1. GENERAL

1.01 ACC General Information

ACC is an Advanced Intelligent Network (AIN) feature that provides a customer the ability to screen outgoing calls from their telephone line. ACC screening allows outgoing calls to be completed or rejected. The customer has the ability to restrict calls based on the number dialed, coupled with time of day (TOD), day of week (DOW) or day of year (DOY).

The customer may activate or deactivate ACC either manually or automatically during specific time periods. The customer may modify the parameters through the use of a DTMF or Touch Tone telephone. ACC also allows the customer to dial an override code during an interactive announcement to override any call restriction.

1.02 AIN Elements

The AIN feature is designed to allow Ameritech to develop new services for customers without going through the process of having the switch vendors developing new feature packages. Typically switch vendors require 18-24 months to develop new services. Then all the switches
require the new software load. AIN allows Ameritech to greatly reduce the time necessary to bring new products to our customers.

Service Control Point (SCP) is the AIN database that provides for how the SSP should proceed with an AIN call. By keeping the database in the SCP, there is no need to duplicate the information in each end office.

Service Switching Points (SSP) are switching offices that are equipped with the hardware and software to handle SS7 trunk signaling and recognize AIN triggers. The SSP sends queries to an SCP and processes responses from the SCP that control how the SSP should proceed with an AIN call.

Service Management System (SMS) is an operation system for creating and managing AIN services. Customers access SMS by a PC or from a DTMF telephone to modify their parameters in the SCP.

There are two releases of AIN software. They are called AIN Release 0.0 and AIN Release 0.1. The SSP may have both releases working simultaneously providing different services. ACC uses AIN 0.1 only.

2. SERVICE/FEATURE OPERATION

2.01 The screening of outgoing calls are divided into three subsets: 1. The allow list - dialed numbers to be allowed. 2. The reject list - dialed numbers to be restricted. 3. All other numbers not on the allow or reject list.

The screening list can be set up to allow/restrict all outgoing calls except to certain specified numbers, area codes or local prefixes. Entries on the screening list can reflect any single number or combination of numbers representing long distance and local calls.

If the network determines that a call is to be rejected, the calling party will receive an interactive announcement. The customer (or authorized user) can override this rejection through the use of an override code. This override code is customer changeable through a DTMF telephone.

Customers have the opportunity to utilize the screening function in the way that best serves their needs. All calls, EXCEPT 911, can be restricted. All operator assisted calls (0+, 0-, 00+, 00-) can either be allowed or rejected. ACC will not be offered where 911 is not available.

The standard menu blocking choices include:

Block all 900 and 976 calls
Block all long distance calls
Block all operator assisted calls
Block specific telephone number, prefix and/or area code - maximum of 10 individualized entries
Block all outgoing calls (except 911) Allow the following exceptions to blocked calls - maximum of 10 individualized entries.
A customer gains access to the Interactive Voice Response (IVR) unit from their telephone by dialing *95. The IVR unit interacts with the AIN SMS to allow the customer to change or modify their screening list. If the customer wishes to modify their screening list remotely, (i.e. from some telephone other than the line which has the ACC service), the customer must dial a 7 or 10 digit number and follow the prompts.

3. TRIGGERS

3.01 Triggering is the process of identifying an AIN call to the SSP. A trigger provides an indication to the SSP to suspend normal call processing and launch a query to the SCP.

Trigger types for AIN 0.1 are:

1. Off-Hook Immediate
2. Off-Hook Delay
3. Shared Interoffice Trunk
4. 3/6/10 Digit Public Office Dialing Plan
5. N11
6. Customized Dialing Plan
7. Automatic Flexible Routing
8. Termination Attempt

The Off-Hook Delay trigger is used for ACC Service on POTS classes of service.

4. MAINTENANCE RESPONSIBILITIES

4.01 This document mentions the following switching centers: Field Dispatch Center (FDC), Switching Technology Center (STC) and Centralized Translations Group (CTG). If these centers are not yet established, assume the Switching Control Center (SCC) will perform most of the functions of these new centers.

4.02 The Maintenance Center (MC) or RECEIPT/SCREEN (RTS) Center will refer ACC trouble reports to the appropriate FDC for analysis. WFA and LMOS should be used where possible for referring trouble reports. Beginning first quarter 1995 the RTS will refer missing/unwanted line triggers directly to the RCMAC groups.

If the FDC determines the problem is not in the SSP, then the trouble report is referred to the (INAC) Intelligent Network Administration Center at (312) 424-2070. If the INAC can find nothing wrong, they will request the FDC to contact their next tier of support. The next tier of support for the FDC is the STC for the specific central office type.

5. PROVISIONING

5.01 The CTG, the INAC and RCMAC groups are responsible for provisioning ACC service. The CTG, or the group who writes the Translations Change
Notice (TCN)/MTS, is also responsible for establishing the necessary initial translations to provide AIN 0.1 capabilities.

RCMAC will assign the Off Hook Delay trigger to the customer’s line from the service order. The balance of the translations are provisioned at the INAC. The INAC work must be completed before RCMAC adds the trigger to the line translations. Failure to do so will result in all outgoing call attempts (except 911) being routed to an announcement.

The CTG must define an escape trigger for code 911. The purpose of the escape trigger is to tell the SSP not to send a query to the SCP when dialing certain digits. This allows the 911 call to route normally. Code 911 must be defined as an escape code to prevent a customer from rejecting the 911 code. The escape trigger also prevents code 911 from being routed to an announcement if the RCMAC work is done first in error.

6. AIN ANNOUNCEMENTS

6.01 There are 255 AIN 0.1 specific announcements possible. These announcements are standardized throughout all switch types. The SCP directs the switch via ID numbers which announcement to play.

ACC Service uses announcement ID #3, ID #8 and ID #13. The announcement phrases are as follows:

ID #3 (ID03WERSRRYAUTH) - "We’re sorry the call you are attempting is not authorized".

ID #8 (ID08AUTHCODEDENOT) - "The authorization code you have dialed is not valid. Please dial the authorization code again now".

ID #13 (ID13REORDER) - Reorder tone.

6.02 EWSO and 5ESS

The AIN 0.1 planners provided the Siemens and the 5ESS vendors with phrase lists necessary for the announcements. The AIN 0.1 announcement phrases are provided for the 5ESS and EWSO with the AIN 0.1 announcement hardware. Translations are used to combine the phrases into complete announcements. The CTG provided these translations when AIN 0.1 capability was established.

6.03 DMS-100

The phrase lists were not provided for the DMS-100. The central office personnel must record the announcements on specific DRAMS provided for the AIN 0.1 service in the DMS-100 switches. CTG provided the assignments for these announcements when establishing AIN 0.1 capability. Cassette tapes with the complete announcements are located in each FOC.

7. AIN TRANSLATIONS

7.01 The translation material that follows for each switch type is for general information only. This information is intended only to be a
guideline to aid the FDC and STC trouble shooting ACC problems.

AIN 0.1 features are available with the following software releases:

- DMS-100 - BCS 36
- EWSD - Release 11.0
- SESS - SE9.1 Generic

AIN 0.1 uses the SS7 network to launch queries to the SCP database. The Global Title Translations Number is 248 and the SubSystem Number is 248. The SSN and GTT must be assigned and activated before AIN 0.1 features can be used. These translations should be completed when the AIN 0.1 feature package is loaded.

The feature code *95 will be translated in each SSP end office to a number that routes to the IVR located in Elgin, Illinois.

7.02 SESS Translations

The escape trigger for the emergency code 911 must be entered in the Recent Change/View 9.3 Local Digit (Office Dialing). Field 20 (ESC CODE) must be marked Y for all necessary LDIT’s.

7.03 DMS-100 Translations

The Table TRIGESC must have the emergency code 911 defined as an escape code.

7.04 DMS Workarounds

The DMS-100 does not fully support AIN 0.1 when interacting with all possible agents. Basic Rate ISDN (BRI) is not supported with ACC service.

Primary Rate ISDN (PRI) trunk groups are looped back to back at the DSX bay to provide the work around. A loop-around outgoing and a loop-around incoming trunk group is used on an office wide basis for various AIN 0.1 services.

The Circuit Administration Center (CAC) issues message trunk orders to establish the PRI Loop-around trunk groups. This allows the traffic peg counts of PRI Loop-around trunks to be tracked like other message trunks. CAC will issue additional message trunk orders when overflows are detected on the PRI groups.

The following tables will have PRI trunk datafill information:

- CLLI, TRKGRP, TRKSSRP
- TRKMEM, LTDEF, LTDATA
- LTCALLS, LTMAP
Table TRKSGRP must be set up as "Network" for the Loop-around outgoing and as "User" for the Loop-around incoming group.

7.05 EWSD Translations

An escape trigger must be entered against the emergency code 911 using the Enter Intelligent Network message (ENTRIN).

8. VENDOR DOCUMENTATION FOR AIN 0.1

EWSD Release 11.0 Translations Guide - TG Book 770
EWSD Release 11.0 Command List - CML Book 1090
EWSD Release 11.0 Feature Descriptions Book 0&25

5ESS Feature Document 235-190-126
5ESS Switch Advanced Service Platform, Release 0.1B
5ESS TS6 Translation Guide

DMS-100 NTP,297-5161-351 AIN Release 0.1 SSP Provisioning Cookbook

9. LINE TRANSLATIONS

9.01 The following four pages are examples of the Off Hook Delay trigger programmed against an EWSD, DMS-100 and 5ESS line.

---

For Siemens, the QHDTRIG Class Of Service (COS) is added.

DISPSUB:DN=3332135;

NPA = 815 DN = 3332135 EQN = 30-1-5-6 MASKNO:03800
CAT = MS
LTT = COSLAC5
LNATT = DTMF
CT = VI
CFRC = 3
ORIG1 = 1
PIC = 2222
DIV = ACTCFBL-3332136
& ACTCFDA-3332136
& CFBL
& CFDA

INTERRUPTION TEXT JOB 3372
CONTINUATION TEXT 0001

ASILB/APS11PS0202/USJCBL4N0010000/010 94-10-04 07:48:01
3372 0&MADM02/AINTST 2816/03800
& CFV
& UPCFVDN
& NOCFIND
& RRNG
& CCAREQ
CHRG = FRSA1

---
For the DMS, the Option is added for AIN OHDTTRIG using SERVORD.

For the 5ESS, the /ASPORIG service is added on the 1.8 view and modified on the 1.64 view to have the OHD option set to 'Y' and to the AINØ.1 Trigger number (3 in the SIL) from the 9.35 view.
**5ESS SWITCH ATT'D0**  
**RECENT CHANGE 1.8**  
**ANALOG LINE/BRCS ASSIGNMENT**

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<th>A</th>
<th>P</th>
<th>C</th>
<th>R</th>
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<td>_</td>
<td>N</td>
<td>N</td>
<td>10</td>
<td>___</td>
<td>___</td>
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<td>N</td>
<td>N</td>
<td>11</td>
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<td>N</td>
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Enter Review, Change-insert, Validate, screen#, or Print:

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**5ESS SWITCH ATT'D0**  
**RECENT CHANGE 9.35**  
**NETWORK SERVICES TRIGGER DEFINITION**

*1. TRIG NBR  3*  
*2. APPLICATION ASP*  
*3. ALT GBL TITLE _________*  
*4. SERV KEY _______*  
*5. STP TT NBR _______*  
*6. ADM ST CD ULK*  
*7. AIN REL ROD1*

Enter Review, Change-insert, Validate, or Print:

---

**5ESS SWITCH ATT'D0**  
**RECENT CHANGE 1.64**  
**ADVANCED SERVICES PLATFORM LINE PARAMETERS**

*1. FEATURE /ASPORIG; (*)3. DE ___:_______ (*)7. MLHG ____*  
*2. TN 3422135; (*)6. PTY ___ (*)8. MEMB ____*
ORIGINATING TRIGGERS

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<th>TRIG ACT</th>
<th>TERMINATING TRIGGERS</th>
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<tr>
<td>9. OHI</td>
<td>__</td>
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<td>21. TA</td>
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TRIG TYPE ALLOWED TRIG ACT

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Enter Review, Validate, or Print:

-11-

10. GLOSSARY

ACC Ameritech Call Control
AIN 0.1 Advanced Intelligent Network Release 0.1
ASP Advanced Service Platform
BRI Basic Rate ISDN
CTG Centralized Translation Group
DN Directory Number
DOW Day of Week
DOY Day of Year
DSX Digital Switch Crossconnect
DTMF Dual Tone Multi-Frequency
FDC Field Dispatch Center
INAC Intelligent Network Administration Center
IVR Interactive Voice Response Unit
LMOS Loop Maintenance Operating System
MTS Mechanized Translation System
NANP North American Numbering Plan
RTS Receipt/Screen
SCC Switching Control Center
SCP Service Control Point
SMS Service Management System
SSP Service Switching Point
STC Switching Technology Center
STP Signal Transfer Point
TCN Translation Change Notice
TDP Trigger Detection Points
WFA Work and Force Administration