

# Cox Communications, Inc. Exhibit 1012

P24859.A01



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Paul G. BANIAK et al.  
Serial No. : 10/761,382 (Continuation of U.S.  
Patent Application No. 09/050,986)  
Filed : January 22, 2004  
For : PROFILE MANAGEMENT SYSTEM INCLUDING USER  
INTERFACE FOR ACCESSING AND MAINTAINING PROFILE  
DATA OF USER SUBSCRIBED TELEPHONY SERVICES

Group Art Unit: 2642  
Examiner: H. Agdeppa

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313

**SECOND SUPPLEMENTAL DECLARATION OF  
TERRY L. VIETH PURSUANT TO 37 C.F.R. §1.131**

I, Terry L. Vieth, declare that:

1. I am an inventor of the subject matter recited in the claims of the present application, which is a continuation of U.S. Patent Application No. 09/050,986 (hereinafter the "parent application"), which claims priority of U.S. Provisional Patent Application No. 60/042,680. The claims of the parent application were rejected in a Final Official Action mailed on March 20, 2003. The claims pending in the present application are identical to the claims rejected in the Final Official Action mailed on March 20, 2003 in the parent application. I have personal knowledge of the facts set forth in this declaration.

2. I have previously executed a Declaration of Terry L. Vieth pursuant to 37 C.F.R. §1.131 on December 17, 2002, and a Supplemental Declaration of Terry L. Vieth

pursuant to 37 C.F.R. §1.131 on August 11, 2003. Copies of these Declarations and their attachments are attached hereto and are incorporated herein by reference in their entireties.

3. I am a member of a group that conceived, prior to October 4, 1995 (i.e., prior to the filing date of DULMAN, U.S. Patent No. 5,915,008), the profile management system that the rejection in the parent application asserts is disclosed by Dulman. From prior to October 4, 1995, the group worked diligently until the profile management system was reduced to practice.

4. The profile management system that was reduced to practice as announced by the Exhibit A submitted with the Supplemental Declaration filed in the parent application on August 20, 2003 is the same profile management system that was described in the Exhibit A submitted with the Declaration filed in the parent application on January 15, 2003, and is the same profile management system that was conceived by the group prior to October 4, 1995.

5. Exhibit B submitted herewith (with dates redacted) is a copy of a memorandum written immediately preceding the reduction to practice of the profile management system, that I authored. Exhibit B submitted herewith describes the profile management system that was reduced to practice as announced by the Exhibit A submitted with the Supplemental Declaration filed in the parent application. Accordingly, Exhibit B submitted herewith also describes the profile management system that was conceived by the group prior to October 4, 1995 as described in the Exhibit A

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submitted with the Declaration filed in the parent application.

I hereby declare all statements made herein of my own knowledge are true and that all statements made herein on information and belief are believed to be true; and, further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of any issued patent.

Executed on: 5-7-4

Terry L. Vieth

Terry L. Vieth

DATE:  
AUTHOR: Terry Vieth

## EXHIBIT B

# REDACTED

### POSID - POSITIVE ID SMS PROCESSING - NEW PRODUCT REQUIREMENTS

#### Open Issues:

1. POSID USOC/FIDS - Updated document on \_\_\_\_\_ with confirmed USOC values.  
Updated document on \_\_\_\_\_ with approved FIDs.
2. Profile Management System/PC Interface requirements
3. A USOC is sent to the SMS from SOAC as an AINID and does not contain a USOC data value. There is a default value specified in the call\_variable\_ref table. However, the default value specified is used in the absence of the USOC or, in the case of FIDs, the FID data. The presence of a USOC indicates to set a value associated with a call variable to be sent to SPACE. However, this value is not in a reference. A decision has been made to add a new column to the call\_variable\_ref table called alt\_default\_value which will contain the default value to use when the USOC is present on the order.

#### Deployment Schedule:

POSID will be deployed in Austin on \_\_\_\_\_, San Antonio, Houston, Dallas/Ft. Worth, St. Louis, Kansas City, Topeka, Wichita, Oklahoma City, Tulsa on \_\_\_\_\_, and then Little Rock on \_\_\_\_\_. However, as will be described further in this document, POSID requires a PC interface for customers to modify their subscription data. It has been stated that POSID will not be deployed without the PC interface, as DTMF is much too cumbersome for customers to submit large subscription data updates. Basically, the deployment of POSID is dependent on the availability of the PC interface. The PC Interface or client software will be ready \_\_\_\_\_, however, the PC Interface Server to SMS interface will not be available until \_\_\_\_\_. Subscription updates collected by the PC Server between \_\_\_\_\_ and \_\_\_\_\_ will be manually provisioned by the CNOC.

#### Product Description:

POSID provides security for access to business phone lines. POSID enables subscribers to prevent all incoming calls from being connected, except those from given Calling Party Numbers (CPNs) or Access Codes. POSID is targeted towards business customers with Computer Systems or remote access to PBX Features. POSID subscribers can create a screening list containing up to 500 Authorized CPNs. In addition, the POSID subscriber can create a second screening list containing up to 100 Access Codes. The subscriber can choose to use the Authorized CPN list, the Access Code list or a combination of both.

(The use of the access code screening list does not provide the same level of security as the CPN screening list. However, there are occasions when the CPN is not delivered, i.e., ISDN, etc.)

If the caller into the POSID equipped line is not calling from an authorized number and does not input a correct access code, then the call will be sent to a denial announcement and disconnected. If, for some reason, the ISCP is down and we cannot determine allowed CPNs or access codes, then all calls will be denied completion.

POSID Subscribers can choose to receive two reports:

- Successful Attempts Log - 100% sampling of all authorized accesses to POSID
- Unsuccessful Attempts Log - 100% sampling of all unauthorized attempts to POSID

Each report is offered weekly, monthly or both. There will be a different recurring rate for a weekly report vs. a monthly report. The SMS will receive a daily file from DRS and be responsible for producing the POSID reports.

#### **Target Market:**

The target market for POSID is any medium or large business customer that employs the public switched network as a means to provide access to its computer system(s). Southwestern Bell customers that have deployed office automation/mechanization systems, remote data access or sales force automation applications are candidates for this service. In addition, any customer that has/will be utilizing work-at-home applications could benefit from the POSID service.

#### **Rating/USOCs/FIDs:**

The POSID product will be offered with Volume Discounting. Based on the number of Working Telephone Numbers (WTNs) equipped with POSID for a given Billing Telephone Number (BTN), the POSID product will contain a different recurring rate. Basically, customers with 1-3 lines equipped with POSID would be charged one rate, customers with 4-7 lines equipped with POSID would be charged a different rate, and customers with 8 or more lines equipped with POSID would be charged with yet a different rate. There are several options available to accomplish the tiered billing approach:

1. POSID could be rated and billed at the BTN level. Each WTN equipped with POSID would contain a free POSID USOC used for provisioning purposes.

# REDACTED

2. Offer three different POSID USOCs, one for each tier. Based on the number of WTNs equipped with POSID on a given BTN, the service representative would apply the correct USOC.
3. Offer a single POSID USOC which would be applied on each POSID equipped WTN. If a given BTN contains more than 3 POSID equipped WTNs, apply a negative USOC to each POSID equipped WTN which would in essence provide a discount.
4. Manually rate the POSID equipped WTNs. Apply a USOC to each POSID equipped WTN followed by the rate (one of the three tiers). The rate supplied on the service order would override the mechanical rating in CRIS.

It was decided by CRIS, Product Development, Marketing Methods, and the SMS to go with Option Number 3. SOAC will be updated to recognize the single POSID USOC and will ignore the negative POSID USOC, as the SMS is not interested in the rate.

A FID will follow the POSID USOC. The FID ASID (Account Security Identification) will contain up to 30 characters following it. The string of 30 characters can be anything and is specified by the customer. It will be used to verify the customer's identity when pin resets are requested. The FID data is not provisioned to a SPACE template and is considered a Local Only Update (LOU). For now, the ASID FID and FID data will be stored in the SMS and CRIS. The reason for storing in CRIS is to make the information available to our service representatives. This is due to EASE not having query capability to the SMS. This obviously is not secure, since basically anyone can see the information if it is in CRIS. The ASID FID data is not provisioned to SPACE on the template, but will be a Local Only Update in the SMS.

A separate non-recurring USOC will be used to reset a customer's pin number. The Pin will be sent to the SMS behind the FID RPI (Reset PIN). However, the RPI FID will be mapped in SOAC to the POSID recurring USOC. Thus, the SMS will not receive the pin reset USOC. Following the RPI FID will be the default PIN data. The default is the last 6 digits of the customer's WTN. The PIN reset USOC will be NR9SP. However, the RPI FID/FID data will be mapped to the POSID USOC (SCMBX) and the SMS will never receive the NR9SP USOC.

A new FID CARC will be created and sent to the SMS along with the USOC SCMBX. The FID data contains a customer name and telephone contact number. A PC Server application administration person will contact this name and telephone number to negotiate customer User IDs for the PC server and PC Interface software distribution. The FID data will be a minimum of 15 and maximum of 62 characters. The customer name will appear first followed by a comma and then the contact telephone number in the format NPA NXX-LINE. The FID data is not provisioned to a SPACE template and is considered a Local Only Update.

A new FID ADID will be created and sent to the SMS along with the USOC SCMBX when the WTN is a DMS100 DID Line. The value following the FID will be Y (Yes). This FID is not required and only present on a DMS100 DID line. When this FID is present (only on inward activity), the SMS will be required to then require two additional FIDs to be populated. These FIDs are phony FIDs #DIGT (DMS DID digit) and #TRNK (DMS DID trunk). The information to populate the #DIGT and #TRNK FID is located in the central office switch and can be determined by doing a QDN. When ADID is present on the inward activity, the SOAC activation request should be erred to the Software Center who would execute the QDN in the switch and populate the new phony FIDs.

The Successful Attempts Log report will appear with one of two different recurring USOCs. The report can be offered weekly or monthly. There are no FIDs associated with the report. The SMS will only receive one of the two possible USOCs as there is a single call variable in the SPACE template. The call variable contains a Y/N value and is not sensitive to whether the report is monthly or weekly. The Successful Attempts Log report weekly USOC is RS6WX and the monthly USOC is RS6MX. The SMS will only receive the RS6WX USOC. The RS6MX USOC will be mapped to RS6WX in SOAC.

The Unsuccessful Attempts Log report will appear with one of two different recurring USOCs. The report can be offered weekly or monthly. There are no FIDs associated with the report. The SMS will only receive one of the two possible USOCs as there is a single call variable in the SPACE template. The call variable contains a Y/N value and is not sensitive to whether the report is monthly or weekly. The Unsuccessful Attempts Log Report weekly USOC is RU6WX and the monthly USOC is RU6MX. The SMS will only receive the RU6WX USOC. The RU6MX USOC will be mapped to RU6WX in SOAC.

In summary, the following USOCs and FIDs will be sent to the SMS from SOAC:

- SCMBX - USOC which identifies a POSID subscriber
  - RPI - FID which contains default PIN data (last 6 digits of the WTN)
  - ASID - FID which contains up to 30 characters used for customer validation purposes
  - ADID - FID which identifies a DMS100 DID line. FID Value = Y.
  - CARC - FID which identifies a customer name and contact telephone number
- RS6WX - USOC for the Weekly Successful Attempts Log Report. This USOC will also be mapped to the SMS when the RS6MX (Monthly) USOC is present on the order.
- RU6WX - USOC for the Weekly Unsuccessful Attempts Log Report. This USOC will also be mapped to the SMS when the RU6MX (Monthly) USOC is present on the order.

Both the CPN screening list and the Access Code screening list will not be provisioned via a service order. Yet, the GUI interface will have the ability to provision/modify both lists. As a result two phony FIDs used only by the SMS will be established and used to provision the embedded tables. The Access Code screening list table also contains one



comment column for each row. The CPN screening list contains two comment columns for each row. Comments can be up to 30 characters. In addition, there are two new phony FIDs associated with the DMS100 DID lines. A phony FID also has been created to provision the car\_active call variable. This FID is only used to provision a number change and retain the customer's active setting. The phony FIDs are:

- #CAR1 - FID used to specify updates to the Access Code screening list
- #CM11 - FID used to specify a comment for each Access Code in the Access Code screening list
- #CAR2 - FID used to specify updates to the CPN screening list
- #CM21 - FID used to specify a comment for each CPN in the CPN screening list
- #CM22 - FID used to specify a second comment for each CPN in the CPN screening list
- #DIGT - FID used to specify the DMS DID digit
- #TRNK - FID used to specify the DMS DID trunk
- #ACTV - FID used to specify the car\_active setting. Basically specify whether the service is on or off.

#### **Service Orders:**

SORD/EASE will be modified to allow for the following USOCs: SCMBX, RCRSA/RCRSB (Negative POSID USOC), RS6WX, RS6MX, RU6WX, RU6MX, NR9SP (POSID Reset PIN USOC). In addition, the FID RPI, ASID, and CARC will be allowed. When the RPI FID is present, SORD/EASE will mechanically populate the FID data with the last 6 digits of the customer's WTN. In addition, SORD will generate the ADID FID when the USOC SCMBX is present with an 'I' action code following the USOCs PLP or PLPTX (PLP and PLPTX indicate DID) and the customer is served by a DMS-100 switch.

#### **Class of Service Restrictions:**

POSID will not be offered on virtual numbers, coin class of services, or mobile, regardless of switch type. POSID will be offered to all other Business class of services.

Currently, POSID is not available on ISDN lines served from a 5ESS switch (availability planned for 1997)

For Hunting arrangements, POSID is available for Series Hunting provided each line in the Hunt group is equipped with Positive ID. For Terminal Hunting, only the lead number in the hunting arrangement needs to be equipped with Positive ID.

If a customer subscribes to POSID, the only other AIN service the customer may subscribe to is DRS.

USOCs RS6WX, RS6MX, RU6WX, RU6MX should not be allowed for customer's served by an AT&T 1A switch with 0.0 AIN software. The switch cannot determine whether the calling number is private or not. Once the AT&T 1A switch is updated to version 0.1 AIN software, the POSID reports can be offered.

Seimens (ISDN and SmartTrunk) and Ericsson switches are not supported at this time.

Following is an example of POSID Inward activity:

REDACTED

314 231-9999 222 WIC

C123456 1BH AAA

-LSTG

LN HAIRBOWS; VIETH'S

LA 603 LAKEFIELD

/DZIP 62236

-CTL

WCO SDM TERRY VIETH

314 235-3659

-BILL

TAR STL

PCL B

IRRMA 1 3HD MON;

MEDIA CONSULTING INC;

ATTN; REE PORTA

123 MAIN;

SUITE 42;

ST. LOUIS, MO 63010

-RMKS

RMK POSID INWARD EXAMPLE

-S&E

R 1BH /TN 1504

/PIC 0288-ATX,063090,

070295,S/RMK ZAP

R 9ZR

R ESM

I SCMBX /RPI 319999

/ASID FUNNYBOWS

/CARC DIXIE JONES;

314 235-9277

I RS6WX

I RU6WX

,S

Following is an example of POSID Change activity:

REDACTED

314 231-9999 222 WIC  
C123456 1BH AAA  
-LSTG  
LN HAIRBOWS; VIETH'S  
LA 603 LAKEFIELD  
/DZIP 62236  
-CTL  
WCO SDM TERRY VIETH  
314 235-3659  
-BILL  
TAR STL  
PCL B  
-RMKS  
RMK POSID INWARD EXAMPLE  
-S&E  
R 1BH /TN 1504  
/PIC 0288-ATX,063090,  
070295,S/RMK ZAP  
R 9ZR  
R ESM  
R RPT2W  
C SCMBX /ASID FUNNYBOWS  
/CARC DIXIE JONES;  
314 235-9277  
T SCMBX /ASID FUNNYGIRL  
/CARC DIXIE JONES;  
314 235-9277  
I NR9SP /RPI 319999  
O RS6WX  
I RS6MX  
\$

## SOAC to SMS Activation Request:

Following is an example of POSID Inward Request (non-AIN customer adding POSID):

```
*C3{FT=PRE;TT=SO;OT=C;ORDNO=123456;MT=F;TRN=1;
```

```
TSYS=SOACTS8;RSYS=SMS1;PRI=+0;WC=314231;}%
```

```
*ODR{
```

```
DIFF=N;
```

```
CS=1BH;
```

```
DD=951201;
```

```
}%
```

```
*SBR{
```

```
CTL{
```

```
CTC=C;
```

```
MTN=3142319999;
```

```
MTCCC=222;
```

```
}
```

```
ACL{
```

```
ACT=O;
```

```
BTN=3142319999;
```

```
BTNCC=222;
```

```
MTNCC=222;
```

```
MTN=3142319999;
```

```
NP=N;
```

```
SRA=603 LAKEFIELD;
```

```
SRN=VIETH'S HAIRBOWS;
```

```
}
```

```
ACL{
```

```
ACT=N;
```

```
BTN=3142319999;
```

```
BTNCC=222;
```

```
MTNCC=222;
```

```
MTN=3142319999;
```

```
NP=N;
```

```
SRA=603 LAKEFIELD;
```

```
SRN=VIETH'S HAIRBOWS;
```

```
}
```

```
}%
```

```

*RSC{
  REC{
    CTL{
      CTC=B;
      CTID=TN[3142319999];
    }
    ACL{
      ACT=N;
      CTID=TN[3142319999];
      TN=3142319999;
      AINS{
        AINID=SCMBX;
        RPI=319999;
        ASID=FUNNYBOWS;
        CARC=DIXIE JONES, 314 235-9277;
      }
      AINS{
        AINID=RS6WX;
      }
      AINS{
        AINID=RU6WX;
      }
    }
  }
}%

```

This is an example of a POSID Change Request. Existing AIN POSID customer is modifying POSID. RPI FID is received to reset PIN. ASID FID is received to change the customer validation character string. Customer changes Report 1 from weekly to monthly. Customer retains Report 2 (weekly). Following is the example:

```

*C3{FT=PRE;TT=SO;OT=C;ORDNO=123456;MT=F;TRN=1;
  TSYS=SOACTS8;RSYS=SMS1;PRI=+0;WC=314231;}%
,*ODR{
  DIFF=N;
  CS=1BH;
  DD=951201;
}%

```

```

*SBR{
  CTL{
    CTC=C;
    MTN=3142319999;
    MTCCC=222;
  }
  ACL{
    ACT=O;
    BTN=3142319999;
    BTNCC=222;
    MTNCC=222;
    MTN=3142319999;
    NP=N;
    SRA=603 LAKEFIELD;
    SRN=VIETH'S HAIRBOWS;
  }
  ACL{
    ACT=N;
    BTN=3142319999;
    BTNCC=222;
    MTNCC=222;
    MTN=3142319999;
    NP=N;
    SRA=603 LAKEFIELD;
    SRN=VIETH'S HAIRBOWS;
  }
}%

```

```

*RSC{
  REC{
    CTL{
      CTC=C;
      CTID=TN[3142319999];
    }
    ACL{
      ACT=O;
      CTID=TN[3142319999];
      TN=3142319999;
      AINS{
        AINID=SCMBX;
        ASID=FUNNYBOWS;
        CARC=DIXIE JONES, 314 235-9277;
      }
      AINS{
        AINID=RS6WX;
      }
      AINS{
        AINID=RU6WX;
      }
    }
  }
  ACL{
    ACT=N;
    CTID=TN[3142319999];
    TN=3142319999;
    AINS{
      AINID=SCMBX;
      RPI=319999;
      ASID=FUNNYGIRL;
      CARC=DIXIE JONES, 314 235-9277;
    }
    AINS{
      AINID=RS6WX;
    }
    AINS{
      AINID=RU6WX;
    }
  }
}
}%

```

NOTE: Notice the RPI FID is not reflected in the RSCREC Old view. This is due to CRIS dropping the FID and not retaining on the CRIS customer record.



**USOC/FID to SPACE Call Variable mapping:**

<u>USOC</u>	<u>FID</u>	<u>Call Variable Name</u>
SCMBX		car
SCMBX	#ACTV	car_active
SCMBX	RPI	car_adminpin
SCMBX	#CAR1	car_emacctbl
SCMBX	#CAR2	car_emscrtbl
SCMBX	ADID	car_dmsdid
SCMBX	#TRNK	car_dmsdidtrunk
SCMBX	#DIGT	car_dmsdiddigit
RS6WX		car_report1
RU6WX		car_report2

NOTE: FIDs ASID, CARC, #CM11, #CM21, and #CM22 are not referenced here because these FIDs are local only FIDs.

## SPACE Call Variables:

The following Call Variables will be contained on the SPACE template for POSID:

<u>Call Variable Name</u>	<u>Type of variable</u>	<u>DTMF</u>	<u>Default</u>	<u>Description</u>
car	Yes/No	No	N	POSID Subscriber indicator used by the ISCP Feature Interaction Manager (FIM) to call POSID specific service logic.
car_active	Yes/No	Yes	N	Customer controls when to activate their service. Once turned on, the customer cannot turn off. The option to turn the service off is available to SPACE users only for troubleshooting.
car_adminpin	7 digit numstring	Yes	last 6 digits of POSID nbr	Administrator PIN
car_emaccttbl	embedded tbl - 100 rows	Yes	blank list	Embedded table of authorized access codes.
car_emscrtbl	embedded tbl - 500 rows	Yes	blank list	Embedded table of CPNs authorized to complete the call.
car_report1	Yes/No	No	N	Successful attempts report option.
car_report2	Yes/No	No	N	Unsuccessful attempts report option.
car_dmsdid	Yes/No	No	N	Required if customer is a DID customer on a DMS-100. If set to yes, the following two variables must be provided.
car_dmsdidtrunk	8 digit numstring	No	00000000	Required if customer is a DID customer on a DMS-100

car_dmsdiddigit	1 digit numstring	No	7	Required if customer is a DID customer on a DMS-100
-----------------	----------------------	----	---	--

Following are POSID embedded table specifications:

**Table car\_emacctl - Authorized Access Code list:**

<u>Column Name</u>	<u>Type of data</u>	<u>DTMF</u>	<u>Default</u>	<u>Description</u>
ACCESS_CODE	Up to 7 digit numstring	Yes	0	Authorized access code or PIN specified by the POSID subscriber. Table can contain up to 100 entries.
UNIQUE_ID	3 digit numstring	No	001	Unique ID or row number generated by SPACE. Range from 001 to 100.

**Table car\_emscrtl - Authorized CPN list:**

<u>Column Name</u>	<u>Type of data</u>	<u>DTMF</u>	<u>Default</u>	<u>Description</u>
CPN	10 digit numstring	Yes	0	Authorized CPN specified by the POSID subscriber. Table can contain up to 500 entries.
UNIQUE_ID	3 digit numstring	No	001	Unique ID or row number generated by SPACE. Range from 001 to 500.

# **SMS to SPACE Activation Request:**

```
*U4{
  trnsId=12345678901234567890,
  ft=PRE,
  ordType=C,
  ordNo=123456,
  dd=951201,
  tsys=SMS1,
  rsys=sw94sp01,
  userId=PASSWORD,
  aos=AOS,
  version=0x4000000
}
EstRscRec{
  EstChgMovRmvRscRecCtl{
    ctc=B,
    provId=tmpl_cds1
  }
  EstChgRscRecAcl{
    act=N,
    tn=3142319999
    Ains{
      Tag{
        TagId=car,
        TagValue=Y,
        TagId=car_active,
        TagValue=N,
        TagId=car_dmsdid,
        TagValue=N,
        TagId=car_dmsdidtrunk,
        TagValue=00000000,
        TagId=car_dmsdiddigit,
        TagValue=7,
        TagId=car_report1,
        TagValue=Y,
        TagId=car_report2,
        TagValue=Y,
        TagId=car_adminpin,
        TagValue=319999
      }
    }
  }
}
```

## **SMS Services Impacted:**

**Edits:** The ASID FID/FID data is not provisioned to SPACE. A new column has been added to the FID\_ref table called local\_only\_ind. The value will be 'Y' when a FID's data should be posted to the SMS only and does not provision to a template. When an ASID FID only change is received, Edits should create a Local Only Update. There will not be an associated call variable for the ASID FID in the call variable ref table. Edits should populate the fid\_call\_variable column in the sav2\_fid\_call\_var table with the value 'NONE.'. Likewise, the FID CARC is a local only FID and will be updated to the SMS only.

POSID will be provisioned on a separate business only template. The only services contained on the template, at this time, will be POSID and DRS. This should be table driven and not result in any coding changes for Edits.

Since the POSID service is sent to the SMS with multiple USOCs, i.e, SCMBX, RS6WX, RU6WX, we originally thought Edits would need to read the USOC\_ref table to determine all possible USOCs for a given service and provision as appropriate. The USOC\_Group in the USOC\_ref table contains a common value for all related USOCs. For example, the USOC\_Group should contain the value POSID for all POSID USOCs. Then, when reading the call\_variable\_ref table, call\_variables for all POSID related USOCs would be identified and provisioned. After testing this, it was decided that the SMS will only provision call variables related to USOCs received from SOAC by the SMS. This is because the SMS retains in the customer master view all USOCs provisioned, even if the value associated with the USOC is 'N'. Without further coding, subsequent order activity actually adding a report to POSID failed because the report USOC appeared on the master view (even though the value was 'N'). It appeared that the customer already had the report.

**Breakout:** As stated in the Edits section, Provisioning to SPACE will not always be necessary. If the ASID FID only is received, a Local Only Update should be created by Breakout. The Local\_only\_ind in the HOL\_step should be set to 'Y' for the given step. If the ASID FID is received in conjunction with other POSID changes or AIN service changes, then Breakout would create a single step with the ASID FID/FID data embedded within the other provisionable changes. As stated previously, the FID/FID data which is local only to the SMS will be designated by the value of 'NONE' in the fid\_call\_variable column in the save2\_fid\_call\_var.

**Provisioning:** Provisioning is responsible for rolling the local only updates into the SMS master view. When provisionable changes are included with the local only update (ASID FID or CARC FID), then the data designated as SMS only would be rolled into the master view after successfully provisioning the NE data. If a local only update was sent to the SMS (SOAC activation request only included ASID and no other changes), then the update would be rolled into the master view on the order due date.

**GUI:** There are eight new phony FIDs: #CAR1 (FID for Access Code screening list), #CM11 (FID for Access Code Comment list), #CAR2 (FID for CPN screening list), #CM21 (FID for CPN comment list), #CM22 (FID for CPN second comment list), #DIGT (FID for DMS DID digit), #TRNK (FID for DMS DID trunk), and #ACTV (FID used for number changes to retain the car\_active setting). For provisioning purposes, GUI will need to specify the phony FIDs when updating the associated call variable.

GUI will need to make similar changes like Edits to accommodate multiple USOCs for a given service. For the Order Matrix screen, GUI will read the USOC\_ref to determine all available USOCs. However, when more than one USOC is available for a service, GUI will only present one USOC and provide a drop down box for the remaining USOCs. Only USOCs with a USOC\_Seq\_Num = 1 should be presented on the initial order matrix screen

**SPACE Interface:** The SPACE Interface will need to recognize FID/FID Data from the STEP tables which does not get provisioned. This can be done by recognizing the value of 'NONE' in the fid\_call\_variable column.

**Data Base:** The USOC\_Ref and FID\_Ref tables have been modified to include the column Local\_Only\_Ind. Value is Y/N. The ASID FID will be populated with a Y for the Local\_Only\_Ind in the FID\_Ref table as well as the CARC FID. In addition, the USOC\_Group\_Seq\_Num column has been added and will be used to specify the order in which to present the USOCs via the GUI interface. The USOC\_Seq\_Num will now be used to present the order to present USOCs within a single service. When only a single USOC is used to provision a service, then USOC\_Seq\_Num will contain a 1. When multiple USOCs are needed to provision a service, then each USOC would contain a unique number (1, 2, 3, etc.).

**NOTE:** As requirements have not been written for the PC Interface, specific SMS service changes have not been noted.

## Reports:

The following data items will be collected by DRS:

Successful Attempts Log Report: Service Identifier (car)  
Calling Party Number  
Called Party Number  
Date/Time  
Successful Access Code (if used)  
Privacy Indicator  
Report Number (1)

Unsuccessful Attempts Log Report: Service Identifier (car)  
Calling Party number  
Called Party Number  
Date/Time  
Unsuccessful Access Code entry  
Privacy Indicator  
Report Number (2)

Once all the data is collected by DRS from the ISCP, it will be validated and modified for transmission to the SMS for production of the POSID Reports. The Privacy Indicator will be used by the SMS to determine the value to print on the report for Calling Party Number. Due to privacy issues, the CPN may not always be printed. Or, in some cases the CPN is not available. A value of '00' designates to print full CPN on report; NPA-NXX only for Texas customers. A value of '01' designates to print 'Private' on report in lieu of CPN. And, a value of '10' designates to print 'Unavailable' on report in lieu of CPN. (Note: The 1A on 0.0 AIN software creates a privacy indicator of 99 which means unavailable. Since we are not offering POSID to 1A customers on 0.0, DRS should never create such a sample. To be safe, though, we should code for a Privacy Indicator of 99 to mean Unavailable.) NOTE: the Texas privacy requirement to print only NPA-NXX applies to Texas POSID customer's and their reports only. If a call originates in Texas and is delivered to an Arkansas POSID customer, then the entire NPA/NXX/LINE will be printed.

The SMS will create POSID reports in the same manner we create CID reports. A pull is run against CIDB identifying the customers and their associated report USOCs. As discussed previously in this document, the USOC identifies the report frequency (weekly, monthly). Of course, the SCMBX POSID USOC should be present on the account. The Successful Attempts Log Report is identified by USOC RS6WX (Weekly) or RS6MX (Monthly). The Unsuccessful Attempt Log Report is identified by USOC RU6WX (Weekly) or RU6MX (Monthly). The SMS Customer Report generation software will not read the various SMS tables to identify which reports to create and the report frequency. In addition, the Report Recipient Media and Address RRMA FID will be present on the account in CIDB and is used as the mailing address for the POSID reports. Also, the

media is specified behind the RRMA FID. The Successful Attempts Log Report is available on a floppy diskette only. The Unsuccessful Attempts Log Report is available on paper or a floppy diskette.



Following is an example of the Successful Attempts Log Report:

**REDACTED**

Positive ID  
Successful Attempts Log for NPA/NXX-LINE  
mm/dd/yy

Section 1: Calls by Authorized Telephone Number

<u>Calling Number</u>	<u>When Called</u>
(201) 235-1570	Sun 08:14 10:22 15:47 22:09 Thu 21:57 Sat 15:12 Sun 10:01 14:57 Tue 21:17
(201) 235-2135	Sun 20:01 Sun 19:58 Sun 19:59
In Texas:	
(201) 235-xxxx	Sun 20:01
(202) 221-xxxx	Sat 08:58

Section 2: Calls by Authorized Access Code

<u>Access Code</u>	<u>When Called</u>	<u>Calling Number</u>
9843	Sun 10:56	(314) 229-6732
1701	Wed 08:17	(201) 480-8700
	13:09	UNAVAILABLE
	20:47	(201) 480-8700
1702	Wed 05:36	(201) 480-8700
	22:21	(201) 480-8700
	Thu 05:47	(201) 480-8700
	13:39	PRIVATE
232916	Fri 08:00	(314) 535-2366
In Texas:		
232916	Fri 08:00	(314) 535-xxxx

Following is an example of the Unsuccessful Attempts Log Report:

**REDACTED**

Positive ID  
Unsuccessful Attempts Log for NPA/NXX-LINE  
mm/dd/yy

Calls Not Connected Due to Incorrect Access Code

<u>Calling Number</u>	<u>When Called</u>	<u>Access Code Attempted</u>
(201) 235-1570	Tue 08:14	1000
		1001
	08:15	1002
		1003
	10:22	1004
		1005
	Thu 21:57	356004
(201) 235-2135	Sun 20:01	35670
	Sun 19:58	356700
PRIVATE	Mon 07:38	1238
UNAVAILABLE	Mon 23:01	347838
In Texas:		
(214) 235-xxxx	Tue 11:17	333478
(214) 235-xxxx	Thu 12:38	38784

### **Profile Management System (PMS):**

POSID contains two screening lists: Access Code List (up to 100 rows) and CPN List (up to 500 rows). Due to the size of the lists, DTMF is considered much too cumbersome for customer's to make modifications to the lists with. DTMF update will be allowed, but is intended only for emergency updates. As stated previously, the two screening lists will not be provisioned via service order. This is for two reasons: the large size of the lists, and lack of security if access codes and CPNs are on a service order. The GUI interface is available for provisioning but is intended for problem resolution or emergency updates only. Since the nature of the POSID service is security, customer's want to make their own updates to their lists, without disclosing to anyone the content of their lists. As a result, the Profile Management System (PMS) or PC Interface will be developed allowing customer's with PCs to update their subscription information mechanically.

At the time of this writing, requirements for the PC Interface are in the development stage. At a high level, requirements are as follows:

1. Customers, via their own PC and modem, would dial into the SWBT Profile Management System.
2. Customers would enter a UNIX platform. Currently, CNA appears to be a likely candidate.
3. The customer would be asked to enter a User ID and Password.
4. Once security is verified, the customer would be presented with a list of their services. The customer would specify which service they would like to view or modify.
5. The PC Interface would retrieve the customer subscription information and present to the customer. This is done by submitting a query to the SMS.
6. The customer may then modify their lists. Any edits for the accuracy of the data input would be housed in the UNIX box. Once the customer saves and submits their subscription data modifications, the update is forwarded to the SMS.
7. The SMS would develop a new service to process messages sent from the PC Interface. A separate document has been created containing message formats for all PC/SMS messages.
8. The PC Interface updates sent to the SMS would need to be converted or stored into the PCS data base. Thus, allowing flowthru to provisioning with minor modifications to the SMS.
9. The SMS will be required to send notifications to the PC Interface when Inward or Outward activity occurs on POSID.
10. Customers would not be allowed to add or remove services via the PC Interface at this time.

At this time, there are many unanswered questions regarding the PC Interface. CNA has been identified to support the interface. However, CNA currently only supports the top 250 customers. The number of PC Interface customers could be in the thousands or more. Additional modem resources would need to be secured. In addition, the PC Interface would need 24x7 coverage. CNA provides coverage 7 a.m. to 7 p.m.

# REDACTED

The SMS has committed to develop the new interface into the SMS by POSID will be deployed on without the SMS PC Interface. The PC application service will collect Customer subscription data updates and forward to the CNOC for manual provisioning. The SMS will still be required to provision POSID, just without the PC Interface.

Detailed requirements for the Profile Management System (PC Interface) will be documented in a separate requirements document.