AMA DUMP FOR SELECTED CUSTOMERS FEATURE DOCUMENT 1A *ESS*™ SWITCH *AUTOPLEX*™ SYSTEM 100

CONTENTS PAGE

1. INTRODUCTION

DEFINITION

1.01 The *AMDSC (Automatic Message Accounting Dump for Selected Customers)* feature allows AMA (automatic message accounting) records for specific mobiles or groups of mobiles to be output on a specified TTY channel in addition to being recorded on AMA tape.

1.02 This feature operates independently from the IAMAD (Immediate AMA Dump) feature.

ECONOMIC WORTH

1.03 This feature provides selected mobile customers with immediate AMA data for billing purposes (e.g., for a group of mobiles associated with a fleet of rental cars).

AVAILABILITY

1.04 The AMDSC feature is initially available in the 1AE9.06 PPU (periodic partial update) of the 1AE9 generic program.

FEATURE GROUPS

1.05 The AMDSC feature is an optional custom feature that is contained in the AMPSCP (System 100 call processing) feature package.

FEATURE ASSIGNMENT

1.06 This feature is provided on a per MTSO (mobile telephone switching office) basis via fast feature set card FF042.

2. USER PERSPECTIVE

USER PROFILE

2.01 This feature is designed to provide call data for selected mobile DNs (directory numbers) in all cases. The call data may include AMA record data and/or the SNs (serial numbers) of the mobiles under study.

FEATURE DESCRIPTION

A. General

2.02 The AMDSC feature is similar to, but separate from, the 1A ESS switch IAMAD feature. Both IAMAD and AMDSC may be active concurrently. Refer to Part 6 A(6) for IAMAD information. Additionally, the AMDSC development adds two new capabilities to the existing IAMAD feature (paragraph 2.05).

2.03 When an AMA record is generated for a call, the AMDSC data base relation (Fig. 1) is searched. If the current AMA record is for a DN in that relation, the record is formatted according to the parameters in the AMDSC data base entry representing that DN. (Refer to Part 4.) The data is then output to the specified TTY channel(s). After the AMDSC relation has been processed, control is passed to the IAMAD feature. Any records associated with the DUMP:AMA study DN (paragraph 2.06) are also output to the requesting TTY channel.

2.04 With the IAMAD feature, only one DN may be under study (i.e., input via the DUMP:AMA message) at a time. The AMDSC feature allows for study of multiple DNs. One or more individual (and/or inclusive ranges) of mobile DNs may be entered in the AMDSC data base. Refer to Part 4 for data base modifications.

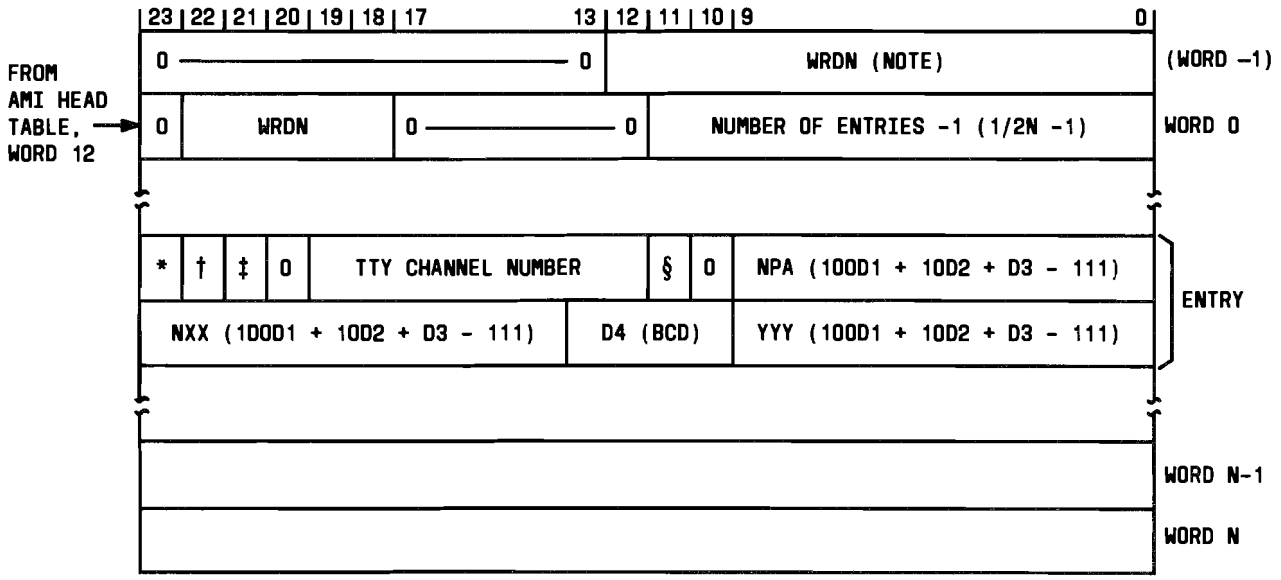
B. AMDSC Enhancements to IAMAD

2.05 This practice primarily concerns the AMDSC feature. However, the enhancements that AMDSC provides to the IAMAD feature are documented for completeness. The IAMAD feature is designed to be used by the MTSO to immediately verify that AMA records are being properly generated against one specific DN. The AMDSC feature enhances the basic IAMAD functions as follows:

(a) Serial number inclusion may be requested on the output message.

(b) AMA data exclusion may be requested on the output message.

2.06 The IAMAD feature can be activated from any allowable TTY by inputting the following message. Refer to Part 6 B(1).



NOTE:

1. Size of data block: If nonzero (in Word 0), it must be >2, <32, and odd. If >31, then WRDN=0 (in Word 0); the true word number is in the minus one word (Word -1), and it is even. Valid values for Word -1 are any even number between 4 and 8190, inclusive.

* RANGE INDICATOR
† SERIAL NUMBER FLAG
‡ NO AMA DATA FLAG
§ INACTIVE ENTRY FLAG

LEGEND:
BCD – BINARY CODED DECIMAL.
INACTIVE ENTRY FLAG – 0 = ACTIVE ENTRY.
1 = INACTIVE ENTRY (IGNORE ENTRY).
NO AMA DATA FLAG – 0 = INCLUDE AMA DATA WITH OUTPUT.
1 = DO NOT INCLUDE AMA DATA WITH OUTPUT
(IGNORE IF PREVIOUS ENTRY'S "RANGE INDICATOR" = 1.)
NPA NXX D4 YYY – EXTENDED MIN (10 DIGITS WITH ZEROES AS TENS).
RANGE INDICATOR – 0 = INDIVIDUAL ENTRY (NOT A RANGE).
1 = LOWER BOUND OF A RANGE ENTRY
(NEXT ENTRY IS THE UPPER BOUND).
SERIAL NUMBER FLAG – DO NOT INCLUDE SERIAL NUMBER WITH OUTPUT.
DO INCLUDE SERIAL NUMBER WITH OUTPUT
(IGNORE IF PREVIDUS ENTRY'S "RANGE INDICATOR" = 1.)
TTY CHANNEL NUMBER – TTY CHANNEL/CLASS FOR ENTRY OUTPUT.
WRDN – WORD NUMBER (SEE NOTE).

Fig. 1—AMDSC Data Relation

DUMP:AMA:TN aaaaaaa[,SN[,ONLY]]!

Where a is an intraoffice telephone number, SN causes inclusion of the transmitted serial number with AMA DUMP, and ONLY causes AMA data to be omitted from AMA DUMP.

2.07 Assuming the input is accepted, an AMA DUMP output message is printed every time an AMA record is made against the study DN. This output message has the following format. Refer to Part 6 B(3).

```
AMA DUMP aaa aaaa
bbbbbbbbbbb
ccccc ..... ccccc
  .          .
  .          .
  .          .
ccccc ..... ccccc
```

Where a is an intraoffice telephone number, b is the transmitted SN, and c represents a word of AMA buffer data as it appears on the AMA record.

2.08 The SN is output only if the SN keyword is used in the DUMP:AMA input message. If the ONLY keyword is used in the DUMP:AMA input message, c does not appear.

2.09 The IAMAD capability is deactivated by inputting the STOP:AMADUMP message. The AMDSC feature is not deactivated by this message.

INTERACTION

2.10 The AMDSC feature requires the IAMAD custom feature to be effective. Refer to Part 6 A(6).

3. ENGINEERING

HARDWARE

3.01 Not applicable.

SOFTWARE

A. Base Generic Program

3.02 The generic code required for the AMDSC feature is initially available with the 1AE9.06 generic program.

B. Optionally Loaded Feature Groups

3.03 Not applicable. The AMDSC feature is a custom feature that is associated with the AMPSCP feature package.

C. Parameters/Call Store Areas

3.04 The AMDSC feature is controlled by fast feature set card FF042. The IAMAD custom feature (set card FFC101) is required for AMDSC to be effective.

D. Translations

3.05 The AMDSC data block (Fig. 1) allows for a list of MINs (mobile identification numbers) to request AMA DUMP output for specific DNs. The list also allows a unique TTY channel specification for each entry.

3.06 The AMDSC data block is pointed to from word 12 of the AMI (System 100 miscellaneous information) head table (auxiliary master head table + 43). The AMDSC data block currently has a maximum size of 8190 words. This allows for 4094 entries plus the first two data block words. It may be built in either higher or lower UCS (unduplicated call store).

4. IMPLEMENTATION

4.01 In order to minimize overhead involved in growing this block, its initial size should be set to a reasonable maximum for the current engineering period.

4.02 All entries in the AMDSC data block must be in ascending full MIN order (i.e., ordered by the full 32-bit MIN) beginning at entry 0 (words 1 and 2). Unused entries, if any, should be set to zeroes and must follow the last valid entry in the table.

4.03 If the range indicator (Fig. 1) for an entry is set, it indicates that this entry is the lower bound (inclusive) of a sequential range of full MINs (with zeroes as tens) and that the next entry is the upper bound (inclusive) of that range. When an entry represents a lower bound, only the TTY channel and the MIN attributes of the next entry are meaningful. All other attributes of the next entry are ignored.

4.04 The TTY channel attribute may be an actual channel number (if less than 96) or a channel class indicating a predefined set of channels (if greater than 95).

4.05 The SN attribute indicates that the SN should be included with the output.

4.06 The inactive flag indicates that this entry (or this entry and the next if range=1) should be ignored. This allows for the inclusion of "place holders", thus minimizing block rearrangement.

4.07 The "no AMA data" flag indicates that the AMA data portion of the output is to be omitted.

SET CARDS

4.08 Set card FF042 activates the AMDSC feature. Set card FFC101 (IAMAD) must also be active.

RECENT CHANGE MESSAGES

4.09 All additions and deletions to the AMDSC data block must be done manually via the RC:PSWD or IN:OWBUF procedures. Refer to Part 6 A(2) and A(5).

VERIFICATION

4.10 Verification of the AMDSC data block is done manually via the VF:DATA:DUMP input message.

5. ADMINISTRATION

5.01 Not applicable.

6. SUPPLEMENTARY INFORMATION

REFERENCES

6.01 The following documentation contains information related to or affected by the AMDSC feature.

A. AT&T Practices

(1) 231-200-005 Mobile Telephone Switching Office, Cell Site, and Subscriber Unit System Description—AUTOPLEX System 100

(2) 231-218-301 Recent Change Formats and Implementation Description Procedures

(3) 231-290-600 Mobile Telephone Switching Office Feature

(4) 231-290-620 Automatic Message Accounting Feature—AUTOPLEX System 100

(5) 231-318-319 GENT, PSBLK, PSWD, SUBTRAN Recent Change Formats

(6) 231-390-382 Immediate AMA Dump Capability.

B. Other Documentation

(1) Input Message Manual IM-6A001

(2) Office Parameter Specification PA-6A001

(3) Output Message Manual OM-6A001

(4) Parameter Guide PG-1A

(5) Translation Guide TG-1A

(6) Translation Output Configuration PA-6A002.

7. COMMENT FORM

7.01 A comment form is located at the back of this practice to provide a communications channel from the user to the writer.

8. ISSUING ORGANIZATION

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The AT&T Documentation Management Organization