

**NO. 5 ETS AND VSS TRANSLATIONS
FOR NO. 1A AMARC, GENERIC 3
BILLING SYSTEMS
SUPPLEMENTAL INFORMATION—CENTRAL OFFICES**

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GENERAL	3	1.01 This section describes the translations performed by a No. 1A Automatic Message Accounting Recording Center (AMARC) to billing data transmitted by a No. 5 Electronic Translation System (ETS) or Voice Storage System (VSS). This section also outlines nongeneric parameter data (NPD) form changes that are required by growth, addition, or removal of one or more of the sensors.	
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NOTICE

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2. NO. 5 ETS DESCRIPTION

2.01 No. 5 ETS performs the automatic message accounting (AMA) function by collecting billing information on customer dialed calls directly from the markers and trunks. The basic local AMA (LAMA) feature is always provided in No. 5 ETS offices and is similar to the LAMA-Computerized (LAMA-C) feature of No. 5 crossbar offices. Optional features include automatic number identification (ANI), automatic identified outward dialing (AIOD), remote message registers (RMR), 800 Service (INWATS) AMA, and centralized AMA (CAMA).

2.02 A billing translation performed by No. 5 ETS, using data provided by the telephone company and stored in the No. 5 ETS data base, determines whether a call should be recorded. For a call that requires AMA recording, the billing translation also determines the call record format.

2.03 No. 5 ETS utilizes the No. 3A processor to replace the equipment normally required for recording calls on paper or magnetic tape. The processor obtains "initial entry" information by scanning the completing marker while the call is being set up. This is then translated and stored in a dedicated area of memory called the trunk register. Answer and disconnect information are obtained by scanning the supervisory relays in the associated trunk. This information is also stored in the trunk register. The processor then assembles the details of the call and forwards the information via a dedicated data link to a No. 1A AMARC. The AMARC reformats the transmitted call records to the current standard AMA call record format. The AMARC automatically records call details on magnetic tape. No provision is made for recording locally.

2.04 The 5 ETS system uses duplicated processors, each attached to associated peripheral equipment. One processor acts as the active recorder and the other as a full-time standby. Each processor interfaces with the No. 5 crossbar equipment via the distribute and scan equipment.

2.05 Each processor tracks the progress of all calls, from the initial completing marker usage until either abandonment or disconnect occurs. The active or on-line processor then assembles the call information into single-entry format, and the completed call records are forwarded through dedicated voice-grade data links to the AMARC

for centralized recording on 1600 bits per inch (BPI) industry compatible, 9-track magnetic tape. An automatically dialed backup data link is available in the event of a dedicated data link failure.

2.06 The ETS equipment has provision to handle a full size No. 5 crossbar marker group. It will accommodate 12 completing markers, 6 dial tone markers, and recording on up to 4800 trunks.

2.07 No. 5 ETS transmits call records for completed local and toll calls for single or 2-party lines, as required by the 5 ETS billing translation. It also records unanswered toll calls or local calls that are recorded if answered during the network completion study (NCS). The NCS is implemented by entering the **MON:NCS!** input message at an input/output (I/O) terminal associated with a No. 5 ETS.

2.08 For additional information on No. 5 ETS, refer to Section 218-799-000. For information on No. 5 ETS translations and the parameters that must be provided by the telephone company, refer to the No. 5 ETS Translation Guide.

3. VSS DESCRIPTION

3.01 The VSS is a processor-controlled system that can receive, store, administer, and deliver voice announcements, greetings, and messages. Subscribers to these services must be assigned to either a No. 1 Electronic Switching System (ESS) equipped with 1E(B6)6 or later generic program or a No. 1A ESS equipped with 1AE6 or later generic program.

3.02 The services offered initially in VSS are an expansion of Custom Calling Services offered in the ESS offices (Call Forwarding, Call Waiting, 3-Way Calling, etc), which will now be known as Custom Calling Services I (CCS I).

3.03 The initial development of VSS provides the capability to introduce Custom Calling Services II (CCS II) and Custom Announcement service.

3.04 CCS II consists of:

- (1) Call Answering provides automatic recording of a message left by a calling party after hearing a greeting left by the subscriber. The greeting may be personalized by the subscriber or selected from a standard format. The

subscriber may retrieve the messages at a later date.

(2) Advance Calling allows a subscriber to leave a voice message that will be forwarded to a designated telephone number at a later time. The delivery time may be determined by either the subscriber or the system. The VSS will attempt to deliver the message several times over some specified time interval. The calling subscriber may check the delivery status of a message.

(3) Custom Announcement service is similar to Call Answering except that the caller may not leave a message.

Note: It should be noted that the names of the services actually tariffed and marketed may differ from the service names used in this document. The service descriptions are not intended to be complete. Full detailed descriptions of the services and their limitations can be found in local tariffs.

3.05 Refer to Section 255-061-010 for additional information on VSS.

4. AMARC CALL PROCESSING OF NO. 5 ETS AND VSS BILLING DATA

4.01 When the AMARC receives billing data, the data are loaded into the Input Assembly Table (IAT) associated with the transmitting channel. An IAT provides temporary storage for billing data transmitted through a specific channel.

4.02 While the billing data are in the IAT, the input entry format of the entity assigned to the channel through which the data were transmitted is determined.

4.03 The AMARC receives billing data from several different sensors. There are differences in the method of operation of the various sensors. As a result, the billing data received from the various sensors require different amounts of processing. When billing data are received, the AMARC determines the functions or translations to be performed based on the method of operation of the sensor transmitting the data. The method of operation is identified by the input entry format of the entity from which the billing data were received.

4.04 The input entry format of an entity is determined by the following process:

(a) AMARC accesses the Channel Table to determine the entity number assigned to the transmitting channel. The Channel Table specifies data associated with each channel, such as the entity assigned to the channel.

(b) AMARC accesses the Entity Identification Table to determine the input entry format of that entity. The Entity Identification Table contains data that uniquely describe each entity, including the input entry format of the sensor with which the entity is equipped.

4.05 The input entry formats for both the No. 5 ETS and VSS entities are single entry.

5. DETERMINATION OF CALL FORMAT BY SINGLE-ENTRY ENTITIES

GENERAL

5.01 The next update of comptroller's Letter M284A will define the call details that are to be included in all records for various call types. Every call that is recorded by any automatic recording system must conform to a call format defined in the comptroller's letter. The AMARC determines the appropriate call type for each single-entry entity call and formats accordingly, conforming to the comptroller's letter.

NO. 5 ETS CALL RECORD FORMAT

5.02 The AMARC formats a No. 5 ETS call as one of the following ten Call Type Call Codes:

- 001-Detailed Message Rate, Timed, Message Billing Index (MBI)
- 002-Message Rate, Timed, MBI or Message Rate, Timed, MBI, No A2
- 006-Station Paid
- 007-WATS, Station Billing No.
- 008-800 Service (INWATS)
- 009-Local Directory Assistance

- 020-Dial Teletypewriter Exchange (DTWX)
- 021-Common Control Switching Arrangement (CCSA)
- 068-WATS, Billing No.

5.03 Table A lists these call types and the structure code options available for the call types. For all call types except 800 Service (INWATS), Local Directory Assistance, and Message Rate, Timed MBI, No A2, there are four structure codes:

- Answered calls
- Answered calls with customer identification
- Unanswered calls
- Unanswered calls with customer identification.

Each of these structure codes may also include the Trunk Network Number (TNN) if the No. 5 ETS sends it.

5.04 Local Directory Assistance calls have the following structure codes:

- Answered calls
- Answered calls with TNN
- Answered calls with customer identification.

5.05 800 Service (INWATS) calls have the following structure codes:

- Answered calls
- Answered calls with TNN
- Unanswered calls
- Unanswered calls with TNN.

5.06 Message Rate, Timed, MBI, and No A2 calls have one structure code only. This is for answered calls without the TNN.

5.07 For each call type, Table A also lists the call type received from No. 5 ETS that

causes the AMARC to reformat the call as the specified AMARC Generic 3 call type.

5.08 Table B defines for each structure code the data fields that may be included in the call record. A check entered for a data field indicates that the field may be included in a call record formatted according to that structure code. Each data field is described in subsequent paragraphs. For certain data fields, provision is made for the AMARC to handle all the features listed whether or not the sensor provides them. For example, certain service features may not be provided presently by the No. 5 ETS.

5.09 AA or AB: Value AA indicates start of record. Value AB indicates start of record and that the "SIGN" value for one of the data fields was a hexadecimal D. Hexadecimal D indicates that one of the digits received from the No. 5 ETS for the data field was mutilated or was an NCD (noncheck dummy). For a No. 5 ETS, a hexadecimal D in the "SIGN" position for any of the following data fields results in an AB value for the start of record entry.

- Originating number
- Terminating number
- Service feature
- Connect time
- Trunk network number
- WATS Band or type
- Customer ID

A hexadecimal C in the "SIGN" position indicates that all data for the field are valid.

5.10 Structure Code: The structure code defines the data fields for a call type call code that are included in a particular call record. All structure codes except 00029 may have the trunk network number (TNN) included if it is sent by the No. 5 ETS. The structure codes are defined as follows:

BCD CHARS	STRUCTURE CODE	OPTION
1-5	10001, 10015, 10020, 10028, 00029, 10077, or 10079	Answered
	10002, 10016, 10021, 10065, 10068, 10078, or 10080	Unanswered
	10014, 10061, 10067, 10082, 00088, or 10090	Answered with customer ID
	10081, 10083, 10084, 10085, 10089, or 10091	Unanswered with customer ID
6	SIGN (hex C)	

5.11 Call Type Code: This field defines the call type used for the call record.

BCD CHARS	CALL CODE	MEANING
1-3	001	Detailed Message Rate, Timed, MBI
	002	Message Rate, Timed, MBI or Message Rate, Timed, MBI, No A2
	006	Station Paid
	007	WATS, Station Billing No.
	008	INWATS (800 Service)
	009	Local Directory Assistance
	020	DTWX
	021	CCSA
4	068	WATS, Billing No.
	SIGN (hex C)	

5.12 Sensor Type: This field indicates the type sensor from which the call originated.

BCD CHARS	SENSOR TYPE	SENSOR
1-3	005	No. 5 ETS
4	SIGN (hex C)	

5.13 Sensor Identification: This field contains the 6-digit code that identifies the sensor entity.

BCD CHARS	SENSOR ID
1	Padding (0)
2-7	Identifying Code
8	SIGN (hex C)

5.14 Recording Office Type: This field identifies the type system that recorded the call record.

BCD CHARS	RECORD. OFC. TYPE	RECORDING OFFICE
1-3	018	No. 1A AMARC
4	SIGN (hex C)	

5.15 Recording Office Identification: For No. 1A AMARC, this field specifies the 6-digit identification number assigned by the telephone company to the recording AMARC. This number also is included on the label that is placed on the magnetic tape before it is sent to the accounting center.

BCD CHARS	RECORD. OFC. ID.
1	Padding (0)
2-7	Identifying Code
8	SIGN (hex C)

5.16 Connect Date: This field identifies the last digit of the year, two digits for the month, and two digits for the day.

BCD CHARS	MEANING
1	Last digit of year
2-3	Month
4-5	Day
6	SIGN (hex C)

5.17 Timing Indicator: This field identifies special timing conditions applied to the call.

BCD CHARS	MEANING
1	0 = Not used
2	0 = Not used 2 = Under minimum chargeable duration (UMCD) (at disconnect, no SST)
3	0 = Not used
4	0 = Not used
5	0 = Not used
6	SIGN (hex C)

5.18 Study Indicator: This field identifies various study conditions that applied to the call.

BCD CHARS	MEANING
1	0 = Unused
2	0 = Unused 1 = Complaint Observed
3	0 = Unused
4	0 = Unused
5	0 = Unused
6	0 = Unused
7	0 = Unused
8	SIGN (hex C)

5.19 Answer: This field identifies whether or not the call was answered.

BCD CHARS	MEANING
1	0 = Answer 1 = Unanswered
2	SIGN (hex C)

5.20 Service Observed Traffic Sampled: This field identifies whether either, both, or neither service observing nor traffic sampling occurred on the call.

BCD CHARS	MEANING
1	0 = Not service observed, not traffic sampled 1 = Service observed, not traffic sampled 2 = Not service observed, traffic sampled 3 = Service observed, traffic sampled
2	SIGN (hex C)

5.21 Operator Action: This field identifies whether the call was either, both, or neither operator dialed nor operator identified.

BCD CHARS	MEANING
1	0 = Not oper. dialed, not oper. identified 2 = Not oper. dialed, oper. identified
2	SIGN (hex C)

5.25 Overseas Indicator: This field indicates for nonoverseas calls whether the NPA was dialed or denied.

BCD CHARS	MEANING
1	0 = NPA dialed 1 = NPA not dialed
2	SIGN (hex C)

5.22 Service Feature: This field identifies special services that applied to the call.

BCD CHARS	MEANING
1	Padding (0)
2-3	00 = Other 01 = Prepay coin 08 = INWATS (800 Service)
4	SIGN (hex C)

5.26 Terminating NPA: This field either provides additional overseas indicators or identifies the NPA in which the call terminated.

BCD CHARS	MEANING
1-2	Overseas expander positions
3-5	NPA
6	SIGN (hex C)

5.23 Originating NPA: This field identifies the NPA of the line that originated the call.

BCD CHARS	MEANING
1-3	NPA
4	SIGN (hex C)

5.27 Terminating Number: This field identifies the 7-digit number to which the call terminated.

BCD CHARS	MEANING
1-3	NXX
4-7	Four-digit number
8	SIGN (hex C)

5.24 Originating Number: This field identifies the 7-digit telephone number of the line that originated the call.

BCD CHARS	MEANING
1-3	NXX
4-7	Four-digit number
8	SIGN (hex C)

5.28 Connect Time: This field identifies the hours, minutes, seconds, and tenths of seconds at which answer occurred.

BCD CHARS	MEANING
1-2	Hours
3-4	Minutes
5-6	Seconds
7	Tenths of seconds
8	SIGN (hex C)

5.29 Elapsed Time: This field identifies the number of hours, minutes, seconds, and tenths of seconds between the answer and first party disconnect.

BCD CHARS	MEANING
1	(Padding) 0
2-6	Minutes
7-8	Seconds
9	Tenths of seconds
10	SIGN (hex C)

Note: On attempts, 0s are recorded for minutes, seconds, and tenths of seconds.

5.30 Trunk Network Number (TNN): This field identifies the TNN which consists of the trunk scan matrix assignment, scan row, and bit position.

BCD CHARS	MEANING
1	(Padding) 0
2-3	Trunk Scan Matrix Assignment
4-5	Scan Row
6-7	Bit Position
8	SIGN (hex C)

5.31 Circuit Time: This field identifies the circuit release time for unanswered calls in hours, minutes, seconds, and tenths of seconds.

BCD CHARS	MEANING
1-2	Hours
3-4	Minutes
5-6	Seconds
7	Tenths of seconds
8	SIGN (hex C)

5.32 WATS Indicator: This field indicates whether the WATS service is full business day or measured time service. On message rate calls, this field contains a zero.

BCD CHARS	MEANING
1	0 = This character not used 1 = Full business day 2 = Measured time
2	SIGN (hex C)

5.33 WATS Band or Type: This field indicates the WATS band or MBI.

BCD CHARS	MEANING
1-3	WATS band or type indicator (MBI)
4	SIGN (hex C)

5.34 Customer ID: This field contains the customer identification number transmitted by 5 ETS.

BCD CHARS	MEANING
1	(Padding) 0
2-5	Customer ID
6	SIGN (hex C)

VSS CALL RECORD FORMAT

5.35 The AMARC formats a VSS call as one of the following fifteen Call Type Call Codes:

- 200—A Type Summary
- 201—B Type Summary
- 202—C Type Summary
- 203—AC Summary
- 204—Status Check Summary
- 205—CA/CAS Activation
- 206—CA/CAS Intercept
- 207—CA/CAS Deactivation
- 208—CA Playback
- 209—CA Message Erasure
- 210—AC Input
- 211—AC Delivery
- 212—AC Erasure
- 213—Status Check
- 214—Privacy Code Change.

5.36 Table C lists these call types and the structure code for each call type. Table C also lists the call type received from the VSS that causes the AMARC to reformat the call as the specified AMARC Generic 3 call type.

5.37 Table D defines for each structure code the data fields that may be included in the call record. A check entered for a data field indicates

that the field may be included in a call record formatted according to that structure code. Each data field is described in subsequent paragraphs. For certain data fields, provision is made for the AMARC to handle all the features listed whether or not the sensor presently provides them.

5.38 AA or AB: Value AA indicates start of record. Value AB indicates start of record and that the "SIGN" value for one of the data fields was a hexadecimal D. Hexadecimal D indicates that one of the digits received from the VSS for the data field was mutilated or was an NCD (noncheck dummy). For VSS, a hexadecimal D in the "SIGN" position for any of the following data fields results in an AB value for the start of record entry.

- Activating NPA
- Activating number
- Terminating NPA
- Terminating number
- Business group number
- Client office number
- VSS Option 1
- VSS Option 2
- Casual/Monthly USOC
- Number of intercepts with no messages
- Number of intercepts with messages
- Activation date
- Activation time
- Elapsed time
- Number of messages stored
- Number of messages played back
- Number of messages erased
- Number of messages saved

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- Number of messages reported
- Number of messages cancelled

A hexadecimal C in the "SIGN" position indicates that all data for that field are valid.

5.39 Structure Code: The structure codes define data fields for a call type call code that are included in a particular call record. The structure codes are defined as follows:

BCD CHARS	STRUCTURE CODE
1-5	As indicated in Table D.
6	SIGN (hex C)

5.40 Call Type Code: This field defines the type format used for the call record.

BCD CHARS	CALL CODE	MEANING
1-3	200	VSS A Type Summary
	201	VSS B Type Summary
	202	VSS C Type Summary
	203	VSS AC Summary
	204	VSS Status Check Summary
	205	VSS CA/CAS Activation
	206	VSS CA/CAS Intercept
	207	VSS CA/CAS Deactivation
	208	VSS CA Playback
	209	VSS CA Message Erasure
	210	VSS AC Input
	211	VSS AC Delivery
	212	VSS AC Erasure
	213	VSS Status Check
214	VSS Privacy Code Change	
4		SIGN (hex C)

5.41 Sensor Type: This field identifies the type sensor from which the call originated.

BCD CHARS	SENSOR TYPE	SENSOR
1-3	024	VSS
4	SIGN (hex C)	

5.42 Sensor Identification: This field contains the 6-digit code that identifies the sensor entity.

BCD CHARS	SENSOR ID
1	Padding (0)
2-7	Identifying code
8	SIGN (hex C)

5.43 Recording Office Type: This field identifies the type system that recorded the call record.

BCD CHARS	RECORD. OFC TYPE	RECORDING OFFICE
1-3	018	No. 1A AMARC
4	SIGN (hex C)	

5.44 Recording Office Identification: For No. 1A AMARC, this field specifies the 6-digit identification number assigned by the telephone company to the recording AMARC. This number is also included on the label that is placed on the magnetic tape before it is sent to the accounting center.

BCD CHARS	RECORD. OFC. ID
1	Padding (0)
2-7	Identifying code
8	SIGN (hex C)

5.45 Activation Date: This field identifies the last digit of the year, two digits for the month, and two digits for the day of the service activation.

BCD CHARS	MEANING
1	Last digit of year
2-3	Month
4-5	Day
6	SIGN (hex C)

5.48 Activating Number: This field identifies the 7-digit telephone number of the line that originated the call.

BCD CHARS	MEANING
1-3	NXX
4-7	Four-digit number
8	SIGN (hex C)

5.46 Study Indicator: This field identifies various study conditions that applied to the call.

BCD CHARS	MEANING
1	0 = Unused
2	0 = Unused 1 = Individual observed 4 = VSS office observed
3	0 = Unused
4	0 = Unused
5	0 = Unused
6	0 = Unused
7	0 = Unused
8	SIGN (hex C)

5.49 Overseas Indicator: This field indicates that the call is not an overseas call or, if the call is an overseas call, it identifies the number of digits dialed.

BCD CHARS	MEANING
1	0 = Not an overseas call (NPA dialed) 1 = Not an overseas call (NPA not dialed) 2 = Less than 7 digit overseas number 3 = 7 Digit overseas number 4 = 8 Digit overseas number 5 = 9 Digit overseas number 6 = 10 Digit overseas number 7 = 11 Digit overseas number 8 = 12 Digit overseas number
2	SIGN (hex C)

5.47 Activating NPA: This field identifies the NPA of the line test that originated the call.

BCD CHARS	MEANING
1-3	NPA
4	SIGN (hex C)

5.50 Terminating NPA: This field either provides additional overseas dialed numbers or identifies the NPA in which the call terminated.

BCD CHARS	MEANING
1-2	Overseas expander positions
3-5	NPA
6	SIGN (hex C)

5.51 Terminating Number: This field identifies the 7-digit number to which the call terminated.

BCD CHARS	MEANING
1-3	NXX
4-7	Four-digit number
8	SIGN (hex C)

5.52 Activation Time: This field identifies the hours, minutes, seconds, and tenths of seconds at which an event occurred.

BCD CHARS	MEANING
1-2	Hours
3-4	Minutes
5-6	Seconds
7	Tenths of seconds
8	SIGN (hex C)

5.53 Elapsed Time: This field identifies the number of hours, minutes, seconds, and tenths of seconds between the answer and disconnect except for events lasting through one or more midnights. In this case, daily recordings are made.

BCD CHARS	MEANING
1	(Padding) 0
2-6	Minutes
7-8	Seconds
9	Tenths of seconds
10	SIGN (hex C)

5.54 Business Group Number: This field contains the 5-digit business group number that is transmitted to the AMARC by the VSS.

5.55 Client Office Number: This field contains the 3-digit client office number that is transmitted to the AMARC by the VSS.

5.56 VSS Option 1: This field contains the Option 1 indicator that is transmitted to the AMARC by the VSS. Option 1 codes include:

- 00 Not used or answered
- 01 Disconnect
- 02 Time-out
- 03 Initial silence
- 04 Trailing silence
- 05 On deactivation
- 06 Activation valid
- 07 Activation invalid
- 08 Deactivation valid
- 09 Deactivation invalid
- 10 Message not verified
- 11 Message rerecorded
- 12 Message too short
- 13 Abort before message
- 14 Time-out
- 15 System error
- 16 Answer, disconnect before 2 seconds
- 17 Busy
- 18 No answer
- 19 Cancelled.

5.57 VSS Option 2: This field contains the Option 2 indicator that is transmitted to the AMARC by the VSS. Option 2 codes include:

00/40	Not used or delivery time not specified
01/41	CA (local)
02/42	CA (remote)
03/43	CAS (local)
04/44	CAS (remote)
05/45	Message left
06/46	No message left
07/47	Message stored (local)
08/48	Message stored (remote)
09/49	Successful delivery
10/50	Unsuccessful delivery attempt
11/51	Successful delivery (not listened to)
12/52	Successful delivery (partially listened)
13/53	Not yet delivered
14/54	Delivery time specified.

5.58 Casual/Monthly USOC: This field indicates monthly or casual USOC transmitted by the VSS according to the code:

00	Casual (CA only)
01	ERR01 (CA), EAA01 (CAS)
02	ERR02 (CA), EAA02 (CAS)
03	ERR03 (CA)
04	ERR04 (CA).

5.59 Number of Intercepts with No Messages: This field indicates the number of intercepts

with no messages as transmitted to the AMARC by the VSS. This is a 5-digit field.

5.60 Number of Intercepts with Messages: This field indicates the number of intercepts with messages as transmitted to the AMARC by the VSS. This is a 5-digit field.

5.61 Number of Messages Stored: This field indicates the number of messages stored as transmitted to the AMARC by the VSS. This is a 5-digit field.

5.62 Number of Messages Played Back: This field indicates the number of messages played back as transmitted to the AMARC by the VSS. This is a 5-digit field.

5.63 Number of Messages Erased: This field indicates the number of messages erased as transmitted to the AMARC by the VSS. This is a 5-digit field.

5.64 Number of Messages Saved: This field indicates the number of messages saved as transmitted to the AMARC by the VSS. This is a 5-digit field.

5.65 Number of Messages Reported: This field indicates the number of messages reported as transmitted to the AMARC by the VSS. This is a 5-digit field.

5.66 Number of Messages Cancelled: This field indicates the number of messages cancelled as transmitted to the AMARC by the VSS. This is a 5-digit field.

6. ADMINISTRATIVE CONSIDERATIONS FOR GROWTH, ADDITION, OR REMOVAL OF SINGLE-ENTRY ENTITIES

FORMS REQUIRED FOR CHANGES TO SINGLE-ENTRY ENTITIES

6.01 Growth in a existing single-entry (either No. 5 ETS or VSS), or the addition or removal of a single-entry entity served by an AMARC may affect NPD. Form 0300 should be revised to reflect the addition or removal of equipped channels.

CHANNEL ASSIGNMENTS FOR SINGLE-ENTRY ENTITIES

6.02 Any unequipped channel may be equipped as a single-entry channel provided the next lower-numbered nondialup channel is not a BDT channel equipped with encoder 0, and the next higher-numbered nondialup channel is not a BDT channel equipped with encoder 1.

6.03 Single-entry entities may require more than one channel to the No. 1A AMARC. For single-entry entities with multiple channels, the channels do not have to be sequentially numbered or sequentially equipped.

6.04 The following three conditions must be satisfied before a nondialup channel may be equipped:

- (a) The multiplexer on which the channel is being equipped must be equipped in the Multiplexer Table (via NPD Form 0103)
- (b) The entity for which the channel is being equipped must be marked as equipped in the Entity Table (via NPD Form 0101)
- (c) Additional memory for one call record register must be available.

6.05 The following two conditions must be satisfied before a nondialup channel may be unequipped:

- (a) The channel must be marked as equipped in the Channel Table.
- (b) The channel must be equipped as a dialup in the Channel Table.

6.06 Growth in an existing single-entry entity or the addition of a new single-entry served by an AMARC may require reexamination of the capability of the AMARC to continue to serve the remote offices in its present configuration.

ENTITY ASSIGNMENTS FOR SINGLE-ENTRY ENTITIES

6.07 Any unequipped entity may be equipped for a single-entry entity (either No. 5 ETS or VSS) provided sufficient memory is available for the additional memory required.

6.08 Any equipped entity may be unequipped provided no channels are equipped for the entity.

TABLE A

NO. 5 ETS CALL TYPE STRUCTURE CODES

CALL TYPE	CALL TYPE CALL CODE	STRUCTURE CODE	OPTION	NO. 5 ETS CALL TYPE
CCSA	021	10001 10002 10014 10081	Answered. Unanswered. Answered with customer ID. Unanswered with customer ID.	V09
Detailed Message Rate (MR), Timed, MBI	001	10020 10021 10061 10085	Answered. Unanswered. Answered with customer ID. Unanswered with customer ID.	V18, V22
DTWX	0020	10001 10002 10014 10081	Answered. Unanswered. Answered with customer ID. Unanswered with customer ID.	V08
INWATS	008	10079 10080	Answered. Unanswered.	V29
Local Directory Assistance	009	10028 00088	Answered. Answered with customer ID.	V30
Message Rate Timed, MBI	002	10015 10016 10067 10084	Answered. Unanswered. Answered with customer ID. Unanswered with customer ID.	V16
Message Rate (MR), Timed, MBI, No A2	002	00029	Answered	V31
Station Paid	006	10001 10002 10014 10081	Answered Unanswered. Answered with customer ID. Unanswered with customer ID.	V01

TABLE A (Contd)

NO. 5 ETS CALL TYPE STRUCTURE CODES

CALL TYPE	CALL TYPE CALL CODE	STRUCTURE CODE	OPTION	NO. 5 ETS CALL TYPE
WATS, Billing No.	068	10077	Answered.	V11
		10078	Unanswered.	
		10082	Answered with customer ID.	
		10083	Unanswered with customer ID.	
WATS, Station Billing No.	007	10020	Answered.	V25
		10021	Unanswered.	
		10061	Answered with customer ID.	
		10085	Unanswered with customer ID.	

Note: Trunk Network Number (TNN) is included for indicated call types if it is sent by the No. 5 ETS. 1 xxxx indicates that the TNN may be included, O xxxx indicates that it is not.

TABLE B

DATA FIELDS FOR NO. 5 ETS CALL TYPE STRUCTURE CODES

Structure Code	CALL TYPE CODE 001 DETAILED MESSAGE RATE (MR), TIMED, MBI				CALL TYPE CODE 002 MESSAGE RATE (MR), TIMED, MBI				CALL TYPE CODE 002 MESSAGE RATE (MR), TIMED, MBI, NO A2	CALL TYPE CODE 006 STATION PAID				CALL TYPE CODE 007 WATS, STATION BILLING NO.				CALL TYPE CODE 008 INWATS	
	10020	10021	10061	10085	10015	10016	10067	10084	00029	10001	10002	10014	10081	10020	10021	10061	10085	10079	10080
Call Type Code	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sensor Type	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sensor Identification	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Recording Office Type	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Recording Office Identification	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Connect Date	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Timing Indicator	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Study Indicator	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Answer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Service Observed, Traffic Sampled	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Operator Action	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Service Feature	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Originating NPA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Originating Number	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Overseas Indicator	✓	✓	✓	✓					✓	✓	✓	✓	✓	✓	✓	✓	✓		
Terminating NPA	✓	✓	✓	✓					✓	✓	✓	✓	✓	✓	✓	✓	✓		
Terminating Number	✓	✓	✓	✓					✓	✓	✓	✓	✓	✓	✓	✓	✓		
Connect Time	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Elapsed Time	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Trunk Network Number	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Circuit Time		✓		✓		✓		✓		✓		✓		✓		✓		✓	✓
Call Status																			
WATS Indicator	✓	✓	✓	✓					✓					✓	✓	✓	✓		
WATS Band or Type	✓	✓	✓	✓					✓					✓	✓	✓	✓		
Customer ID			✓	✓							✓	✓				✓	✓		

✓ = May be included.

TABLE B (Contd)

DATA FIELDS FOR NO. 5 ETS CALL TYPE STRUCTURE CODES

Structure Code	CALL TYPE CODE 009 LOCAL DIRECTORY ASSISTANCE			CALL TYPE CODE 020 DTWX			CALL TYPE CODE 021 CCSA				CALL TYPE CODE 068 WATS. BILLING NO.			
	10028	00088	10001	10002	10014	10081	10001	10002	10014	10081	10077	10078	10082	10083
	Call Type Code	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sensor Type	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sensor Identification	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Recording Office Type	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Recording Office Identification	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Connect Date	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Timing Indicator	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Study Indicator	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Answer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Service Observed, Traffic Sampled	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Operator Action	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Service Feature	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Originating NPA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Originating Number	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Overseas Indicator			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Terminating NPA			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Terminating Number			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Connect Time	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Elapsed Time			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Trunk Network Number	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Circuit Time		✓		✓	✓	✓		✓	✓		✓		✓	✓
Call Status														
WATS Indicator										✓	✓	✓	✓	
WATS Band or Type														
Customer ID						✓	✓		✓	✓			✓	✓

✓ = may be included

TABLE C

VSS CALL TYPE STRUCTURE CODES

CALL TYPE	CALL TYPE CALL CODE	STRUCTURE CODE	VSS CALL TYPE
A Type Summary	200	00201	V70
AC Delivery	211	00208	V81
AC Erasure	212	00209	V82
AC Input	210	00207	V80
AC Summary	203	00202	V73
B Type Summary	201	00201	V71
C Type Summary	202	00201	V72
CA Message Erasure	209	00206	V79
CA Playback	208	00205	V77
CA/CAS Activation	205	00204	V75
CA/CAS Deactivation	207	00204	V78
CA/CAS Intercept	206	00204	V76
Privacy Code Change	214	00211	V84
Status Check	213	00210	V83
Status Check Summary	204	00203	V74

TABLE D

DATA FIELDS FOR VSS CALL TYPE STRUCTURE CODES

AA or AB	CALL TYPE CODE 200 A TYPE SUMMARY	CALL TYPE CODE 201 B TYPE SUMMARY	CALL TYPE CODE 202 C TYPE SUMMARY	CALL TYPE CODE 203 AC SUMMARY	CALL TYPE CODE 204 STATUS CHECK SUMMARY	CALL TYPE CODE 205 CA/CAS ACTIVATION
Structure Code	0201	0201	0201	0202	0203	0204
Call Type Code	✓	✓	✓	✓	✓	✓
Sensor Type	✓	✓	✓	✓	✓	✓
Sensor Identification	✓	✓	✓	✓	✓	✓
Recording Office Type	✓	✓	✓	✓	✓	✓
Recording Office Identification	✓	✓	✓	✓	✓	✓
Activation Date	✓	✓	✓		✓	✓
Study Indicator	✓	✓	✓	✓	✓	✓
Activating NPA	✓	✓	✓	✓	✓	✓
Activating Number	✓	✓	✓	✓	✓	✓
Overseas Indicator				✓		
Terminating NPA				✓		
Terminating Number				✓		
Activation Time	✓	✓	✓	✓	✓	✓
Elapsed Time					✓	✓
Business Group Number	✓	✓	✓	✓	✓	✓
Client Office Number	✓	✓	✓	✓	✓	✓
VSS Option 1	✓	✓	✓	✓	✓	✓
VSS Option 2	✓	✓	✓	✓	✓	✓
Casual/Monthly USOC	✓	✓	✓			✓
Number of Intercepts with No Messages	✓	✓	✓			
Number of Intercepts with Messages	✓	✓	✓			
Number of Messages Stored						
Number of Messages Played Back						
Number of Messages Erased						
Number of Messages Saved						
Number of Messages Reported				✓		
Number of Messages Cancelled				✓		

✓ = may be included

TABLE D (Contd)

DATA FIELDS FOR VSS CALL TYPE STRUCTURE CODES

AA or AB	CALL TYPE CODE 206 CA/CAS INTERCEPT	CALL TYPE CODE 207 CA/CAS DEACTIVATION	CALL TYPE CODE 208 CA PLAYBACK	CALL TYPE CODE 209 CA MESSAGE ERASURE	CALL TYPE CODE 210 AC INPUT	CALL TYPE CODE 211 AC DELIVERY
Structure Code	0204	0204	0205	0206	0207	0208
Call Type Code	\	\	\	\	\	\
Sensor Type	\	\	\	\	\	\
Sensor Identification	\	\	\	\	\	\
Recording Office Type	\	\	\	\	\	\
Recording Office Identification	\	\	\	\	\	\
Activation Date	\	\	\	\	\	\
Study Indicator	\	\	\	\	\	\
Activating NPA	\	\	\	\	\	\
Activating Number	\	\	\	\	\	\
Overseas Indicator					\	\
Terminating NPA					\	\
Terminating Number					\	\
Activation Time	\	\	\	\	\	\
Elapsed Time	\	\	\		\	\
Business Group Number	\	\	\	\	\	\
Client Office Number	\	\	\	\	\	\
VSS Option 1	\	\	\	\	\	\
VSS Option 2	\	\	\	\	\	\
Casual/Monthly USOC	\	\	\	\		
Number of Intercepts with No Messages						
Number of Intercepts with Messages						
Number of Messages Stored			\			
Number of Messages Played Back			\			
Number of Messages Erased			\			
Number of Messages Saved			\			
Number of Messages Reported						
Number of Messages Cancelled						

\ = may be included

TABLE D (Contd)

DATA FIELDS FOR VSS CALL TYPE STRUCTURE CODES

AA or AB	CALL TYPE CODE 212 AC ERASURE	CALL TYPE CODE 213 STATUS CHECK	CALL TYPE CODE 214 PRIVACY CODE CHANGE
Structure Code	0209	0210	0211
Call Type Code	✓	✓	✓
Sensor Type	✓	✓	✓
Sensor Identification	✓	✓	✓
Recording Office Type	✓	✓	✓
Recording Office Identification	✓	✓	✓
Activation Date	✓	✓	✓
Study Indicator	✓	✓	✓
Activating NPA	✓	✓	✓
Activating Number	✓	✓	✓
Overseas Indicator	✓	✓	
Terminating NPA	✓	✓	
Terminating Number	✓	✓	
Activation Time	✓	✓	✓
Elapsed Time			
Business Group Number	✓	✓	✓
Client Office Number	✓	✓	✓
VSS Option 1	✓	✓	✓
VSS Option 2	✓	✓	✓
Casual/Monthly USOC			
Number of Intercepts with No Messages			
Number of Intercepts with Messages			
Number of Messages Stored			
Number of Messages Played Back			
Number of Messages Erased			
Number of Messages Saved			
Number of Messages Reported			
Number of Messages Cancelled			

✓ = may be included