AIN Update Cancel

Input Parameters

Event 912

Name	Type	Length	Description
data	string pointer		data defining the requested update
aecn	string pointer		Alternate Exchange Carrier Number

where data is: (although this is shown in a table, data is a continuous string without spaces)

*C3{	LspAccess service to SMS Route Control Header section; contains order and routing information used by SMS in the proper processing of an Activation Request.
FT=CAN;	Function Type: CAN for cancel.
TT=SO;	Transaction Type: value will always be SO.
OT=C;	Order Type: service order type; value will always be C: Change.
ORDNO=111111;	Order Number: service order number; 6 digits.
MT=F;	Message Type: value will always be F: Flow Through Activation Request.
TRN=2;	Transaction Number: Relates the sequence of messages between the SMS and LspAccess. The TRN value in the resulting C0 header will match the TRN value in the C3 header.
TSYS=LSPDG;	Transmitting System: system entity code; value will be always be LSPDG: LspAccess DataGate.
RSYS=SMSA;	Receiving System: system entity code; value will always be SMSA.
PRI=+4;	Priority: value will always be "+4".
WC=314235;	Wire Center: work group responsible for handling errors in the SMS; value will be 6 digits.
}%	

AIN Results Retrieval Request

Input Parameters

Event 920

Name	Type	Length	Description
aecn	string pointer		Alternate Exchange Carrier Number

Output Parameters

Event 921: Update Request Positive Acknowledgement

Name	Type	Length	Description
data	string pointer		data defining the requested update

where data is: (although this is shown in a table, data is a continuous string without spaces)

*C0{	SMS to LspAccess service Route Control Header section; contains order and routing information used by LspAccess in the proper processing of an Activation Response.
FT=PRE;	Function Type
TT=SO;	Transaction Type: value will always be SO.
OT=C;	Order Type: service order type; value will always be C: Change.
ORDNO=111111;	Order Number: service order number; 6 digits.
RSPNS=1;	Response: value will always be 1: Positive response.
TRN=1;	Transaction Number: Relates the sequence of messages between the SMS and LspAccess. The TRN value in this resulting C0 header will match the TRN value in the originating C3 header.
TSYS=SMSA;	Transmitting System: system entity code; value will always be SMSA.
RSYS=LSPDG;	Receiving System: system entity code; value will be always be LSPDG: LspAccess DataGate.
WC=314235;	Wire Center: work group responsible for handling errors in the SMS; value will be 6 digits.
}%	

Event 922: Update Request Negative Acknowledgement

Name	Type	Length	Description
data	string pointer		data defining the requested update

where data is: (although this is shown in a table, data is a continuous string without spaces)

```
*C0{                                SMS to LspAccess service Route Control Header section; contains
                                        order and routing information used by LspAccess in the proper
                                        processing of an Activation Response.
    FT=PRE;                         Function Type
    TT=SO;                          Transaction Type: value will always be SO.
    OT=C;                           Order Type: service order type; value will always be C: Change.
    ORDNO=111111;                   Order Number: service order number; 6 digits.
    RSPNS=2;                        Response: value will always be 2: Negative response.
    TRN=1;                          Transaction Number: Relates the sequence of messages between
                                        the SMS and LspAccess. The TRN value in this resulting C0
                                        header will match the TRN value in the originating C3 header.
    TSYS=SMSA;                      Transmitting System: system entity code; value will always be
                                        SMSA.
    RSYS=LSPDG;                     Receiving System: system entity code; value will be always be
                                        LSPDG: LspAccess DataGate.
    WC=314235;                      Wire Center: work group responsible for handling errors in the
                                        SMS; value will be 6 digits.
}%
*MSG{
    REC{                            Record Aggregate: One or more occurrences; each WTN will be in
                                        a separate RSC/REC section.
        ERCODE=000001;
        ERRTXT=THIS IS AN ERROR MESSAGE FOR ORDER NUMBER 1;
    }
}%
```

Event 923: Cancel Request Positive Acknowledgement

Name	Type	Length	Description
data	string pointer		data defining the requested update

where data is: (although this is shown in a table, data is a continuous string without spaces)

```
*C0{                                SMS to LspAccess service Route Control Header section; contains
                                        order and routing information used by LspAccess in the proper
                                        processing of an Activation Response.
    FT=CAN;                         Function Type: CAN for cancel.
    TT=SO;                          Transaction Type: value will always be SO.
    OT=C;                           Order Type: service order type; value will always be C: Change.
    ORDNO=111111;                   Order Number: service order number; 6 digits.
    RSPNS=1;                        Response: value will always be 1: Positive response.
    TRN=1;                          Transaction Number: Relates the sequence of messages between
                                        the SMS and LspAccess. The TRN value in this resulting C0
                                        header will match the TRN value in the originating C3 header.
    TSYS=SMSA;                      Transmitting System: system entity code; value will always be
                                        SMSA.
    RSYS=LSPDG;                     Receiving System: system entity code; value will be always be
                                        LSPDG: LspAccess DataGate.
    WC=314235;                      Wire Center: work group responsible for handling errors in the
                                        SMS; value will be 6 digits.
}%
```

Event 924: Cancel Request Negative Acknowledgement

Name	Type	Length	Description
data	string pointer		data defining the requested update

where data is: (although this is shown in a table, data is a continuous string without spaces)

```
*C0{                                SMS to LspAccess service Route Control Header section; contains
                                        order and routing information used by LspAccess in the proper
                                        processing of an Activation Response.
    FT=CAN;                         Function Type: CAN for cancel.
    TT=SO;                          Transaction Type: value will always be SO.
    OT=C;                           Order Type: service order type; value will always be C: Change.
    ORDNO=111111;                   Order Number: service order number; 6 digits.
    RSPNS=2;                        Response: value will always be 2: Negative response.
    TRN=1;                          Transaction Number: Relates the sequence of messages between
                                        the SMS and LspAccess. The TRN value in this resulting C0
                                        header will match the TRN value in the originating C3 header.
    TSYS=SMSA;                      Transmitting System: system entity code; value will always be
                                        SMSA.
    RSYS=LSPDG;                     Receiving System: system entity code; value will be always be
                                        LSPDG: LspAccess DataGate.
    WC=314235;                      Wire Center: work group responsible for handling errors in the
                                        SMS; value will be 6 digits.
}%
*MSG{
    REC{                            Record Aggregate: One or more occurrences; each WTN will be in
                                        a separate RSC/REC section.
        ERCODE=000001;
        ERRTXT=THIS IS AN ERROR MESSAGE FOR ORDER NUMBER 1;
    }
}%
```

Error Output Parameters

Event Numbers	Description
120	General Service Error
130	Application or LspAccess Error

Name	Type	Length
OrigEvent	long	
ErrorMsg	opaque	100

Function Descriptions

Due Date Availability

The Due Date service returns the current morning and afternoon availability of technicians over the next 28 days. It does not assign or reserve a due date.

Business or Residential Service Availability

Dispatch

The Dispatch function is used to determine the possibility of dispatching a technician *to a residential site*. It is a *possibility* because the actual dispatch request would occur only after the service order flows. This information is provided to the service representative in order to give the prospective customer notification that a technician may need to be dispatched. At this point in the pre-order process, it is always assumed that *business customers* will need a technician dispatched.

Unnumbered Addresses, Descriptive Addresses, and Unnamed Streets

As described in Address Validation, there are unnumbered addresses, descriptive addresses, and unnamed streets. To enter an unnumbered address or a descriptive address into the Dispatch function, the client must set the **no** field to the assigned house number (AHN) and set the **st** field to either the unnumbered address or descripive address preceded by "**@** " (*at-sign space*). To enter an unnamed street, the client must set the **no** field to the AHN and set the **st** field to the full "**@ , community-name**" (*at-sign space comma community-name*).

Other Dispatch information includes whether the facility is encapsulated, whether construction is necessary, whether the facility is in a guarded area, and/or the number of available and spare facilities.

The logic to determine whether a technician will be dispatched is:

```
If ( FAC < requested requested by the client ) {
  DISP=Y
  if ( ENCAP ) {
    if ( PCF ) {
      perform RPT PDL transaction
      if ( FAC + SPARES + DEFECTIVE < requested ) {
        CONST WK=Y
      }
    }
    else {
      CONST WK=Y
    }
  }
  else {
    perform RPT PDL transaction
    if ( FAC + SPARES + DEFECTIVE < requested ) {
      CONST WK=Y
    }
}
```

where

FAC	Available facilities.
DISP	Dispatch technician indicator.
ENCAP	Encapsulated terminal (the pairs are spliced together and sealed) indicator.
PCF	A loop status of Partial Connect Facilities. All facility segments (f2 through fn) are intact, however the f1 segment is missing. When the loop status equal this on an encapsulated line, a RPT PDL transaction is done.
RPT PDL	FACS transaction to determine the number of spares and defective facilities at the terminal address.
SPARES	Spare facilities found on the RPT PDL screen.
DEFECTIVE	Defective facilities found on the RPT PDL screen.
CONST WK	Construction work possible indicator. There are not enough current facilities, spares or defectives to satisfy the request or the line is encapsulated.

The business logic is handled in the DataGate service. It is possible that many screens may need to be traversed on the FACS system, and a RPT PDL transaction may need to be done, so response time will vary with the amount of paging through the screens.

Use of the emp Field in the FACSQuery Structure

It is advantageous for clients to pass an **emp** field (in the **FACSQuery** structure) in the format **DGATEx** (where ***x*** is a alphanumeric assigned by SWBT). A patch has been made to the FACS system to keep inquiry transactions from traversing additional screens when the **emp** field is in this format. This should help overall response time.

Input and Output Events

Input Event 300 yields one of the following:

1 Output Event 130 (failure: dispatch function error)
or
2 Output Event 120 (failure: general service error)
or
3 Output Event 131 (dispatch information)

Dispatch Error Messages

Address Validation

The PREMIS Legacy Application

Address Validation is done by accessing the PREMIS application. Business and residential addresses in SWBT territory can be validated, but the PREMIS application records only residential customer data.

Unlike other applications, PREMIS will not fail the validation outright if the input parameters are close but not precise. If the input parameters are close, PREMIS may return a list of choices or *near hits*. The client must examine these, adjust the input parameters, and resubmit the request.

PREMIS keeps track of a large amount of varied information. It attempts to interpret any input for which it does not get a hit. For example, if a client inputs a ZIP code for a Street Address Guide Area (the **saga** field in the input structure) of "63101" (downtown St. Louis) and an address of "201 Chestnut", the response received will be for that address in St. Charles—some 30 miles away. PREMIS maps the ZIP code to a larger geographic area SAGA mnemonic (SUBA: Suburban St. Louis, KCM: Kansas City Metropolitan...), then it disregards the ZIP code and searches the entire geographic area using the other criteria that the client has supplied.

The PREMIS application also requires standard street abbreviations:

- Directional indicators: N, S, E, W, NW, NE, SW, SE.
- Numbered addresses, example: 1234-1/2 Pine St, 123 S Main St, 64-11 22nd Terr
- Thoroughfare names

Searches for "225 South Harris Road" and "225 S Harris Rd" will probably yield two different results.

The client can limit the number of screens to display by setting the **no_output_pages** field (in the input structure). This is limited to 25 screens which together contain approximately 32K worth of information. A future release of the LspAccess service will eliminate this limitation.

A hit is defined as a validated address. An address may validate even if:

- the address is found in a different community;
- the address is found at a different ZIP code;
- the address has a different name; or
- the address has supplemental address information.

It is important to verify that the result that the user receives is the one that the user wants.

Location Information

There are three location levels in PREMIS. These are broadly designated as *apt* (level 1: apartment), *flr* (level 2: floor), and *bldg* (level 3: building). The possible designations for these levels are:

- Level 1: APT (apartment), UNIT, RM (room), SUIT (suite), LOT, and SLIP.
- Level 2: FLR (floor).
- Level 3: BLDG (building), PIER, and WING.

It is important for this information to be passed correctly when creating a service order. Because of this, DataGate will pass the level designations for levels 1 and 3 to CLECs. The level 2 designation is always FLR, so it will not be passed.

Note that these designations should not be passed to the LspAccess service in the **apt, flr** or **bldg** fields in the input structure for event 400. For example, send 1A, not APT 1A.

A maximum of twelve unique locations will be displayed for an address.

Unnumbered Addresses, Descriptive Addresses, and Unnamed Streets

There are many addresses that lack a street number or street name. Some of these may be identified by their route/box number or an *assigned house number* (AHN) assigned by SWBT). An example of an unnumbered address is "Highway M." An example of a descriptive address is "Pine Trailer Park." These are entered in the **addr** field in the input structure and are preceded by "@ " (*at-sign space address*).

If a community has addresses which have unnamed streets, the community's name is used in PREMIS as the street name. These AHNs can be displayed by preceding the community name with an "@ ," (*at-sign space comma space community-name*). The **rt** and **box**, **tn**, and/or **ln** fields must be populated in the input structure for unnumbered and unnamed streets, otherwise anaddress entered preceded by "@" is considered a descriptive address.

The **status** field is applicable for unnumbered address searches and is only used if no previous or current customer telephone number (**tn** field) or listed name (**ln** field) is available. There is one valid value:

X	This is used for an unnumbered address validation. If the address is validated, geographic segment information is returned.

Community Name and Inward Service Order Activity

If the community name (**com** field) returned with Event 420 is preceded by three asterisks "***," the community name is required on all incoming service orders.

Manual Intervention for Unnumbered Addresses

Contact the CLEC Service Center (CLECSC) when a customer, living at an unnumbered address which has never had phone service, requests a telephone number for that address. The unnumbered address can be validated (for example, **@ HIGHWAY M**), but the address must be given an assigned house number (AHN) before the address can be validated. A service representative at the CLECSC will determine in which geographical segment the customer is located and assign a house number. This information will be passed back to the CLEC. The CLEC should validate the address by populating the input structure with the unnumbered address (**addr** field) and the assigned house number (**ahn** field). Telephone number selection is possible once an AHN is associated with an unnumbered address.

The CLEC must still validate the address when a customer, living at an unnumbered address which has had phone service (current or previous customer service), requests a telephone number for that address. It is assumed that the customer and CLEC do not know the AHN for the address. The CLEC can attempt to validate the address by populating the input structure with additional information:

- the telephone number (**tn** field) of current or previous customer
- the route and box (**rt** and **box** fields)
- the listed name (**ln** field) of current or previous customer (last name only).

Use of the tn and ln Fields for Address Validation

A telephone number (`tn` field) or listed name (`ln` field) may be used to help validate a customer address.

A telephone number may be a current or previous number and, if included in the input structure, the address (`addr` field) is overridden and not used. Because PREMIS stores working and non-working customer account information, the use of the phone number may result in either a list of possible addresses. Address validation in this way may work for residential and coin customers, not business customers.

A listed name of the previous customer can only be used for unnumbered addresses. When the listed name is entered, the address (`addr` field) is still required. Address validation in this way may work for residential and coin customers, not business customers.

Output Events

The PREMIS screen output is returned in multiple structures. Each multi-part (one or many) section has a `last_ind` (last indicator) which indicates when the last section has been sent. A final "record completed" event (460) is passed to the client when all data has been sent. This event has no structure associated with it, so when it is received it can be removed with an MFlushMsg DataGate command.

Event 428

The service returns one address (`addr` field) at a time which may contain one community (`com` and `state` fields) and up to 12 associated ranges. If the `addr` field in the output structure is blank, it is assumed that the community that follows is a continuation of the previous address. If the `com` field in the output structure is blank, it is assumed that the ranges that follow are a continuation of the previous community. All addresses have been sent when `last_ind` in the output structure has the value of 1.

Event 429 and SAG area names (SAGAs)

If the address cannot be validated because the address and ZIP code supplied are in multiple SAGAs, a list of possible SAGAs is returned to the client. The client must then choose from those supplied.

Use of the object Field in the Query Structure

In order to create a single input query structure, all necessary fields for each transaction (**REQ PREM**, **REQ TMS**, **REQ MTMS**, **REQ MTMR**) are included. The `object` field for address validation should always be **PREM**.

Input and Output Events

Input Event 400 (with object=PREM) yields one of the following:

1 Output Event 130 (failure: premis error) (possible MSGs 06, 10, 11, 19, 67, 68)
or
2 A *hit* (MSGs none, 07, 08, 09, 13, 65, 71, 83, 99)
Output Event 420 (upper screen)
Output (one or many) Event 421 (lower screen)
Output (zero or many) Event 422 (supplemental addresses)
Output (zero or many) Event 423 (equal access providers [PIC list])
Output Event 460 (record completed)
or
3 Geographic segment information (MSG 30)
Output Event 420 (upper screen)
Output (One or many) Event 424 (geographic segment information)
Output Event 460 (record completed)
or
4 Street address guide information (MSGs 01, 14)
Output Event 420 (upper screen)
Output Event 429 (street address guide information)
Output Event 460 (record completed)
or
5 Descriptive address information (MSGs 03, 27)
Output Event 420 (upper screen)
Output (One or many) Event 425 (descriptive address information)
Output Event 460 (record completed)
or
6 Assigned house number information (MSGs 29, 70)
Output Event 420 (upper screen)
Output (One or many) Event 426 (assigned house number information)
Output Event 460 (record completed)
or
7 Miscellaneous address information (MSGs 02, 04, 05, 12)
Output Event 420 (upper screen)
Output (Zero, one or many) Event 427 (miscellaneous address information)
Output Event 460 (record completed)
or
8 Unnumbered address information (MSG 26)
Output Event 420 (upper screen)
Output (One or many) Event 428 (unnumbered address information)
Output Event 460 (record completed)
or
9 Output Event 120 (failure: general service error)

Error Output Parameters
PREMIS Error Messages

PREMIS Thoroughfare Designations

ALLEY	ALY	
ANNEX	ANX	
APARTMENT	APT	
ARCH	ARCH	This is also used as a street name.
ARCADE	ARC	
AVENUE	AV	This is frequently spelled out as a thoroughfare designator.
BARRACKS	BRRKS	This is frequently spelled out as a thoroughfare designator.
BASE	BS	
BEACH	BCH	
BEND	BND	
BLOCK	BLK	
BOARDWALK	BDWK	
BOULEVARD	BLVD	This is frequently spelled out as a thoroughfare designator.
BRANCH	BR	
BROOK	BRK	
BUILDING	BLDG	
CAUSEWAY	CSWY	
CENTER	CTR	This is also used as a street name.
CIRCLE	CIR	
CLOSE	CLS	
CONCOURSE	CONC	
CORNER	COR	
COURT	CT	
COURTHOUSE	CTHSE	
COURSE	CORS	
CREEK	CREEK	
CRESCENT	CRES	This is also used as a street name.
CROSS	CRS	This is also used as a street name.
CROSSING	CRSG	
CROSSROAD	CRSRD	
CROSSWAY	CRSWY	
CURVE	CURV	
CUTOFF	CO	This is frequently spelled out as a thoroughfare designator.
DEPOT	DEP	
DISTRICT	DIST	
DRIVE	DR	
EAST	E	This is also used as a street name and is abbreviated or spelled out.
EASEMENT	EAS	

PREMIS Thoroughfare Designations, continued

ESPLANADE	ESPLAND	
ESTATE	EST	
EXPRESSWAY	EXWY	This is also used as a street name and is spelled out. This is also frequently spelled out as a thoroughfare designator.
EXTENSION	EXT	
FIELD	FLD	
FOOT	FT	
FREEWAY	FRWY	
GARDEN	GRDN	
GROVE	GRV	This is also used as a street name.
HEAD	HD	
HEIGHTS	HTS	
HIGHWAY	HWY	This is also used as a street name and is frequently spelled out.
HOUSE	HSE	
ISLAND	ISL	
JUNCTION	JCTN	This is also used as a street name and is frequently spelled out.
LAKE	LK	This is also used as a street name and is spelled out.
LANE	LN	
LINK	LNK	
LOOP	LP	This is also used as a street name and is spelled out.
LOWER	LOW	
MALL	ML	
MANOR	MNR	This is also used as a street name and is spelled out.
MARKET	MKT	This is also used as a street name and is spelled out.
MEADOW	MDW	
MEW	MEW	
MOUNT	MT	
NEAR	NR	
NECK	NK	
NORTH	N	This is also used as a street name and is abbreviated or spelled out.
NORTHEAST	NE	This is also used as a street name and is abbreviated or spelled out.
NORTHWEST	NW	This is also used as a street name and is abbreviated or spelled out.
OVAL	OV	
PARK	PK	This is also used as a street name and is usually spelled out. This is frequently spelled out as a thoroughfare designator.
PARKWAY	PKWY	This is also used as a street name and is frequently spelled out.
PASS	PS	
PATH	PA	
PIER	PR	

PREMIS Thoroughfare Designations, continued

PIKE	PKE	This is also used as a street name and is spelled out.
PLACE	PL	
PLAZA	PLZ	This is also used as a street name and is usually spelled out. This is frequently spelled out as a thoroughfare designator.
POINT	PT	This is frequently spelled out as a thoroughfare designator.
POND	PD	
PROMENADE	PROM	
RAILROAD	RR	
RAILWAY	RY	
RIDGE	RDG	This is also used as a street name and is spelled out.
ROAD	RD	This is also used as a street name and is frequently spelled out. It is also spelled out as a thoroughfare in some areas.
ROADWAY	RDWY	
ROUTE	RT	
ROW	ROW	
RUE	RUE	
RURAL FREE DELIVERY	RFD	
SHORE	SH	This is also used as a street name and is spelled out.
SHOREWAY	SHWY	This is also used as a street name and is spelled out.
SLIP	SLIP	
SOUTH	S	This is also used as a street name and is abbreviated or spelled out.
SOUTHEAST	SE	This is also used as a street name and is abbreviated or spelled out.
SOUTHWEST	SW	This is also used as a street name and is abbreviated or spelled out.
SPRING	SP	This is also used as a street name and is spelled out.
SQUARE	SQ	This is frequently spelled out as a thoroughfare designator.
STATION	STA	This is also used as a street name and is spelled out. This is frequently spelled out as a thoroughfare designator.
STREET	ST	
TERMINAL	TERM	
TERRACE	TERR	This is also used as a street name and is spelled out.
TRACK	TRK	
TOWER	TWR	This is also used as a street name and is spelled out.
THRUWAY	THRWY	
TRAFFICWAY	TRFWY	This is also used as a street name and is abbreviated or spelled out.
TRAIL	TR	This is also used as a street name and is spelled out.
TUNNEL	TUN	
TURN	TRN	
TURNPIKE	TRNPK	
UPPER	UP	

PREMIS Thoroughfare Designations, continued

VALLEY	VAL	This is also used as a street name and is abbreviated or spelled out.
WALK	WK	
WAREHOUSE	WHSE	
WAY	WAY	
WEST	W	This is also used as a street name and is spelled out. It is frequently spelled out as a thoroughfare designator.
WHARF	WHF	
WOOD	WD	
YARD	YD	

SAGAs	
SL	St. Louis, MO
ELD	Eldon, MO
SPG	Springfield, MO
KCM	Kansas City, MO
CAP	Cape Girardeau, MO
SUBA	Suburban St. Louis, MO
SJO	St. Joseph, MO
EAST	Eastern, AR
WEST	Western, AR
CENT	Central, AR
KCK	Kansas City, KS
TOP	Topeka, KS
WIC	Wichita, KS
SLN	Salina, KS
HUT	Hutchinson, KS
OK	Oklahoma City, OK
TU	Tulsa, OK
EN	Enid, OK
ST	Stillwater, OK
LW	Lawton, OK
MU	Muskogee, OK
DA	Dallas, TX
FW	Fort Worth, TX
LT	Longview/Tyler, TX
WF	Wichita Falls, TX
HO	Houston, TX
SU	Suburban Houston, TX
AU	Austin, TX
AUA	Suburban Austin, TX
AUB	Suburban Austin/El Paso, TX
SA	San Antonio, TX
SAB	Suburban San Antonio/Valley and South, TX
SAC	Suburban San Antonio/Coastal, TX

Primary Interexchange Carrier (PIC) List

PIC lists are obtained by accessing the PREMIS application. When an address is validated and the **carrier_info** field in the input structure of event 400 is set to 1, the PIC list (if available) is returned as one or more event 423s. If PIC information is *not* needed, the **carrier_info** field in the input structure of event 400 can be set to 0 (zero). Setting this field to 0 will significantly reduce response time when a simple address validation is needed.

Upon the receipt of an update, the PIC lists within PREMIS are changed immediately. (A request for a PIC list in the morning may have different results in the afternoon if an update is made.) The updated carrier information is placed last on the list until the PIC lists are scrambled (which resequences the order of the carriers every Friday evening).

Input and Output Events

The PREMIS screen output is returned in multiple structures. Each multi-part ("one or many") section has a **last_ind** (last indicator) which indicates when the last section has been sent. A final "record completed" event (460) is passed to the client when all data has been sent. This event has no structure associated with it, so when it is received it can be removed with an MFlushMsg DataGate command.

See Address Validation for events regarding addresses that succeed or fail validation.

Error Output Parameters

Reserve Telephone Number(s)

The PREMIS Legacy Application

Before the telephone number is reserved, the address supplied by the client is validated (via the PREMIS **REQ PREM** transaction). Unlike other applications, PREMIS will not fail the validation outright if the input parameters are close but not precise. In some cases where the input parameters are close, PREMIS may return a list of choices or *near hits*. The client must examine these, adjust the input parameters, and resubmit the request.

A *hit* results in the telephone number reservation or return information. A hit is defined as a validated address. An address may validate even if:

- the address is found in a different community;
- the address is found at a different ZIP code;
- the address has a different name; or
- the address has supplemental address information.

It is important to have the correct validated address before assigning a telephone number.

If the validation of the address fails, the result of the failed validation transaction (**REQ PREM**) is returned. This information may be many screens long. The client can limit the number of screens that they wish to see by setting the `no_output_pages` field (in the input structure). This is limited to 25 screens which together contain approximately 32K worth of information. A future release of the LspAccess service will eliminate this limitation. See Address Validation for more information on addresses that fail validation as well as events that may be received when address validation fails.

Use of the object Field in the Query Structure

In order to create a single input query structure, all necessary fields for each transaction (**REQ PREM**, **REQ TNS**, **REQ MTNS**, **REQ MTNR**) are included. The `object` field for a single telephone number reservation should always be **TNS**. The `object` field for a multiple (two to five) telephone number reservation should always be **MTNS**. The `object` field for a telephone number return (one to five numbers) should always be **MTNR**.

Options when Selecting Telephone Numbers

A prospective customer may request a specific billing date. If so, the **bd** field is populated in the input structure. Not all billing dates are valid for every address as they are based on the NPA NNX of the residence. The **bd** field cannot be used in conjunction with either the **npa** or the **nnx** fields.

A prospective customer may request a specific NPA or NNX or combination of NPA NNX (the **npa** and **nnx** field in the input structure). The telephone number selection will succeed depending on the available NPAs and NNXs available for this residence. The **npa** or the **nnx** fields cannot be used in conjunction with the **bd** field.

Local Service Providers will use the values of **LSP** (basic service) and **LSPE** (extended service) for the `tcat` (telephone category) field in the input structure.

The Return of Reserved Telephone Numbers

Telephone number selection with REQ TNS or REQ MTNS retrieves numbers that have been on the available list for the longest time. When telephone numbers are returned, they are added to the end of the available list. The list may have a very limited supply of numbers, so subsequent telephone number selections may show numbers that have been returned recently. It is vitally important to return selected phone numbers that will not be used. Telephone numbers are in short supply in certain exchanges.

Vanity and Sequential Telephone Number Reservation

Due to limitations with the PREMIS application, the selection of vanity telephone numbers and sequential telephone numbers is not available.

Output Events

The PREMIS screen output is returned in multiple structures. Each multi-part ("one or many") section has a `last_ind` (last indicator) which indicates when the last section has been sent. A final "record completed" event (460) is passed to the client when all data has been sent. This event has no structure associated with it, so when it is received it can be removed with an MFlushMsg DataGate command.

Event 428

The service returns one address (the `addr` field) at a time which may contain one community (the `com` and `state` fields) and up to 12 associated ranges. If the `addr` field in the output structure is blank, it is assumed that the community that follows is a continuation of the previous address. If the `com` field in the output structure is blank, it is assumed that the ranges that follow are a continuation of the previous community. All addresses have been sent to the client when `last_ind` in the output structure has the value of 1.

Event 429 and SAG area names (SAGAs)

If the address cannot be validated because the address and ZIP code supplied are in multiple SAGAs, a list of possible SAGAs is returned to the client. The client must then choose from those supplied.

Input and Output Events for:

- Reserving a Single Telephone Number
- Reserving Two to Five Telephone Numbers
- Returning One to Five Telephone Numbers

Error Output Parameters
PREMIS Error Messages

Reserve Single Telephone Number

Input Event 400 (with object=TNS) yields one of the following:

1 Output Event 130 (failure: premis error) (possible MSGs 06, 10, 11, 19, 38, 48, 50, 63, 67, 68, 72)
or
2 Address validation failure: Geographic segment information) (MSG 30)
Output Event 420 (upper screen)
Output (One or many) Event 424 (geographic segment information)
Output Event 460 (record completed)
or
3 Address validation failure: Street address guide information (MSGs 01, 14)
Output Event 420 (upper screen)
Output Event 429 (street address guide information)
Output Event 460 (record completed)
or
4 Address validation failure: Descriptive address information (MSGs 03, 27)
Output Event 420 (upper screen)
Output (One or many) Event 425 (descriptive address information)
Output Event 460 (record completed)
or
5 Address validation failure: Assigned house number information (MSGs 29, 70)
Output Event 420 (upper screen)
Output (One or many) Event 426 (assigned house number information)
Output Event 460 (record completed)
or
6 Address validation failure: Miscellaneous address information (MSGs 02, 04, 05, 12)
Output Event 420 (upper screen)
Output (zero, one, or many) Event 427 (miscellaneous address information)
Output Event 460 (record completed)
or
7 Address validation failure: Unnumbered address information (MSG 26)
Output Event 420 (upper screen)
Output (One or many) Event 428 (unnumbered address information)
Output Event 460 (record completed)
or
8 Output Event 120 (failure: general service error)
or
9 Output Event 121 (telephone number) (MSGs 46, 47)

Error Output Parameters

Reserve Two to Five Telephone Numbers

Input Event 400 (with object=MTNS) yields one of the following:

1 Output Event 130 (failure: premis error) (possible MSGs 06, 10, 11, 19, 38, 48, 50, 63, 67, 68, 72)
or
2 Address validation failure: Geographic segment information (MSG 30)
Output Event 420 (upper screen)
Output (One or many) Event 424 (geographic segment information) (MSG 30)
Output Event 460 (record completed)
or
3 Address validation failure: Street address guide information (MSGs 01, 14)
Output Event 420 (upper screen)
Output Event 429 (street address guide information)
Output Event 460 (record completed)
or
4 Address validation failure: Descriptive address information (MSGs 03, 27)
Output Event 420 (upper screen)
Output (One or many) Event 425 (descriptive address information)
Output Event 460 (record completed)
or
5 Address validation failure: Assigned house number information (MSGs 29, 70)
Output Event 420 (upper screen)
Output (One or many) Event 426 (assigned house number information)
Output Event 460 (record completed)
or
6 Address validation failure: Miscellaneous address information (MSGs 02, 04, 05, 12)
Output Event 420 (upper screen)
Output (zero, one, or many) Event 427 (assigned house number information)
Output Event 460 (record completed)
or
7 Address validation failure: Unnumbered address information (MSG 26)
Output Event 420 (upper screen)
Output (One or many) Event 428 (unnumbered address information)
Output Event 460 (record completed)
or
8 Output Event 120 (failure: general service error)
or
9 Output Event 122 (telephone numbers) (MSGs none, 46, 47)

Error Output Parameters

Return One to Five Telephone Numbers

Input Event 400 (with object=MTNR) yields) one of the following:

1 Output Event 130 (failure: premis error) (possible MSG 57)
or
2 Address validation failure: Geographic segment information (MSG 30)
Output Event 420 (upper screen)
Output (One or many) Event 424 (geographic segment information) (MSG 30)
Output Event 460 (record completed)
or
3 Address validation failure: Street address guide information (MSGs 01, 14)
Output Event 420 (upper screen)
Output Event 429 (street address guide information)
Output Event 460 (record completed)
or
4 Address validation failure: Descriptive address information (MSGs 03, 27)
Output Event 420 (upper screen)
Output (One or many) Event 425 (descriptive address information)
Output Event 460 (record completed)
or
5 Address validation failure: Assigned house number information (MSGs 29, 70)
Output Event 420 (upper screen)
Output (One or many) Event 426 (assigned house number information)
Output Event 460 (record completed)
or
6 Address validation failure: Miscellaneous address information (MSGs 02, 04, 05, 12)
Output Event 420 (upper screen)
Output (zero, one, or many) Event 427 (assigned house number information)
Output Event 460 (record completed)
or
7 Address validation failure: Unnumbered address information (MSG 26)
Output Event 420 (upper screen)
Output (One or many) Event 428 (unnumbered address information)
Output Event 460 (record completed)
or
8 Output Event 120 (failure: general service error)
or
9 Output Event 123 (telephone number(s) returned)

Error Output Parameters

Service Availability

Service Availability returns universal service order codes (USOCs) that are available to the customer. This information is based on the customer's telephone number.

English Translations of USOCs

The CLEC has the option to request English translations of USOCs. This is accomplished by setting the **translation_desired** field to 1. This field is found in the input structure.

Business or Residential Service Availability

The client has the option to request Business or Residential services that are available to the customer. This is accomplished by specifying either **B** or **R** in the **bus_res_ind** in the input structure. If both are required, then two separate requests must be made by the client.

AECN Use

An AECN (Alternate Exchange Company Number) can now be used to retrieve only those services available to the CLEC for the given input telephone number. **AECN** and **discard_on_nomatch** are optional fields and default to null and 0, respectively.

If **AECN** is null, the service will return all available services for that telephone number, regardless of AECN. If **AECN** is set and **discard_on_nomatch** is set to 0, the service will return all data for that telephone number. If **AECN** is set, a matching AECN is found, and **discard_on_nomatch** is set to 1, the service will return all data that matches the input telephone number and AECN. If **AECN** is set and **discard_on_nomatch** is 1 and no match is found for the input AECN, then an empty structure (no data) will be returned. Note that AECNS are assigned on a state by state basis depending on what services will have been negotiated and, therefore, may be different for each state.

Input and Output Events

Input Event 600 yields one of the following:

1 Output Event 130 (failure: service availability application error)
or
2 Output Event 120 (failure: general service error)
or
3 Output (One or More) Event 210 (List of Available Services)

One or more output events list all USOCs available to the customer that are possible. The output event structures return five USOCs at once. All USOCs have been sent to the client when **last_ind** in the output structure has the value of 1.

Service Availability Error Messages

Customer Service Record

This service accepts a working telephone number (WTN) and outputs service and equipment associated with a billing telephone number (BTN) but not a WTN (optional), additional listing information associated with a BTN (optional), a single summary record in conjunction with that number, and one or more detailed records which describe the existing universal service order codes (USOCs) and feature identifiers (FIDs) for that customer. There are many background DataGate events, such as changing the WTN to the BTN, retrieving the customer service records, and (optionally) translating of the USOCs and FIDs into English.

The Telecommunications Act of 1996 requires that *written authorization* be received from a customer for a CLEC to obtain that customer's service records. The input structure contains authorization fields that must be completed or the request will fail. The **writ_auth** field must be equal to **Y** which states that written authorization has been received from the customer which allows a CLEC to obtain that customer's service records. The optional **LOA_indicator** field should contain the name of the customer which is found on the letter of authorization. This information is logged (as are the required **lsp** and **emp** fields) for auditing purposes.

English Translations of USOCs and FIDs

The CLEC has the option to request USOCs and/or FIDs to be translated into English. This is accomplished by setting the **usoc_translation_desired** field and/or the **fid_translation_desired** field to 1. Both fields are found in the input structure.

Input and Output Events

Input Event 700 yields one of the following:

1 CSR records:
  Loop through one or more BTNs
    Output Event 701 (Billing Telephone Number)
    Output (Zero, One or More) Event 12 (Service & Equipment associated with BTN Detail)
    Output (Zero, One or More) Event 13 (Additional listing information associated with BTN Detail)
    Loop through one or more WTNs:
      Output Event 702 (Working Telephone Number or circuit name)
      Output Event 10 (CSR Summary)
      Output (One or More) Event 11 (CSR Service and Equipment Detail)
    End WTN loop
  End BTN Loop
  Output Event 760 (record completed)
or
2 Output Event 130 (failure: CSR error)
  Output Event 760 (record completed)
or
3 Output Event 120 (failure: general service error)
  Output Event 760 (record completed)

Five different structures are associated with the four to six different events received:

- Event 701 is the billing telephone number that will identify the BTN related to subsequent WTN or circuit entries.
- Event 12 contains details of the service and equipment associated with the BTN but not necessarily the WTN. USOC and FID information is passed back in the same manner as event 11. This event is only received if the **service_and_equip_desired** flag is set in the input structure.