change,
        origination     [5] Origination,
        redirection     [7] Redirection,
        release         [8] Release,
        termAttempt     [10] TerminationAttempt,
        connectionTest  [11] ConnectionTest,
        connection      [13] Connection,
        connectBreak    [14] ConnectionBreak,
        dialedDgtExtrn  [15] DialedDigitExtraction,
        networkSignal   [16] NetworkSignal,
        subjectSignal   [17] SubjectSignal
```

4.1.1 **Answer**

The following ASN.1 definition shall be used for the Answer message:

```
Answer::= SEQUENCE {
             [0] CaseIdentity,
             [1] IAPSystemIdentity OPTIONAL,
             -- include to identify the system containing the
             -- Intercept Access Point (IAP).
             [2] TimeStamp,
             [3] CallIdentity,
answering    [4] PartyIdentity OPTIONAL,
             -- include when the subject is not the answering
             -- party.
             [6] EXPLICIT BearerCapability OPTIONAL
             -- include when known (or presumed) to indicate the
             -- granted bearer capability.
}
```

4.1.2 **CCClose**

The following ASN.1 definition shall be used for the CCClose message:

```
CCClose::= SEQUENCE {
             [0] CaseIdentity,
             [1] IAPSystemIdentity OPTIONAL,
             -- include to identify the system containing the
             -- Intercept Access Point (IAP).
             [2] TimeStamp,
             [3] EXPLICIT CCCIdentity
}
```

4.1.3 **CCOpen**

The following ASN.1 definition shall be used for the CCOpen message:

```
CCOpen::= SEQUENCE {
             [0] CaseIdentity,
             [1] IAPSystemIdentity OPTIONAL,
             -- include to identify the system containing the
             -- Intercept Access Point (IAP).
             [2] TimeStamp,
             CHOICE {
                 [3] SEQUENCE OF CallIdentity,
                 -- for circuit-mode intercepts
             },
             [5] EXPLICIT CCCIdentity
}
```

4.1.4 Change
The following ASN.1 definition shall be used for the Change message:

```
Change::= SEQUENCE {
             [0] CaseIdentity,
             [1] IAPSystemIdentity OPTIONAL,
             -- include to identify the system containing the
             -- Intercept Access Point (IAP).
             [2] TimeStamp,
prevCallIDs [3] SEQUENCE OF -- previous call(s)
                    SEQUENCE OF CallIdentity,
                    -- identity(ies) of a previous call
resCalls    [4] SEQUENCE OF SEQUENCE {-- resulting call(s)
                 [0] SEQUENCE OF CallIdentity,
                 -- identity(ies) of resulting call
                 [1] EXPLICIT CCCIdentity OPTIONAL
                 -- included when the contents of the resulting
                 -- call are delivered to identify the CCC(s)
}
```

4.1.5 Origination
The following ASN.1 definition shall be used for the Origination message:

```
Origination::= SEQUENCE {
             [0] CaseIdentity,
             [1] IAPSystemIdentity OPTIONAL,
             -- include to identify the system containing the
             -- Intercept Access Point (IAP).
             [2] TimeStamp,
             [3] CallIdentity,
calling      [4] PartyIdentity OPTIONAL,
             -- include when more specific than the subject
             -- identity associated with the CaseIdentity to
             -- identify the calling number
called       [5] PartyIdentity OPTIONAL,
             -- include if known
input        CHOICE {
userInput       [6] VisibleString (SIZE (1..32)),
                 -- use if input is known to be from the user
                 -- e.g., "12025551234" or "*123"
translationInput [7] VisibleString (SIZE (!..32))
                 -- use for inputs to translation
                 -- e.g., "12025551234" or "*123"
             },
             [9] TransitCarrierIdentity OPTIONAL,
             -- include if known
             [10] EXPLICIT BearerCapability OPTIONAL
             -- include if known (or presumed)
}
```

4.1.6 Redirection

The following ASN.1 definition shall be used for the Redirection message:

```
Redirection::= SEQUENCE {
                [0] CaseIdentity,
                [1] IAPSystemIdentity OPTIONAL,
                -- include to identify the system containing the
                -- Intercept Access Point (IAP).
                [2] TimeStamp,
                [3] CallIdentity,
redirectedTo [4] PartyIdentity,
                [5] TransitCarrierIdentity OPTIONAL,
                -- include if known
                [6] EXPLICIT BearerCapability OPTIONAL,
                -- include if known (or presumed)
}
```

4.1.7 Release

The following ASN.1 definition shall be used for the Release message:

```
Release::= SEQUENCE {
                [0] CaseIdentity,
                [1] IAPSystemIdentity OPTIONAL,
                -- include to identify the system containing the
                -- Intercept Access Point (IAP).
                [2] TimeStamp,
                [3] CallIdentity,
release       [PRIVATE 1] ReleaseReason OPTIONAL
}
```

4.1.8 TerminationAttempt

The following ASN.1 definition shall be used for the TerminationAttempt message:

```
TerminationAttempt::= SEQUENCE {
                [0] CaseIdentity,
                [1] IAPSystemIdentity OPTIONAL,
                -- include to identify the system containing the
                -- Intercept Access Point (IAP).
                [2] TimeStamp,
                [3] CallIdentity,
calling      [4] PartyIdentity,
called       [5] PartyIdentity OPTIONAL,
                -- include when more specific than the subject
                -- identity associated with the CaseIdentity to
                -- identify the called number
                [6] EXPLICIT BearerCapability OPTIONAL,
```

```
                        -- include when known (or presumed)
                        [7] RedirectedFromInformation OPTIONAL
                        -- include if this termination attempt is the result
                        -- of a redirected call
            }
```

4.1.9 ConnectionTest
The following ASN.1 definition shall be used for the ConnectionTest message:

```
ConnectionTest::= SEQUENCE {
            [1] IAPSystemIdentity OPTIONAL,
            -- include to identify the system containing the
            -- Intercept Access Point (IAP).
            [2] TimeStamp,
memo        [3] VisibleString (SIZE (1..255))OPTIONAL
}
```

4.1.10 Connection
The following ASN.1 definition shall be used for the Connection message:

```
Connection ::= SEQUENCE {
        [0] CaseIdentity,
        [1] IAPSystemIdentity OPTIONAL,
        -- include to identify the system containing the
        -- Intercept Access Point (IAP).
        [2] TimeStamp,
        [3] SEQUENCE OF CallIdentity,
        -- Connection Information
        -- The following two parameters are considered
        -- Connection Information.Include at least one of the
        -- following.
    connectedParties    [4] SEQUENCE OF PartyIdentity OPTIONAL,
    newParties          [5] SEQUENCE OF PartyIdentity OPTIONAL
}
```

4.1.11 ConnectionBreak
The following ASN.1 definition shall be used for the ConnectionBreak
message:

```
ConnectionBreak ::= SEQUENCE {
            [0] CaseIdentity,
            [1] IAPSystemIdentity OPTIONAL,
            -- include to identify the system containing the
            -- Intercept Access Point (IAP).
            [2] TimeStamp,
            [3] SEQUENCE OF CallIdentity,
```

```
                     -- ConnectionBreak Information
                     -- The following three parameters are considered
                     -- ConnectionBreak Information. Include at least
                     -- one of the following.
     removedParties       [4] SEQUENCE OF PartyIdentityOPTIONAL,
     remainingParties     [5] SEQUENCE OF PartyIdentityOPTIONAL,
     droppedParties       [6] SEQUENCE OF PartyIdentityOPTIONAL
}
```

4.1.12 DialedDigitExtraction

The following ASN.1 definition shall be used for the DialedDigitExtraction message:

```
DialedDigitExtraction ::= SEQUENCE {
             [0] CaseIdentity,
             [1] IAPSystemIdentity OPTIONAL,
             -- include to identify the system containing the
             -- Intercept Access Point (IAP).
             [2] TimeStamp,
             [3] CallIdentity,
digits       [4] VisibleString (SIZE (1..32))
}
```

4.1.13 NetworkSignal

The following ASN.1 definition shall be used for the NetworkSignal message:

```
NetworkSignal ::= SEQUENCE {
         [0] CaseIdentity,
         [1] IAPSystemIdentity OPTIONAL,
         -- include to identify the system containing the
         -- Intercept Access Point (IAP).
         [2] TimeStamp,
         [3] CallIdentity OPTIONAL,
         -- Signal
         -- The following four parameters are considered
         -- subject-initiated signals. Include at least one of
         -- the following four parameters to identify the signal
         -- being applied by the IAP.
alertingSignal       [4] AlertingSignal OPTIONAL,
subjectAudibleSignal[5] AudibleSignal OPTIONAL,
terminalDisplayInfo [6] TerminalDisplayInfo OPTIONAL,
other                [7] VisibleString (SIZE (1..128)) OPTIONAL
                     -- e.g., standard announcement or name of
                     -- an announcement as per ANSI-41.
}
```

4.1.14 SubjectSignal

The following ASN.1 definition shall be used for the SubjectSignal message:

```
SubjectSignal ::= SEQUENCE {
        [0] CaseIdentity,
        [1] IAPSystemIdentity OPTIONAL,
        -- include to identify the system containing the
        -- Intercept Access Point (IAP).
        [2] TimeStamp,
        [3] CallIdentity OPTIONAL,
signal  [4] SEQUENCE {
    switchhookFlash [0] VisibleString (SIZE (1..128)) OPTIONAL,
                    -- e.g, "FLASH"
    dialedDigits    [1] VisibleString (SIZE (1..128)) OPTIONAL,
                    -- e.g. "12013452367", "*123",
    featureKey      [2] VisibleString (SIZE (1..128)) OPTIONAL,
                    -- e.g. "KEY1", "HOLD", "CONFERENCE" or any
                    -- other function key.
    otherSignalingInformation [3] VisibleString (SIZE
                                            (1..128)) OPTIONAL
                    -- e.g., "HOME"
}
```

4.2   CDC Parameter Definitions

The parameters are defined using ASN.1.

4.2.1   AlertingSignal

The AlertingSignal parameter shall be encoded as follows:

```
AlertingSignal ::= ENUMERATED {
    notUsed            (0),
    alertingPattern0   (1),-- normal alerting
    alertingPattern1   (2),-- distinctive alerting:
                               -- Intergroup
    alertingPattern2   (3),-- distinctive alerting:
                               -- Special/Priority
    alertingPattern3   (4),-- Electronic Key Telephone Serv.
    alertingPattern4   (5),-- reminder ring
    callWaitingPattern1 (6),-- basic call waiting tone
    callWaitingPattern2 (7),-- incoming additional call tone
    callWaitingPattern3 (8),-- priority additional call tone
    callWaitingPattern4 (9),-- distinctive call waiting tone
    bargeInTone        (10)
}
```

4.2.2 AudibleSignal

The AudibleSignal parameter shall be encoded as follows:

```
AudibleSignal ::= ENUMERATED {
    notUsed             (0),
    dialTone            (1),
    recallDialTone      (2),
    ringbackTone        (3),-- RingbackTone or AudibleAlerting
    reorderTone         (4),-- ReorderTone or CongestionTone
    busyTone            (5),
    confirmationTone    (6),
    expensiveRouteTone  (7),
    messageWaitingTone  (8),
    receiverOffHookTone (9),
    specialInfoTone     (10),
    denialTone          (11),
    interceptTone       (12),-- InterceptTone or MobileReorder
    answerTone          (13),
    tonesOff               (14),
    pipTone                (15),
    abbreviatedIntercept   (16),
    abbreviatedCongestion  (17),
    warningTone            (18),
    dialToneBurst          (19),
    numberUnObtainableTone (20),
    authenticationFailTone (21)
}
```

4.2.3 BearerCapability

The BearerCapability parameter shall be encoded as follows:

```
BearerCapability::= CHOICE {
speech              [0] NULL,
f3100HzAudio        [1] NULL,
bearerCapInfoElement[2] OCTET STRING (SIZE(1..64))
                    -- encoded according to T1.607 Bearer
                    -- Capability information element starting
                    -- with octet 3
}
```

4.2.4 CallIdentity

The CallIdentity parameter shall be encoded as follows:

```
CallIdentity::= SEQUENCE {
sequenceNumber      [0] VisibleString (SIZE (1..25)),
}
```

4.2.5 **CaseIdentity**

The CaseIdentity parameter shall be encoded as follows:

```
CaseIdentity::= VisibleString (SIZE (1..25))
                    -- e.g., "FBI-12345", "NYPD-2583"
```

4.2.6 **CCCIdentity**

The CCCIdentity parameter shall be encoded as follows:

```
CCCIdentity::= CHOICE {
sepCCCpair  [1] SEQUENCE {
            -- paired CCC
sepXmitCCC     [0] VisibleString (SIZE (1..20)),
                -- transmit path (from the intercept
                -- subject or redirected to party)
sepRecvCCC     [1] VisibleString (SIZE (1..20)),
                -- receive path (to the intercept subject
                -- or redirected to party)
            },
indXmitCCC  [2] VisibleString (SIZE (1..20)),
                -- individual transmit path
                -- (from the intercept subject or
                -- redirected-to party)
indRecvCCC  [3] VisibleString (SIZE (1..20)),
                -- individual receive path
                -- (to the intercept subject or
                -- redirected-to party)
indCCC      [4] VisibleString (SIZE (1..20)),
                 -- individual CCC without a specified
                 -- direction. Use only in CCClose messages.)
}
```

4.2.7 **IAPSystemIdentity**

The IAPSystemIdentity parameter shall be encoded as follows:

```
IAPSystemIdentity ::= VisibleString (SIZE (1..15))
                -- e.g., CLLI code.
```

4.2.8 **PartyIdentity**

The PartyIdentity parameter shall be encoded as follows:

```
PartyIdentity ::= SEQUENCE {
                -- include those identification elements
                -- necessary to uniquely identify the party
                -- known at the point in the call and are
                -- authorized. At least one of the following
                -- parameters is required.
    spid            [3] VisibleString (SIZE (3..20)) OPTIONAL,
                -- ISDN-based Service Profile Identifier
    dn              [6] VisibleString (SIZE (1..15)) OPTIONAL,
                -- e.g., called directory number or network
                -- provided calling number.
    userProvided    [7] VisibleString (SIZE (1..15)) OPTIONAL,
                -- user provided calling number as supplied
                -- appearances.
    appearanceId    [8] VisibleString (SIZE (1..15)) OPTIONAL,
                -- include for instruments or services with
                -- multiple line, station, or call appearances.
    ipAddress       [10] VisibleString (SIZE (1..32)) OPTIONAL,
                -- decimal quad notation e.g., "12.34.56.78"
    trunkId         [12] VisibleString (SIZE (1..32)) OPTIONAL,
                -- indicate trunk group, trunk number or both
                -- This is usually used to identify an associate
                -- when other identifying information is not
                -- available. This may also identify a
                -- subject's agent (e.g., screening service).
    subaddress      [13] OCTET STRING (SIZE (2..21)) OPTIONAL,
                -- encoded according to T1.607 Subaddress
                -- information element starting with octet 3
    port            [17] VisibleString (SIZE (1..32)) OPTIONAL,
                -- identify a particular port.
                -- This is used to identify an associate when
                -- other identifying information is not
                -- available
    context         [18] VisibleString (SIZE (1..64)) OPTIONAL,
                -- when none of the other identities are known
                -- or to identify the context and special
                -- considerations of the supplied
                -- identifier(s), especially when the
                -- identifier(s) is (are) abnormal (e.g.,
                -- international, private, restricted,
                -- operator, no address, hotel/motel, etc.)
    isdnHighLayer   [19] OCTET STRING (SIZE (2..14)) OPTIONAL,
                -- include if known
                -- encoded according to T1.607 High Layer
                -- Compatibility information element starting
                -- with octet 3
```

```
isdnLowLayer     [20] OCTET STRING (SIZE (2..14)) OPTIONAL
                 -- include if known
                 -- encoded according to T1.607 Low Layer
                 -- Compatibility information element starting
                 -- with octet 3
}
```

4.2.9 RedirectedFromInformation

The RedirectedFromInformation parameter shall be encoded as follows:

```
RedirectedFromInformation::= SEQUENCE {
lastRedirecting [0] PartyIdentity OPTIONAL,
                 -- include if known
originalCalled  [1] PartyIdentity OPTIONAL,
                 -- include if known
numRedirections [2] INTEGER (1..100) OPTIONAL
                 -- include if known
}
```

4.2.10 ReleaseReason

The ReleaseReason parameter shall be encoded as follows:

```
ReleaseReason ::= VisibleString (SIZE (4..30))
```

4.2.11 TerminalDisplayInfo

The TerminalDisplayInfo parameter shall be encoded as follows:

```
TerminalDisplayInfo ::= SEQUENCE {
    generalDisplay       [0] VisibleString (SIZE (1..80))
                                         OPTIONAL,
    calledNumber         [1] VisibleString (SIZE (1..40))
                                         OPTIONAL,
    callingNumber        [2] VisibleString (SIZE (1..40))
                                         OPTIONAL,
    callingName          [3] VisibleString (SIZE (1..40))
                                         OPTIONAL,
    originalCalledNumber [4] VisibleString (SIZE (1..40))
                                         OPTIONAL,
    lastRedirectingNumber [5] VisibleString (SIZE (1..40))
                                         OPTIONAL,
    redirectingName      [6] VisibleString (SIZE (1..40))
                                         OPTIONAL,
    redirectingReason    [7] VisibleString (SIZE (1..40))
                                         OPTIONAL,
    messageWaitingNotif  [8] VisibleString (SIZE (1..40))
                                         OPTIONAL
}
```

4.2.12 TimeStamp

The TimeStamp parameter shall be encoded as follows:

```
TimeStamp ::= GeneralizedTime
                    -- VisibleString (SIZE (18))
```

4.2.13 TransitCarrierIdentity

The TransitCarrierIdentity parameter shall be encoded as follows:

```
TransitCarrierIdentity ::= VisibleString (SIZE (3..7))
                    -- the carrier access code (if applicable) and
                    -- the four-digit carrier identification code
                    -- e.g., "0202" or "0310".
```

Section 5: Message Encoding

The following tables describe the encoding of the CDC messages used by the DMS-10 to communicate with LEA collection facilities.

Each CDC message and its parameters will follow the X.209 Basic Encoding Rules and have the following format:

Not all parameters need to be present in a CDC message. Optional parameters are shown in *italics*. Furthermore, some of the message parameters may be repeated. Parameters that may be repeated are shown in **bold**.

All octet values are in hexadecimal unless otherwise stated.

Identifier
1st Octet - Identifier (Message or Parameter)

Length
2nd Octet - If the number of contents octets is less than or equal to 127, then the short form to encode the length octet will be used. For the short form, the 2nd Octet will have the following format:

| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

| 0 | Contains the number of octets in the contents octets with Bit 7 as the most significant. |

If the number of contents octets is greater than 127, the long form to encode the length octets will be used. For the long form, the 2nd Octet will have the following format:

| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

| 1 | Contains the number of octets in the length octets with Bit 7 as the most significant. |

With the long form, the 3rd Octet, 4th Octet, and so on, will contain the number of contents octets, with Bit 8 of the 3rd Octet as the most significant.

The Length octet(s) value ll is variable for each message and parameter; however, where a parameter's length has been identified, its value is included.

Contents
3rd Octet - If the length is specified using the short form, the 3rd Octet is where the contents octets begin.

nth Octet - If the length is specified using the long form, the first octet following the length octets is where the contents octets begin.

The Contents octet(s) are encoded using ASCII characters.

5.1   CDC Message Formats

5.1.1   Answer Message

Table 5-A: Answer Message Format

LAESMessage			
Identifier	A1		
Length	ll		
Contents	CaseIdentity		
	Identifier	80	
	Length	ll	
	Contents	VisibleString (SIZE (1..25)) The case identity in ASCII form.	
	IAPSystemIdentity		
	Identifier	*81*	
	Length	*ll*	
	Contents	*VisibleString (SIZE (1..15))* *Identifies the system containing the Intercept Access Point (IAP)*	
	TimeStamp		
	Identifier	82	
	Length	ll	
	Contents	GeneralizedTime - 18 octets in ASCII form YYYYMMDDhhmmss.mmm	
	CallIdentity		
	Identifier	A3	
	Length	ll	
	Contents	sequenceNumber	
		Identifier	80
		Length	ll
		Contents	VisibleString (SIZE (1..25)) The call identity in ASCII decimal form.

Table 5-A: Answer Message Format

	answering PartyIdentity		
	Identifier	*A4*	
	Length	*ll*	
	Contents -- *include at least one* *of the following ->*	*spid*	
		Identifier	*83*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..25))*
		dn	
		Identifier	*86*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..15))*
		appearanceId	
		Identifier	*88*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..15))* *For MBS lines: "MBS KEY n"*
		ipAddress	
		Identifier	*8A*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..32))* *For example: "12.34.56.78"* *IP address of Voice over IP (VoIP)* *Gateway Lines, such as Session* *Initiation Protocol (SIP) lines.*
		subaddress	
		Identifier	*8D*
		Length	*ll*
		Contents	*OCTET STRING (SIZE (2..21))* *T1.607 subaddress information* *element of the Called party, starting* *with octet 3 (for ISDN parties).*

Table 5-A: Answer Message Format

		port	
		Identifier	*91*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..32))* *Line Equipment Number of the party:* *[Site] Bay Shelf Pack Unit.*
		context	
		Identifier	*92*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..64))* *Contains Nature of Address, Numbering Plan and Presentation Restriction Indicator for calling party number in the form:* *NOA = "Nature of Address",* *# PLAN = "Numbering Plan",* *DISP= "Privacy Type"* *where possible values for "Nature of Address" include:* *UNKNOWN - unknown nature of address* *UNIQ SUB - unique subscriber number* *UNIQ NAT - unique national number* *UNIQ INT - unique international number* *NONUNIQ SUB - nonunique subscriber number* *NONUNIQ NAT - nonunique national number* *NONUNIQ INT - nonunique international number* *NONE - nature of address not identified*
			(continued)

Table 5-A: Answer Message Format

			where possible values for "Numbering Plan" include: *UNKN - unknown numbering plan* *NANP - North American numbering plan* *PRIV - private numbering plan* *NONE - numbering plan not identified* *where possible values for "Privacy Type" include:* *PUB - public* *PRIV - private* *UNAV - number not available* *NONE - privacy not identified*
	BearerCapability		
	Identifier	*A6*	
	Length	*ll*	
	Contents -- only one of the following ->	*speech*	
		Identifier	*80*
		Length	*00*
		Contents	
		f3100HzAudio	
		Identifier	*81*
		Length	*00*
		Contents	
		bearerCapInfoElement	
		Identifier	*82*
		Length	*ll*
		Contents *For 56Kbps*	*OCTET 1 = 88* *OCTET 2 = 90* *OCTET 3 = 21* *OCTET 4 = 8F*
		For 64Kbps	*OCTET 1 = 88* *OCTET 2 = 90*

5.1.2 CCClose Message

Table 5-B: **CCClose Message Format**

LAESMessage		
Identifier	A2	
Length	ll	
Contents	**CaseIdentity**	
	Identifier	80
	Length	ll
	Contents	VisibleString (SIZE (1..25)) The case identity in ASCII form.
	IAPSystemIdentity	
	Identifier	*81*
	Length	*ll*
	Contents	*VisibleString (SIZE (1..15))* *Identifies the system containing the Intercept Access Point (IAP)*
	TimeStamp	
	Identifier	82
	Length	ll
	Contents	GeneralizedTime - 18 octets in ASCII form YYYYMMDDhhmmss.mmm
	CCCIdentity	
	Identifier	A3
	Length	ll
	Contents - includes only one of the shaded choices.	**sepCCCpair**
		Identifier	A1
		Length	ll
		Contents	Continued on next page

Table 5-B: CCClose Message Format

			Contents	sepXmitCCC	
				Identifier	80
				Length	ll
				Contents	*VisibleString (SIZE (1..20)) Physical location of the CCC used to deliver call content from the subject or MRP in the form: [Site] Bay Shelf Pack Channel -or- [Site] Bay Shelf Pack Link Channel*
				sepRecvCCC	
				Identifier	81
				Length	ll
				Contents	*VisibleString (SIZE (1..20)) Physical location of the CCC used to deliver call content from the associate(s) in the form: [Site] Bay Shelf Pack Channel -or- [Site] Bay Shelf Pack Link Channel*
			indXmitCCC		
			Identifier	82	
			Length	ll	
			Contents	*VisibleString (SIZE (1..20)) Physical location of the CCC used to deliver call content from the associate(s) in the form: [Site] Bay Shelf Pack Channel -or- [Site] Bay Shelf Pack Link Channel.*	
			indRecvCCC		
			Identifier	83	
			Length	ll	
			Contents	*VisibleString (SIZE (1..20)) Physical location of the CCC used to deliver call content from the associate(s) in the form: [Site] Bay Shelf Pack Channel -or- [Site] Bay Shelf Pack Link Channel*	

5.1.3 CCOpen Message

Table 5-C: CCOpen Message Format

LAESMessage				
Identifier	A3			
Length	ll			
Contents	CaseIdentity			
	Identifier	80		
	Length	ll		
	Contents	VisibleString (SIZE (1..25)) The case identity in ASCII form.		
	IAPSystemIdentity			
	Identifier	*81*		
	Length	*ll*		
	Contents	*VisibleString (SIZE (1..15))* *Identifies the system containing the Intercept Access Point (IAP)*		
	TimeStamp			
	Identifier	82		
	Length	ll		
	Contents	GeneralizedTime - 18 octets in ASCII form YYYYMMDDhhmmss.mmm		
	SEQUENCE OF CallIdentity (one or more CallIdentities)			
	Identifier	A3		
	Length	ll		
	Contents	**CallIdentity**		
		Identifier	**30**	
		Length	**ll**	
		Contents	**sequenceNumber**	
			Identifier	**80**
			Length	**ll**
			Contents	**VisibleString (SIZE (1..25))** **The call identity in ASCII decimal form.**

Table 5-C: CCOpen Message Format

	CCCIdentity			
	Identifier	A5		
	Length	ll		
Contents - includes only one of the shaded choices.	sepCCCpair			
	Identifier	A1		
	Length	ll		
	Contents	sepXmitCCC		
		Identifier	80	
		Length	ll	
		Contents	*VisibleString (SIZE (1..20)) Physical location of the CCC used to deliver call content from the subject or MRP in the form: [Site] Bay Shelf Pack Channel - or- [Site] Bay Shelf Pack Link Channel*	
		sepRecvCCC		
		Identifier	81	
		Length	ll	
		Contents	*VisibleString (SIZE (1..20)) Physical location of the CCC used to deliver call content from the associate(s) in the form: [Site] Bay Shelf Pack Channel - or- [Site] Bay Shelf Pack Link Channel*	

Table 5-C: CCOpen Message Format

			indXmitCCC	
			Identifier	82
			Length	ll
			Contents	*VisibleString (SIZE (1..20))* *Physical location of the CCC used to deliver call content from the associate(s) in the form:* *[Site] Bay Shelf Pack Channel -or-* *[Site] Bay Shelf Pack Link Channel*
			indRecvCCC	
			Identifier	83
			Length	ll
			Contents	*VisibleString (SIZE (1..20))* *Physical location of the CCC used to deliver call content from the associate(s) in the form:* *[Site] Bay Shelf Pack Channel -or-* *[Site] Bay Shelf Pack Link Channel*

5.1.4   Change Message

Table 5-D: Change Message Format

LAESMessage		
Identifier	A4	
Length	ll	
Contents	*CaseIdentity*	
	Identifier	80
	Length	ll
	Contents	VisibleString (SIZE (1..25)) The case identity in ASCII form.
	IAPSystemIdentity	
	Identifier	*81*
	Length	*ll*
	Contents	*VisibleString (SIZE (1..15))* *Identifies the system containing the Intercept Access Point (IAP)*
	TimeStamp	
	Identifier	82
	Length	ll
	Contents	GeneralizedTime - 18 octets in ASCII form YYYYMMDDhhmmss.mmm

Table 5-D: Change Message Format

		SEQUENCE OF -- previous call(s)				
	Identifier	A3				
	Length	ll				
	Contents	**SEQUENCE OF CallIdentity (one or more CallIdentities)**				
		Identifier	**30**			
		Length	**ll**			
		Contents	**CallIdentity**			
			Identifier	**30**		
			Length	**ll**		
			Contents	**sequenceNumber**		
				Identifier	**80**	
				Length	**ll**	
				Contents	**VisibleString (SIZE (1..25)) The call identity in ASCII decimal form.**	

Table 5-D: Change Message Format

SEQUENCE OF -- resulting call(s)							
	Identifier	A4					
	Length	ll					
	Contents	**SEQUENCE (for each resulting call)**					
		Identifier	**30**				
		Length	**ll**				
		Contents	**SEQUENCE OF CallIdentity (one or more CallIdentities)**				
			Identifier	**A0**			
			Length	**ll**			
			Contents - (below)				
			CallIdentity				
			Identifier	**30**			
			Length	**ll**			
			Contents	**sequenceNumber**			
				Identifier	**80**		
				Length	**ll**		
				Contents	**VisibleString (SIZE (1..25))** **The call identity in ASCII decimal form.**		
			CCCIdentity				
			Identifier	*A1*			
			Length	*ll*			
			Contents - includes one of the shaded regions below				
			sepCCCpair				
			Identifier	*A1*			
			Length	*ll*			
			Contents	*sepXmitCCC*			
				Identifier	*80*		
				Length	*ll*		

Table 5-D: Change Message Format

				Contents	*VisibleString (SIZE (1..20)) Physical location of the CCC used to deliver call content from the subject or MRP in the form: [Site] Bay Shelf Pack Channel -or- [Site] Bay Shelf Pack Link Channel*
				sepRecvCCC	
				Identifier	*81*
				Length	*ll*
				Contents	*VisibleString (SIZE (1..20)) Physical location of the CCC used to deliver call content from the subject or MRP in the form: [Site] Bay Shelf Pack Channel -or- [Site] Bay Shelf Pack Link Channel*
			indXmitCCC		
			Identifier	*82*	
			Length	*ll*	
			Contents	*VisibleString (SIZE (1..20)) Physical location of the CCC used to deliver call content from the associate(s) in the form: [Site] Bay Shelf Pack Channel -or- [Site] Bay Shelf Pack Link Channel*	
			indRecvCCC		
			Identifier	*83*	
			Length	*ll*	
			Contents	*VisibleString (SIZE (1..20)) Physical location of the CCC used to deliver call content from the associate(s) in the form: [Site] Bay Shelf Pack Channel -or- [Site] Bay Shelf Pack Link Channel*	

5.1.5 Origination Message

Table 5-E: Origination Message Format

LAESMessage			
Identifier	A5		
Length	ll		
Contents	CaseIdentity		
	Identifier	80	
	Length	ll	
	Contents	VisibleString (SIZE (1..25)) The case identity in ASCII form.	
	IAPSystemIdentity		
	Identifier	*81*	
	Length	*ll*	
	Contents	*VisibleString (SIZE (1..15))* *Identifies the system containing the Intercept Access Point (IAP)*	
	TimeStamp		
	Identifier	82	
	Length	ll	
	Contents	GeneralizedTime - 18 octets in ASCII form YYYYMMDDhhmmss.mmm	
	CallIdentity		
	Identifier	A3	
	Length	ll	
	Contents	sequenceNumber	
		Identifier	80
		Length	ll
		Contents	VisibleString (SIZE (1..25)) The call identity in ASCII decimal form.

Table 5-E: Origination Message Format

	calling PartyIdentity		
	Identifier	*A4*	
	Length	*ll*	
	Contents -- include at least one of the following ->	*spid*	
		Identifier	*83*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..25))*
		dn	
		Identifier	*86*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..15))*
		userProvided	
		Identifier	*87*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..15))* *Calling number as supplied by the calling party (for ISDN parties).*
		appearanceId	
		Identifier	*88*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..15))* *For MBS lines: "MBS KEY n"*
		ipAddress	
		Identifier	*8A*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..32))* *For example: "12.34.56.78"* *IP address of Voice over IP (VoIP) Gateway Lines, such as Session Initiation Protocol (SIP) lines.*

Table 5-E: Origination Message Format

		trunkId	
		Identifier	*8C*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..32))* *Trunk group number of the trunk used to reach the party in the following form: LTG nnn (line trunk group number) or TG nnn (trunk group number)*
		subaddress	
		Identifier	*8D*
		Length	*ll*
		Contents	*OCTET STRING (SIZE (2..21))* *T1.607 subaddress information element of the Called party, starting with octet 3 (for ISDN parties).*
		port	
		Identifier	*91*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..32))* *Line Equipment Number of the party: [Site] Bay Shelf Pack Unit.*
		context	
		Identifier	*92*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..64))* *See the context information element described in the Answer message in Table 5-A:*
		isdnHighLayer	
		Identifier	*93*
		Length	*ll*
		Contents	*OCTET STRING (SIZE (2..14))* *T1.607 high layer compatibility information element of the party, starting with octet 3 (for ISDN parties).*

Table 5-E: Origination Message Format

		isdnLowLayer	
		Identifier	*94*
		Length	*ll*
		Contents	*OCTET STRING (SIZE (2..14)) T1.607 low layer compatibility information element of the party, starting with octet 3 (for ISDN parties).*
	called PartyIdentity		
	Identifier	*A5*	
	Length	*ll*	
	Contents -- include at least one of the following ->	*spid*	
		Identifier	*83*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..25))*
		dn	
		Identifier	*86*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..15))*
		ipAddress	
		Identifier	*8A*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..32)) For example: "12.34.56.78" IP address of Voice over IP (VoIP) Gateway Lines, such as Session Initiation Protocol (SIP) lines.*
		subaddress	
		Identifier	*8D*
		Length	*ll*
		Contents	*OCTET STRING (SIZE (2..21)) T1.607 subaddress information element of the Called party, starting with octet 3 (for ISDN parties).*

Table 5-E: **Origination Message Format**

		port	
		Identifier	*91*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..32))* *Line Equipment Number of the party:* *[Site] Bay Shelf Pack Unit.*
		context	
		Identifier	*92*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..64))* *See the context information element described in the Answer message in Table 5-A:*
input (Either userInput or translationInput)			
userInput			
	Identifier	86	
	Length	ll	
	Contents	VisibleString (SIZE (1..32)) The digits dialed by the user including * and #. For example: "", "*72", "19199054764".	
translationInput			
	Identifier	87	
	Length	ll	
	Contents	VisibleString (SIZE (1.32)) The digits input by translation.	
TransitCarrierIdentity			
	Identifier	*89*	
	Length	*04*	
	Contents	*VisibleString (SIZE (3..7))* *The four-digit carrier identification code (CIC) nnnn.*	

Table 5-E: Origination Message Format

	BearerCapability		
	Identifier	*AA*	
	Length	*ll*	
	Contents -- includes only one of the following	*speech*	
		Identifier	*80*
		Length	*00*
		Contents	
		f3100HzAudio	
		Identifier	*81*
		Length	*00*
		Contents	
		bearerCapInfoElement	
		Identifier	*82*
		Length	*ll*
		Contents *For 56Kbps*	*OCTET 1 = 88* *OCTET 2 = 90* *OCTET 3 = 21* *OCTET 4 = 8F*
		For 64Kbps	*OCTET 1 = 88* *OCTET 2 = 90*

5.1.6   Redirection Message

Table 5-F: Redirection Message Format

LAESMessage			
Identifier	A7		
Length	ll		
Contents	CaseIdentity		
	Identifier	80	
	Length	ll	
	Contents	VisibleString (SIZE (1..25)) The case identity in ASCII form.	
	IAPSystemIdentity		
	Identifier	*81*	
	Length	*ll*	
	Contents	*VisibleString (SIZE (1..15))* *Identifies the system containing the Intercept Access Point (IAP)*	
	TimeStamp		
	Identifier	82	
	Length	ll	
	Contents	GeneralizedTime - 18 octets in ASCII form YYYYMMDDhhmmss.mmm	
	CallIdentity		
	Identifier	A3	
	Length	ll	
	Contents	sequenceNumber	
		Identifier	80
		Length	ll
		Contents	VisibleString (SIZE (1..25)) The call identity in ASCII decimal form.

Table 5-F: **Redirection Message Format**

	redirectedTo PartyIdentity		
	Identifier	A4	
	Length	ll	
	Contents -- include at least one of the following ->	*spid*	
		Identifier	*83*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..25))*
		dn	
		Identifier	*86*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..15))*
		port	
		Identifier	*91*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..32))* *Line Equipment Number of the party:* *[Site] Bay Shelf Pack Unit.*
	TransitCarrierIdentity		
	Identifier	*85*	
	Length	*04*	
	Contents	*VisibleString (SIZE (3..7))* *The four-digit carrier identification code (CIC) nnnn.*	

Table 5-F: **Redirection Message Format**

	BearerCapability		
	Identifier	A6	
	Length	ll	
	Contents -- includes only one of the following ->	*speech*	
		Identifier	80
		Length	00
		Contents	
		f3100HzAudio	
		Identifier	81
		Length	00
		Contents	
		bearerCapInfoElement	
		Identifier	82
		Length	ll
		Contents *For 56Kbps*	*OCTET 1 = 88* *OCTET 2 = 90* *OCTET 3 = 21* *OCTET 4 = 8F*
		For 64Kbps	*OCTET 1 = 88* *OCTET 2 = 90*

5.1.7 Release Message

Table 5-G: Release Message Format

LAESMessage			
Identifier	A8		
Length	ll		
Contents	CaseIdentity		
	Identifier	80	
	Length	ll	
	Contents	VisibleString (SIZE (1..25)) The case identity in ASCII form.	
	IAPSystemIdentity		
	Identifier	*81*	
	Length	*ll*	
	Contents	*VisibleString (SIZE (1..15))* *Identifies the system containing the Intercept Access Point (IAP)*	
	TimeStamp		
	Identifier	82	
	Length	ll	
	Contents	GeneralizedTime - 18 octets in ASCII form YYYYMMDDhhmmss.mmm	
	CallIdentity		
	Identifier	A3	
	Length	ll	
	Contents	sequenceNumber	
		Identifier	80
		Length	ll
		Contents	VisibleString (SIZE (1..25)) The call identity in ASCII decimal form.

Table 5-G: Release Message Format

ReleaseReason	
Identifier	*C1*
Length	*ll*

Contents	*VisibleString (4..30)).*
	One of:
	    SURVEILLANCE CAPACITY REACHED[a]
	    NO INS CCCS AVAILABLE IN CCG[b]
	    NO INS DDE AVAILABLE IN CCG[c]
	    MAX CCCS EXCEEDED FOR CALL[d]
	    INVALID BC FOR CCG[e]
	    NO NETWORK PATH FOR CCCS[f]
	    CCC/DDE HARDWARE FAILURE[g]
	    MAX CALL IDS EXCEEDED FOR CALL[h]

a. The number of simultaneous intercepted calls has reached the switch capacity (30 for Generic 501 and subsequent generics). Information only.

b. There are currently no in-service Call Content Channels (CCCs) available in the Call Content Group. Either order more CCC resources or CCC resources are not in service - have operating company return CCC resources to service.

c. There are currently no in-service Dialed Digit Extraction (DDE) resources available in the Call Content Group. Either more DDE resources must be assigned or DDE resources are not in service - have operating company return DDE resources to service.

d. The maximum number of Call Content Channels (CCCs) for a given intercepted call has reached the per-call limit (10 for Generic 501 and subsequent generics). Information only.

e. Facilities or equipment used by the Call Content Channels (CCCs) are not capable of transporting one or more of the subject's intercepted bearer services. Change CCC resources (digital trunks) to use a Digital Signal Interface (DSI) module set up for 64 kbps clear channel operation.

f. Network path(s) could not be established within the DMS-10 Network. Information only.

g. Call Content Channel (CCC) hardware failure. Information only.

h. The number of intercepted calls (Call Identities) has reached the per-call limit (6 for Generic 501 and subsequent generics). Information only.

5.1.8 TerminationAttempt Message

Table 5-H: TerminationAttempt Message Format

LAESMessage			
Identifier	AA		
Length	ll		
Contents	CaseIdentity		
	Identifier	80	
	Length	ll	
	Contents	VisibleString (SIZE (1..25)) The case identity in ASCII form.	
	IAPSystemIdentity		
	Identifier	*81*	
	Length	*ll*	
	Contents	*VisibleString (SIZE (1..15))* *Identifies the system containing the Intercept Access Point (IAP)*	
	TimeStamp		
	Identifier	82	
	Length	ll	
	Contents	GeneralizedTime - 18 octets in ASCII form YYYYMMDDhhmmss.mmm	
	CallIdentity		
	Identifier	A3	
	Length	ll	
	Contents	sequenceNumber	
		Identifier	80
		Length	ll
		Contents	VisibleString (SIZE (1..25)) The call identity in ASCII decimal form.

Table 5-H: TerminationAttempt Message Format

		calling PartyIdentity	
	Identifier	A4	
	Length	ll	
	Contents -- includes at least one of the following ->	spid	
		Identifier	83
		Length	ll
		Contents	VisibleString (SIZE (1..25))
		dn	
		Identifier	86
		Length	ll
		Contents	VisibleString (SIZE (1..15))
		userProvided	
		Identifier	87
		Length	ll
		Contents	VisibleString (SIZE (1..15)) Calling number as supplied by the calling party (for ISDN parties).
		appearanceId	
		Identifier	*88*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..15)) For MBS lines: "MBS KEY n"*
		ipAddress	
		Identifier	*8A*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..32)) For example: "12.34.56.78" IP address of Voice over IP (VoIP) Gateway Lines, such as Session Initiation Protocol (SIP) line.*

Table 5-H: TerminationAttempt Message Format

		trunkId	
		Identifier	8C
		Length	ll
		Contents	VisibleString (SIZE (1..32)) Trunk group number of the trunk used to reach the party in the following form: LTG nnn (line trunk group number) or TG nnn (trunk group number)
		subaddress	
		Identifier	8D
		Length	ll
		Contents	OCTET STRING (SIZE (2..21)) T1.607 subaddress information element of the Called party, starting with octet 3 (for ISDN parties).
		port	
		Identifier	91
		Length	ll
		Contents	VisibleString (SIZE (1..32)) Line Equipment Number of the party: [Site] Bay Shelf Pack Unit.
		context	
		Identifier	92
		Length	ll
		Contents	*VisibleString (SIZE (1..64))* *See the context information element described in the Answer message in Table 5-A:*
		isdnHighLayer	
		Identifier	93
		Length	ll
		Contents	OCTET STRING (SIZE (2..14)) T1.607 high layer compatibility information element of the party, starting with octet 3 (for ISDN parties).

Table 5-H: TerminationAttempt Message Format

		isdnLowLayer	
		Identifier	94
		Length	ll
		Contents	OCTET STRING (SIZE (2..14)) T1.607 low layer compatibility information element of the party, starting with octet 3 (for ISDN parties).
	called PartyIdentity		
	Identifier	*A5*	
	Length	*ll*	
	Contents -- include at least one of the following ->	*spid*	
		Identifier	*83*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..25))*
		dn	
		Identifier	*86*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..15))*
		ipAddress	
		Identifier	*8A*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..32)) For example: "12.34.56.78" IP address of Voice over IP (VoIP) Gateway Lines, such as Session Initiation Protocol (SIP) lines.*
		subaddress	
		Identifier	*8D*
		Length	*ll*
		Contents	*OCTET STRING (SIZE (2..21)) T1.607 subaddress information element of the Called party, starting with octet 3 (for ISDN parties).*

Table 5-H: TerminationAttempt Message Format

		port	
		Identifier	*91*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..32))* *Line Equipment Number of the party:* *[Site] Bay Shelf Pack Unit.*
		context	
		Identifier	*92*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..64))* *See the context information element described in the Answer message in Table 5-A:*
BearerCapability			
Identifier		*A6*	
Length		*ll*	
Contents -- *only one of the* *following ->*		*speech*	
		Identifier	*80*
		Length	*00*
		Contents	
		f3100HzAudio	
		Identifier	*81*
		Length	*00*
		Contents	
		bearerCapInfoElement	
		Identifier	*82*
		Length	*ll*
		Contents *For 56Kbps*	*OCTET 1 = 88* *OCTET 2 = 90* *OCTET 3 = 21* *OCTET 4 = 8F*
		For 64Kbps	*OCTET 1 = 88* *OCTET 2 = 90*

Table 5-H: TerminationAttempt Message Format

		RedirectedFromInformation		
	Identifier	*A7*		
	Length	*ll*		
	Contents	*lastRedirecting PartyIdentity*		
		Identifier	*A0*	
		Length	*ll*	
		Contents - includes the following		
		dn		
			Identifier	*86*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..15))*
		context		
			Identifier	*92*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..64))* *See the context information element described in the Answer message in Table 5-A:*
		originalCalled PartyIdentity		
		Identifier	*A1*	
		Length	*ll*	
		Contents - includes the following		
		dn		
			Identifier	*86*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..15))*

Table 5-H: TerminationAttempt Message Format

		context	
		Identifier	*92*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..64))* *See the context information element described in the Answer message in Table 5-A:*
		numRedirections	
		Identifier	*82*
		Length	*ll*
		Contents	*Integer (1..100)*

5.1.9   ConnectionTest Message

Table 5-I: ConnectionTest Message Format

LAESMessage		
Identifier	AB	
Length	ll	
Contents	*IAPSystemIdentity*	
	Identifier	*81*
	Length	*ll*
	Contents	*VisibleString (SIZE (1..15))* *Identifies the system containing the Intercept Access Point (IAP)*
	TimeStamp	
	Identifier	82
	Length	ll
	Contents	GeneralizedTime - 18 octets in ASCII form YYYYMMDDhhmmss.mmm
	memo	
	Identifier	*83*
	Length	*ll*
	Contents	*VisibleString (SIZE (1..255))* *CDC CONNECTION REESTABLISHED*

5.1.10 Connection Message

Table 5-J: Connection Message Format

LAESMessage				
Identifier	AD			
Length	ll			
Contents	**CaseIdentity**			
	Identifier	80		
	Length	ll		
	Contents	VisibleString (SIZE (1..25)) The case identity in ASCII form.		
	IAPSystemIdentity			
	Identifier	*81*		
	Length	*ll*		
	Contents	*VisibleString (SIZE (1..15))* *Identifies the system containing the Intercept Access Point (IAP)*		
	TimeStamp			
	Identifier	82		
	Length	ll		
	Contents	GeneralizedTime - 18 octets in ASCII form YYYYMMDDhhmmss.mmm		
	CallIdentity			
	Identifier	A3		
	Length	ll		
	Contents	**SEQUENCE OF CallIdentity**		
		Identifier	**30**	
		Length	**ll**	
		Contents	**sequenceNumber**	
			Identifier	**80**
			Length	**ll**
			Contents	**VisibleString (SIZE (1..25))** **The call identity in ASCII decimal form.**

	Connected Parties		
	Identifier	*A4*	
	Length	*ll*	
	Contents	*SEQUENCE OF Party Identity*	
		Identifier	*30*
		Length	*ll*
		Contents -- include at least one of the following ->	*spid*
			Identifier — *83*
			Length — *ll*
			Contents — *VisibleString (SIZE (1..25))*
			dn
			Identifier — *86*
			Length — *ll*
			Contents — *VisibleString (SIZE (1..15))*
			appearanceId
			Identifier — *88*
			Length — *ll*
			Contents — *VisibleString (SIZE (1..15)) For MBS lines: "MBS KEY n"*
			ipAddress
			Identifier — *8A*
			Length — *ll*
			Contents — *VisibleString (SIZE (1..32)) For example: "12.34.56.78" IP address of Voice over IP (VoIP) Gateway Lines, such as Session Initiation Protocol (SIP) lines.*

			trunkId	
			Identifier	*8C*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..32)) Trunk group number of the trunk used to reach the party.*
			port	
			Identifier	*91*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..32)) Line Equipment Number of the party: [Site] Bay Shelf Pack Unit.*
			context	
			Identifier	*92*
			Length	*04*
			Contents	*VisibleString (SIZE (1..15)) "TONE"*

		New Parties		
		Identifier	A5	
		Length	*ll*	
		Contents	*SEQUENCE OF Party Identity*	
			Identifier	30
			Length	*ll*
			Contents -- *include at least* *one of the* *following ->*	*spid*
				Identifier 83
				Length *ll*
				Contents *VisibleString (SIZE (1..25))*
				dn
				Identifier 86
				Length *ll*
				Contents *VisibleString (SIZE (1..15))*
				appearanceId
				Identifier 88
				Length *ll*
				Contents *VisibleString (SIZE (1..15)) For MBS lines: "MBS KEY n"*
				ipAddress
				Identifier 8A
				Length *ll*
				Contents *VisibleString (SIZE (1..32)) For example: "12.34.56.78" IP address of Voice over IP (VoIP) Gateway Lines, such as Session Initiation Protocol (SIP) lines.*

			trunkId	
			Identifier	*8C*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..32)) Trunk group number of the trunk used to reach the party.*
			port	
			Identifier	*91*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..32)) Line Equipment Number of the party: [Site] Bay Shelf Pack Unit.*
			context	
			Identifier	*92*
			Length	*04*
			Contents	*VisibleString (SIZE (1..15)) "TONE"*

5.1.11 ConnectionBreak Message

Table 5-K: ConnectionBreak Message Format

LAESMessage				
Identifier	AE			
Length	ll			
Contents	**CaseIdentity**			
	Identifier	80		
	Length	ll		
	Contents	VisibleString (SIZE (1..25))		
	IAPSystemIdentity			
	Identifier	*81*		
	Length	*ll*		
	Contents	*VisibleString (SIZE (1..15))* *Identifies the system containing the Intercept Access Point (IAP)*		
	TimeStamp			
	Identifier	82		
	Length	ll		
	Contents	GeneralizedTime - 18 octets in ASCII form YYYYMMDDhhmmss.mmm		
	CallIdentity			
	Identifier	A3		
	Length	ll		
	Contents	**SEQUENCE OF CallIdentity**		
		Identifier	**30**	
		Length	**ll**	
		Contents	**sequenceNumber**	
			Identifier	**80**
			Length	**ll**
			Contents	**VisibleString (SIZE (1..25))** **The call identity in ASCII decimal form.**

	Removed Parties		
	Identifier	A4	
	Length	*ll*	
	Contents	*SEQUENCE OF Party Identity*	
		Identifier	30
		Length	*ll*
		Contents -- include at least one of the following ->	**spid**
			Identifier / 83
			Length / *ll*
			Contents / *VisibleString (SIZE (1..25))*
			dn
			Identifier / 86
			Length / *ll*
			Contents / *VisibleString (SIZE (1..15))*
			appearanceId
			Identifier / 88
			Length / *ll*
			Contents / *VisibleString (SIZE (1..15)) For MBS lines: "MBS KEY n"*
			ipAddress
			Identifier / 8A
			Length / *ll*
			Contents / *VisibleString (SIZE (1..32)) For example: "12.34.56.78" IP address of Voice over IP (VoIP) Gateway Lines, such as Session Initiation Protocol (SIP) lines.*

			trunkId	
			Identifier	*8C*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..32)) Trunk group number of the trunk used to reach the party.*
			port	
			Identifier	*91*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..32)) Line Equipment Number of the party: [Site] Bay Shelf Pack Unit.*
			context	
			Identifier	*92*
			Length	*04*
			Contents	*VisibleString (SIZE (1..15)) "TONE"*

		Remaining Parties		
		Identifier	A5	
		Length	ll	
		Contents	*SEQUENCE OF Party Identity*	
			Identifier	30
			Length	ll
			Contents -- include at least one of the following ->	**spid**
				Identifier	83
				Length	ll
				Contents	*VisibleString (SIZE (1..25))*
				dn
				Identifier	86
				Length	ll
				Contents	*VisibleString (SIZE (1..15))*
				appearanceId
				Identifier	88
				Length	ll
				Contents	*VisibleString (SIZE (1..15)) For MBS lines: "MBS KEY n"*
				ipAddress
				Identifier	8A
				Length	ll
				Contents	*VisibleString (SIZE (1..32)) For example: "12.34.56.78" IP address of Voice over IP (VoIP) Gateway Lines, such as Session Initiation Protocol (SIP) lines.*

			trunkId	
			Identifier	*8C*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..32)) Trunk group number of the trunk used to reach the party.*
			port	
			Identifier	*91*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..32)) Line Equipment Number of the party: [Site] Bay Shelf Pack Unit.*
			context	
			Identifier	*92*
			Length	*04*
			Contents	*VisibleString (SIZE (1..15)) "TONE"*

	Dropped Parties		
	Identifier	_A6_	
	Length	_ll_	
	Contents	_SEQUENCE OF Party Identity_	
		Identifier	_30_
		Length	_ll_
		Contents -- include at least one of the following ->	_spid_
			Identifier 83
			Length _ll_
			Contents _VisibleString (SIZE (1..25))_
			_dn_
			Identifier 86
			Length _ll_
			Contents _VisibleString (SIZE (1..15))_
			appearanceId
			Identifier 88
			Length _ll_
			Contents _VisibleString (SIZE (1..15)) For MBS lines: "MBS KEY n"_
			ipAddress
			Identifier 8A
			Length _ll_
			Contents _VisibleString (SIZE (1..32)) For example: "12.34.56.78" IP address of Voice over IP (VoIP) Gateway Lines, such as Session Initiation Protocol (SIP) lines._

			trunkId	
			Identifier	*8C*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..32)) Trunk group number of the trunk used to reach the party.*
			port	
			Identifier	*91*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..32)) Line Equipment Number of the party: [Site] Bay Shelf Pack Unit.*
			context	
			Identifier	*92*
			Length	*04*
			Contents	*VisibleString (SIZE (1..15)) "TONE"*

5.1.12 DialedDigitExtraction Message

Table 5-L: DialedDigitExtraction Message Format

LAESMessage			
Identifier	AF		
Length	ll		
Contents	**CaseIdentity**		
	Identifier	80	
	Length	ll	
	Contents	VisibleString (SIZE (1..25))	
	IAPSystemIdentity		
	Identifier	*81*	
	Length	*ll*	
	Contents	*VisibleString (SIZE (1..15))* *Identifies the system containing the Intercept Access Point (IAP)*	
	TimeStamp		
	Identifier	82	
	Length	ll	
	Contents	GeneralizedTime - 18 octets in ASCII form YYYYMMDDhhmmss.mmm	
	CallIdentity		
	Identifier	A3	
	Length	ll	
	Contents	**sequenceNumber**	
		Identifier	80
		Length	ll
		Contents	VisibleString (SIZE (1..25)) The call identity in ASCII decimal form.
	Digits		
	Identifier	84	
	Length	ll	
	Contents	VisibleString (SIZE (1..32)) Digits dialed by the intercept subject (max. 32)	

5.1.13 NetworkSignal Message

Table 5-M: NetworkSignal Message Format

LAESMessage			
Identifier	B0		
Length	ll		
Contents	**CaseIdentity**		
	Identifier	80	
	Length	ll	
	Contents	VisibleString (SIZE (1..25))	
	IAPSystemIdentity		
	Identifier	*81*	
	Length	*ll*	
	Contents	*VisibleString (SIZE (1..15))* *Identifies the system containing the Intercept Access Point (IAP)*	
	TimeStamp		
	Identifier	82	
	Length	ll	
	Contents	GeneralizedTime - 18 octets in ASCII form YYYYMMDDhhmmss.mmm	
	CallIdentity		
	Identifier	A3	
	Length	ll	
	Contents	sequenceNumber	
		Identifier	80
		Length	ll
		Contents	VisibleString (SIZE (1..25)) The call identity in ASCII decimal form.
	AlertingSignal		
	Identifier	*84*	
	Length	*ll*	
	Contents	*Number from 1 to 10 indicates the valid alerting signal* *See page 4-7 for further information.*	

		AudibleSignal	
	Identifier	*85*	
	Length	*ll*	
	Contents	*Number from 1 to 21 indicates the valid audible signal* *See page 4-8 for further information.*	
		TerminalDisplayInfo	
	Identifier	*A6*	
	Length	*ll*	
	Contents -- include at least one of the following ->	*General display*	
		Identifier	*80*
		Length	*ll*

		Contents	*VisibleString (SIZE (1..80))*
			For example:
			    "Conference"
			    "Forward"
			    "Call Fwd"
			    "Fwd Busy"
			    "Fwd No Ans" or "Fwd Dont Ans"
			    "Call Transfer"
			    "Pickup"
			    "Picked Up"
			    "Not Picked Up"
			    "Outside"
			    "Camp On"
			    "Camp On Recall"
			    "Call Park"
			    "Call Park Recall"
			    "DSS Autodial"
			    "Station Ringer Test"
			Note 1: *The characters // are used to differentiate between lines on a display.*
			Note 2: *Displays in French and Spanish are also supported by Nortel's Meridian Business Sets.*
			Note 3: *2500-type telephones with CLASS Calling Name/Number displays are displayed in the form:*
			"<time stamp> <number> <name>".
			Note 4: *In the name and number fields, the single character 'O' and 'P' are interpretted as "Out-of-Area/Unknown" and "Private/Suppressed" respectivelly.*

			Called Number	
			Identifier	*81*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..40))*
			Calling Number	
			Identifier	*82*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..40))*
			Calling Name	
			Identifier	*83*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..40))*
			Original Called Number	
			Identifier	*84*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..40))*
			Last Redirect Number	
			Identifier	*85*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..40))*
			Redirected Name	
			Identifier	*86*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..40))*
			Redirected Reason	
			Identifier	*87*
			Length	*ll*
			Contents	*VisibleString (SIZE (1..40))*

		Message Waiting Notification	
		Identifier	*88*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..40))*
	Other		
	Identifier	*87*	
	Length	*ll*	
	Contents	*VisibleString (SIZE (1..128))* *Note: For Announcements, see Appendix B "Announcements"*	

5.1.14 SubjectSignal Message

Table 5-N: SubjectSignal Message Format

LAESMessage			
Identifier	B1		
Length	ll		
Contents	CaseIdentity		
	Identifier	80	
	Length	ll	
	Contents	VisibleString (SIZE (1..25))	
	IAPSystemIdentity		
	Identifier	*81*	
	Length	*ll*	
	Contents	*VisibleString (SIZE (1..15))* *Identifies the system containing the Intercept Access Point (IAP)*	
	TimeStamp		
	Identifier	82	
	Length	ll	
	Contents	GeneralizedTime - 18 octets in ASCII form YYYYMMDDhhmmss.mmm	
	CallIdentity		
	Identifier	A3	
	Length	ll	
	Contents	sequenceNumber	
		Identifier	80
		Length	ll
		Contents	VisibleString (SIZE (1..25)) The call identity in ASCII decimal form.

		Signal	
		Identifier	A4
		Length	ll
	Contents *-- include at least one of the following ->*	*switchhookFlash*	
		Identifier	*80*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..128))* *"Flash", "On-Hook", or "Off-Hook".*
		dialedDigits	
		Identifier	*81*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..128))* *Digits dialed by the intercept subject.*
		featureKey	
		Identifier	*82*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..128))*
		otherSignalingInformation	
		Identifier	*83*
		Length	*ll*
		Contents	*VisibleString (SIZE (1..128))*

Section A: ASCII Character Set

Table A-A   **ASCII character set used by the DMS-10**

00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
Null										\<LF\>			\<CR\>		
10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F
20	21	22	23	24	25	26	27	28	29	2A	2B	2C	2D	2E	2F
space	!	"	#	$	%	&	'	(	)	*	+	,	-	.	/
30	31	32	33	34	35	36	37	38	39	3A	3B	3C	3D	3E	3F
0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
40	41	42	43	44	45	46	47	48	49	4A	4B	4C	4D	4E	4F
@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
50	51	52	53	54	55	56	57	58	59	5A	5B	5C	5D	5E	5F
P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
60	61	62	63	64	65	66	67	68	69	6A	6B	6C	6D	6E	6F
'	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
70	71	72	73	74	75	76	77	78	79	7A	7B	7C	7D	7E	7F
p	q	r	s	t	u	v	w	x	y	z	{			}	~	

Section B: Announcements

When the NetworkSignal message has the 'other' parameter encoded as "Audichron Announcement", the Telecommunications Service Provider (TSP) has recorded their own announcement. Contact the TSP to determine actual announcement recording.

When the NetworkSignal message has the 'other' parameter encoded as "Announcement Number x(xx)," use Table B-A to determine the announcement phrase being voiced towards the intercept subject. This table defines all CLASS announcements that the DMS-10 supports. The definition includes the announcement message number and an *example* of the announcement phrase. Often the TSP has their own announcement phrases recorded, so contact the TSP to determine actual announcement recording.

Table B-A   CLASS Announcement Phase Definitions

Announcement Number	Example Announcement Phrase
SLE Messages	
001	Your (SCA/SCF/SCR/SDR/SRNG) service is now (on/off). There (is/are) # numbers on your list, [including # private number(s)]. You may dial anytime during the announcement for faster service. When you have finished, hang up.
002	To reject the last calling party, press the number sign key, dial 0,1, and then press the number sign key again.
003	To turn this service (on/off), dial 3. To add a number, press the number sign key. To remove one or more numbers, press star. To hear the numbers on your list, dial 1. To hear these instructions repeated, dial 0. Please dial now.
004	Your calls will be forwarded to (digit string). If this number is correct, dial 1. If this number is not correct, dial 0. Please dial now.
005	Please dial the telephone number to which you want your calls forwarded, and then press the number sign key. Please dial now.
006	The number you have dialed, (digit string), is not permitted.

Table B-A   CLASS Announcement Phase Definitions

Announcement Number	Example Announcement Phrase
007	We're sorry. The number you have dialed is incorrect. Please start again or dial 0 for instructions.
008	We're sorry. The digits dialed are not a valid command.
009	We're sorry. You have dialed too few digits. Please start again, or dial 0 for instructions.
010	We're sorry. You have dialed too many digits. Please start again, or dial 0 for instructions.
011	Your (SCA/SCF/SCR/SDR/SRNG) service is now off. Please continue, dial 0 for instructions, or hang up.
012	Your (SCA/SCF/SCR/SDR/SRNG) service is now on. Please continue, dial 0 for instructions, or hang up.
013	To turn on this service, you must add a number to your list. To add a number press the number sign key.
014	Dial the phone number you want to add, and then press the number sign key again. To add the last calling party, dial 0,1, and then press the number sign key again. Please dial now.
015	Dial the phone number you want to erase, and then press the star key again. To erase all numbers, dial 0,8, and then press the star key again. To erase the private numbers, dial 0,9, and then press the start key again. To hear these instructions repeated, dial 0. Please dial now.
016	We're sorry. Your last call came from outside the service area so the number is unavailable. Please start again, or dial 0 for instructions.
017	The number you have added is marked private and cannot be announced. Please continue, dial 0 for instructions, or hang up.
018	The number you have added is (digit string). Please continue, dial 0 for instructions, or hang up.
019	We're sorry. Your list is full. You must erase an entry before adding another. Please continue, or dial 0 for instructions.
020	We're sorry, please try adding the number again in a few minutes. Please continue, or dial 0 for instructions.
021	We're sorry, the number you have dialed is unavailable with this service. Please start again or dial 0 for instructions.
022	We're sorry. Your list is empty. Please try other options or dial zero for instructions.
023	The number you have erased is a private number. Please continue, dial 0 for instructions, or hang up.

Table B-A   CLASS Announcement Phase Definitions

Announcement Number	Example Announcement Phrase
024	The number you have erased is (digit string). Please continue, dial 0 for instructions, or hang up.
025	The end of your list has been reached. Please continue, dial 0 for instructions or hang up.
026	There are no more private numbers on your list. Please continue, dial 0 for instructions or hang up.
027	There (is/are) # private number(s) on your list. Please try other options or dial zero for instructions.
028	There (is/are) # number(s) on your list, [including # private number(s)]. To erase a number dial 0,7 as soon as you hear it.
029	The end of your list has been reached.
030	The first number on your list is (digit string).
031	Next (digit string).
032	Your (SCA/SCF/SCR/SDR/SRNG) service is now (on/off). We're sorry. Please hang up now, consult your written instructions, and try again later.
033	We're sorry. You must dial a telephone number after dialing the number sign key or the star key. Please start again, or dial 0 for instructions.
034	Your selective call forwarding service is now on. Your calls will be forwarded to (digit string). We're sorry. Please hang up now, consult your written instructions, and try again later.
035	Your (SCA/SCF/SCR/SDR/SRNG) service is now off. We're sorry. Please hang up now, consult your written instructions, and try again later.
036	We're sorry. This service is being interrupted. Please hang up and try again later.
037	You have cleared the dialed digits. Please start again, or dial 0 for instructions.
038	The number you have entered is already on the list as a private number. Please continue, dial 0 for instructions or hang up.
039	This number is already on your list, (digit string). Please continue, dial 0 for instructions or hang up.
040	The number to be erased is not on the list. Please start again, dial 0 for instructions or hang up.
041	This is the end of your list. Your list is now empty.
042	Repeating, (digit string).

Table B-A   CLASS Announcement Phase Definitions

Announcement Number	Example Announcement Phrase
ACB/AR Messages	
043	The number you have tried to reach is busy. The system will check the line for # minutes; you will be notified by special ringing when the party is free.
044	We're sorry. Your (ACB/AR) request cannot be processed at this time. Please try, again later or dial directly.
045	The number you are trying to reach cannot be handled by (ACB/AR). Please dial directly.
046	All outstanding (ACB/AR) requests have been deactivated.
047	The last calling number was marked private and cannot be announced. This call was received on (date) at (time). To activate automatic recall, dial 1; otherwise please hang up.
048	The last incoming call was received on (date) at (time). We were unable to determine the telephone number of the calling party. Automatic recall cannot be activated at this time. Please hang up.
049	The last call came to you from (digit string). This call was received on (date) at (time). To activate automatic recall, dial 1; otherwise please hang up.
050	To activate automatic recall, dial 1; otherwise please hang up.
051	The number you are calling was free but it has just become busy again. You will be notified by special ringing when the party is free.
052	*not defined*
053	We were unable to determine the telephone number of the calling party. Automatic recall cannot be activated at this time. Please hang up.
Caller Id. and ACR Messages	
054	Your caller I.D. service is (on/off).
055	Your caller I.D. service is now (on/off).
056	Your (caller I.D./calling line delivery blocking/anonymous call rejection) service is momentarily busy. Please hang up and try again later.
057	Access to the (caller I.D./calling line delivery blocking/anonymous call rejection) service is not permitted from this telephone.
058	Your calling line delivery blocking service has been activated.

Table B-A   CLASS Announcement Phase Definitions

Announcement Number	Example Announcement Phrase
COT Messages	
059	This is your call tracing service. To trace the last call received, dial 1; otherwise please hang up.
060	The last incoming call has been traced.
061	We're sorry. The last incoming call could not be traced (due to telephone company facility trouble/because the call came from outside your service area/because your call tracing service is momentarily busy).
SLE Messages, cont.	
062	You are about to erase all numbers, to confirm dial 1. To repeat instructions dial 0.
063	You are about to erase the private numbers, to confirm dial 1. To repeat instructions dial 0.
064	To add the last calling party to your (SCA/SCF/SCR/SDR/SRNG) list, press the number sign key, dial 0, 1, and then press the number sign key again.
Misc. Messages	
065	We're sorry, the number you have reached is not accepting calls at this time.
066	We're sorry, your request cannot be processed at this time. Please try again later.
067	We're sorry, you are not a subscriber to this service. If you wish to subscribe please call the business office.
Caller Id. and ACR Messages, cont.	
068	Your anonymous call rejection service is now (on/off). Incoming calls will be checked for privacy before they are allowed to complete to your line.
069	Your caller I.D. service is (on/off). It will remain (on/off).
070	We're sorry, the number you have reached is not accepting calls from private numbers. Please hang up, reverse your number privacy, and try calling again.
071	We're sorry, your current privacy status does not allow the completion of this call. Please hang up, change your privacy status, and try calling again.
AR Privacy Reject Message	
072	The last call received was marked private. This service does not permit calls to private numbers.
Telemarketer Call Screening Message	
073	The number ypu are calling does not accept solicitation or survey calls of any kind. If you are a telemarketer, please hang up and place this number on your Do-not-call list. All others, press "1" or stay on the line to ring through.

Table B-A   CLASS Announcement Phase Definitions

Announcement Number	Example Announcement Phrase
Other	
xxx	*Vendor specific - contact Telecommunications Service Provider.*

Section C: List of Terms

ACB/AR

Mnemonic for *Automatic Call Back/Automatic Recall.*

ACR

Mnemonic for *Anonymous Call Rejection.*

AIN

Mnemonic for *Advanced Intelligent Network*

ANM

Mnemonic for *Answer Message*

ASCII

Mnemonic for *American Standard Code for Information Interchange*.

ASN.1

Mnemonic for *Abstract Syntax Notation One*

BC

See Bearer Capability (BC)

Bearer Capability (BC)

A characteristic associated with a Directory Number (DN) to indicate the type of call (voice or data) and the rate of transmission allowed.

BER

Mnemonic for *Basic Encoding Rules*

BRI

Mnemonic for *ISDN Basic Rate Interface (BRI)*

CALEA

See Communications Assistance for Law Enforcement Act
or Communications Assistance for Law Enforcement Agencies

Call Content

Electronic communications exchanges between a subject's service and one or more associates.

Call Content Channel (CCC)

Logical link between the device performing a surveillance access function and the LEA that carries the call content passed between a subject and one or more associates.

Call Content Group (CCG)

As the name implies, a call content group is a group of CCCs. Call content delivery uses a set of circuits (CCCs) between two functions to convey call content for a set of subscribers with a common destination. Data Modification Order (DMO) prompting sequence in overlay SURV to enter the call content group number, circuit packs type, and whether in-band signaling is required.

Call Data

Dialing or signaling information that identifies the origin, direction, destination, or termination of a communication generated or received by a subscriber by means of any equipment, facility, or service of a telecommunications carrier at the IAP related to the subject.

Call Data Channel (CDC)

Logical link between the device performing a surveillance access function and the LEA that carries the call identifying information, as well as other information related to the subject.

Call leg

link between two entities, such as lines, trunks, and conference circuits. For example, a three-way call is made up of two call legs, party A (controller) to party B, and party A to party C.

CCC

See Call Content Channel (CCC)

CCG

See Call Content Group (CCG)

CDC

See Call Data Channel (CDC)

CF

See Collection Function (CF)

CLASS

Mnemonic for *Custom Local Area Signaling Services.*

Collection Function (CF)

The *collection function*, located at the LEA's premises, is responsible for collecting and analyzing the intercepted communications from the subject switch.

Communications Assistance for Law Enforcement Act (CALEA)

The *Communications Assistance for Law Enforcements Act (CALEA)* of 1994 (U.S. Public Law 103-414) was enacted to make clear a telecommunications carrier's duty to cooperate in the interception of communications for law enforcement purposes. CALEA requires telecommunications equipment manufacturers to provide the technical capability to support Lawfully Authorized Electronic Surveillance (LAES).

Communications Assistance for Law Enforcement Agencies (CALEA)

The DMS-10 feature described in NTP 297-3401-105, *Features and Services Description*, which provides the capabilities required by the *Communications Assistance for Law Enforcements Act (CALEA)* of 1994 (U.S. Public Law 103-414).

COT

Mnemonic for *Customer Originated Trace.*

DDE

See Dialed Digit Extraction

Dialed Digit Extraction (DDE)

The capability that permits law enforcement to receive on the call data channel digits dialed by an intercept subject when the call is connected to another service provider; for example, for processing and routing.

Directory Number (DN)

(1) Generally: The full complement of digits required to designate a subscriber's station within one Numbering Plan Area (NPA) - usually a three-digit central office code followed by a four-digit station number. (2) In DMS-10: Used by various Data Modification Order (DMO) overlays in specifying a given directory number. (3) In DMS-10: Data Modification Order (DMO) program mnemonic for DMO operations involving stations.

DMS

Mnemonic for *Digital Multiplex Switching*

DMS-10
> Nortel Class 5 digital switch

DN
> *See* Directory Number (DN)

FBI
> Mnemonic for *United States Federal Bureau of Investigation*

FCC
> Mnemonic for *United States Federal Communications Commission*

INS
> Mnemonic for *In-service*

Internet Protocol (IP)
> A connectionless protocol that operates at the network layer (layer 3 of the OSI reference model) and provides a mechanism for packet delivery.

IP
> *See* Internet Protocol (IP)

ISDN
> Mnemonic for *Integrated Services Digital Network*

ISUP
> Mnemonic for *ISDN User Part*

J-STD-025
> Document number of the Interim Standard (Trial Use Standard) *Lawfully Authorized Electronic Surveillance* document upon which this document is based.

kbps
> Mnemonic for *kilobits-per-second*; One thousand bits per second

LAES
> *See* Lawfully Authorized Electronic Surveillance (LAES)

LAESP
> *See* Lawfully Authorized Electronic Surveillance Protocol (LAESP)

Law Enforcement Agency (LEA)
> Government agency with the legal authority to conduct electronic surveillance.

Lawfully Authorized Electronic Surveillance (LAES)
> The title of the J-STD-025 document, upon which this document is based. See also *J-STD-025*.

Lawfully Authorized Electronic Surveillance Protocol (LAESP)
> Mnemonic for *LAES Protocol;* Operating at the application layer (layer 7 of the OSI reference model), it defines the protocol used for the CDC messages. The LAESP messages are delivered over CDCs using standard data communication protocols; in the DMS-10, TCP/IP is used.

LEA
> *See* Law Enforcement Agency (LEA)

LTG
> Mnemonic for *Line Trunk Group (LTG)*

MBS
> *See* Meridian Business Set

Meridian Business Set (MBS)
> The Meridian Business Set (MBS) feature enables the Telco's business customers who subscribe to Enhanced Business Services (EBS) to use the Nortel M5000-Series business sets.

Monitored Replacement Party (MRP)
> The party that replaces the subject in a call and that is monitored by the LAES feature.

Monitoring
> Accessing of call data and possible call content information for a specific call and delivering it to the LEA.

MRP
> *See* Monitored Replacement Party (MRP)

NANP
> Mnemonic for *North American Numbering Plan*

NBR
> Mnemonic for *Number*

NOA
> Mnemonic for *Nature Of Address*

NTP

Mnemonic for *Nortel Technical Publication*

PRI

Mnemonic for *ISDN Primary Rate Interface (PRI)*

SCA

Mnemonic for *Selective Call Acceptance.*

SCF

Mnemonic for *Selective Call Forwarding.*

SCR

Mnemonic for *Selective Call Rejection.*

SDR

Mnemonic for *Selective Distinctive Ringing and Call Waiting.*

SLE

Mnemonic for *Screen List Editing.*

SRNG

Mnemonic for *Simultaneous Ringing.*

Subject

Party whose incoming, outgoing, and redirected communications and/or call data information is to be accessed and delivered to law enforcement pursuant to a court order or other lawful authorization.

Subject switch

Switch upon which the intercept subject is homed. Also referred to as the Intercept Access Point (IAP) or access switch.

SURV

Data Modification Order (DMO) program mnemonic for DMO operations involving lawfully authorized electronic surveillances.

Surveillance

The assignment of the LAES feature to a given subject to provide for the continuous monitoring and provide appropriate information to one LEA.

TCP

See Transmission Control Protocol (TCP)

TCP/IP

Mnemonic for Transmission Control Protocol / Internet Protocol. A suite of communications protocols used by computers to exchange information between application processes over local or wide area networks. See also *Transmission Control Protocol (TCP)* and *Internet Protocol (IP)*

Telecommunications Service Provider (TSP)

Entity engaged in the transmission or switching of wire or electronic communications as a common carrier for hire. Also referred to as the operating company.

TG

Mnemonic for *Trunk Group (TG)*

Transmission Control Protocol (TCP)

A transport layer protocol (layer 4 of the OSI reference model) used to establish a connection between end systems for the reliable delivery of data in the TCP/IP protocol suite.

TSP

See Telecommunications Service Provider (TSP)

DMS-10 Family

600-Series Generics

Communications Assistance for Law Enforcement
Act Call Data Channel Message Definitions

NORTEL