A. Appendix A — FCIF Overview

The Flexible Computer Interface Form (FCIF) is a data exchange language developed for inter-operating systems applications communications. It was developed to "minimize" message sizes for the purposes of network communications, decouple the component systems with respect to release transitioning, and provide for interface extensibility.

A.1 FCIF Language

In the FCIF language,* the kernel unit of data is the *data item*. A data item consists of an FCIF tag and value combination, with the tag delimited from the value by the character "=" and the value terminated by the character ";". A tag is defined as a string of numbers or upper-case letters. The FCIF data value is a sequence of zero or more ASCII or EBCDIC characters (excluding control characters other than line feed and tab). If special FCIF delimiter characters are needed within a data value, they must be preceded by a backslash ("\"), which is interpreted as an escape. (See Section A.5 for information on ASCII to EBCDIC character translation problems.) Therefore, the data item representing "street" could be of the form:

STR=MAIN ST;

The FCIF *data aggregate* is a named grouping of one or more FCIF data items and/or other FCIF data aggregates. The aggregate tag is an FCIF tag as defined above. The aggregate tag precedes the grouped data, which is enclosed between the characters "{" and "}", respectively. Therefore, the aggregate representing "basic address" could be of the form:

BADR{STR=MAIN;HNBR=123;CN=MYTOWN;ST=KANSAS;}

Given the notion of items and aggregates, the FCIF language allows for explicit hierarchical data relationships to an arbitrary number of levels. The FCIF syntax allows the definition of an arbitrary, hierarchical tree structure in which each data item corresponds to a terminal node on the tree and each data aggregate corresponds to a branch node. For example, the *nested* aggregate structure representing a "complete address" (basic plus supplemental) could have the form:

* The information in this Appendix is taken from two Bellcore Memoranda for File: (1) Roberto, J. T., "Flexible Computer Interface Form (FCIF), A Data Exchange Language," April 29, 1987; and (2) Chol, K. K., "TVO and FCIF Interface," June 20, 1988.

CADR{BADR{STR = MAIN;HNBR = 123;CN = MYTOWN;
ST = KANSAS;}SADR{UNIT = APT 1A;FLR = 2;}}

Once the data hierarchy is defined for a given construct between two FCIF partners, all allowable data items need not be sent and the sequence of the items within an aggregate is optional.

The FCIF section is used to group data items and data aggregates by the different general activities a component system typically performs. An FCIF section is denoted by surrounding the grouped data by the characters "*" (for the beginning of the section) and "%" (for the end of the section). The first aggregate in a section is commonly referred to as the section name. Thus, a valid FCIF section could be:

*MSG{REC{APSO = Y;DST = LAC;}TXT = NO FACILITIES;}%

In actual uses of the FCIF language, inter-component system messages typically have multiple sections. Each section groups similar data corresponding to application-specific processing.

A.2 Semantics

The semantics of a language can be viewed simply as the relationship between the structure of the language and what the language denotes. In the development of the FCIF language, a fundamental decision was made to make the language "semantic-less." This means that there are no predefined meanings associated with its kernel elements, namely, data items. Therefore, the semantic interpretation of any given FCIF message (as defined by the contract) is left to the receiving component system. Such a message (or part of a message) received by another component system could be interpreted differently, and have a different meaning. In practical terms, the FCIF language has no predefined verbs, keywords, implied actions, or operators. However, such elements could be defined using the FCIF language in the implementation of any contract.

As an example of the flexibility of a semantic-less language, consider the following three constructs, which represent a "disconnect" and two "circuits," respectively.

DIS = TN1[2019812464], TN1[2019812465];
ACT = OUT; CKT{TN = 2019812464; TN = 2019812465;}
REMOVE{CKT = TN[2019812464]; CKT = TN[2019812465];}

A.3 Parsing FCIF

When an FCIF message is decomposed, an application usually requires the tag and the data associated with the tag. The tag by itself may not be very useful, since its context within the grouping of FCIF aggregates may affect its meaning. The following example illustrates an FCIF sequence:

*ACL{TP{ID=CT15-0013;}OE{ID=002-000-001;}}%

In this example, there are two occurrences of the tag "ID". The meaning of "ID" varies, depending on whether it appears in the TP or OE aggregate.

As strings of ASCII (or EBCDIC) characters, FCIF messages are intrinsically readable. In actual uses of the FCIF language, "white space," tab, and new line characters have been used extensively to make FCIF messages more readable with respect to message structure. This enhanced readability has substantially reduced the time and effort involved in tracking down inter-system transaction failures.

A.4 FCIF Syntax

To describe the formal syntax of the FCIF language, the following notation language elements will be used:

Element	Definition
< x >	Describes the object named "x"
::=	Can be formed from
|	A separator for alternative constructs (exclusive OR)
(x) (i,j)	A repeating specification for the object "x" to be iterated at least "i" times but not more than "j" times, in which j> =i> =0.
"..."	A non-null terminal symbol sequence

Using the notation language specified above, the syntax can be expressed in the form of the following statements:

< message> ::= (< section>) (1,N)

< section> ::= < white space> < start of section> (< data aggregate> | < data item>) (1,N < end of section> < white space>

< start of section > ::= *

< end of section > ::= %

< data aggregate > ::= < tag > < left aggregate delimiter > (< data aggregate > | < data item >)(1,N) < right aggregate delimiter >

< data item > ::= < tag > < tag delimiter > < value > < data item delimiter >

< tag > ::= (< letter > | < digit >)(1,N)

< value > ::= (< letter > | < digit > | < ASCII special character > | < letter1 > | < control character >) (0,N)

< tag delimiter > ::= < white space > < equal sign >

< data item delimiter > ::= < data item termination > < white space >

< left aggregate delimiter > ::= < white space > < start of aggregate >

< right aggregate delimiter > ::= < white space > < end of aggregate > < white space >

< start of aggregate > ::= {|<

< end of aggregate > ::= }|>

< data item termination > ::= ;

< white space > ::= (< control character > | < one blank space >) (0,N)

< letter > ::= A|B|C|...|Z|a|b|c|...|z

< digit > ::= 0|1|2|3|4|5|6|7|8|9

< ASCII or EBCDIC special character > ::= Environmental writable characters except < letter > < digit > < letter1 > < control character >

< vertical bar > ::= |

< letter1 > ::= < backslash > < FCIF special character >

< backslash > ::= \

< fcif special character > ::= ;|{|}|%|=|*|< back slash > |<|>

< control character > ::= < tab > | < line feed >

< equal sign > ::= =

< tab > ::= tab character

< line feed > ::= line feed character

< one blank space > ::= space character

NOTE

An "empty" aggregate is not a valid FCIF construct. A null value is an acceptable FCIF construct, but SNS contracts do not allow null values. For example, the use of "TN{}" to represent an empty aggregate is not valid. Likewise, the use of "BAD=;" to convey a tag with a null value is not allowed. See Appendix B for appropriate tag size ranges.

A.5 Character Translation Problem

For inter-component system communication in which the ASCII character set is not available, an ASCII to EBCDIC (and vice versa) translation can be performed at the communication level. Applications should not use characters that may cause translation problems if communication to foreign character sets is desired. **Only environmental writable (non-binary) characters can be converted into FCIF messages.** The characters that may cause translation problems are:

ASCII: [ ] ! ^ |

EBCDIC: ? ! | ~ \

B. Appendix B – SNS FCIF Tag Descriptions

Table B-1. SNS FCIF Tag Descriptions

SNS FCIF Tag Descriptions (1 of 14)			
Tag	**Size**	**Code Set**	**Description**
ACCT	1-4	Alpha/Num	Customer account; criteria used in identifying spare loops
ACT	1	O,N,R	Action code – old (O), new (N), or replace (R)
ACTIND	1	B, D, E, N	Activation indicator. Indicates if customer's feature is buttonable (B), dial accessed (D), either (E), or does not apply (N).
AHN	1-8	Alpha/Num	Assigned house number is a reference number assigned to an address in lieu of a house number. Only BAD *or* AHN may exist in an address.
ALL	1	Y,N	Return all features for each returned feature package (Y), or return only feature packages (N)
ALLSTAT	1	Y,N	Delete all TN entries regardless of STAT code
ALLTN	1	N	All TNs are *not* required for selection.
ALT	1-67	Alpha/Num	Alternate address is the name of a street that is an alternate name for a primary street name in PREMIS.
BAD	1-12	Alpha/Num	Basic address designation identifies the house number portion of the address. Only BAD *or* AHN may exist in an address.
BO	1-9	Alpha/Num	Business office serving customers in a specific geographic area
CAT	1-3	Numeric	Customer access treatment code

SNS FCIF Tag Descriptions (2 of 14)			
Tag	Size	Code Set	Description
CATOPT	4	F,G	Catalog option indicator: feature (F) or group (G)
CDRC	5		Catalog data return code. Indicates the results of catalog data processing.
CKL	1-15	Alpha/Num	Circuit location identifier used to identify a circuit termination (e.g., CKL 1)
CLLI	11	Alpha/Num	CLLI code that identifies a network element
CLS	1-27	Alpha/Num	CLCI serial number that identifies a circuit
CNA	1-32	Alpha/Num	Community in which address is located
CNA1	1-29	Alpha/Num	Alternate community name 1
CNA2	1-29	Alpha/Num	Alternate community name 2
CNARQ	1	Y	Community name required indicator is a positive indicator to identify whether the PREMIS primary community name is required on the service order for PREMIS service order processing.
CO	3	Alpha/Num	A code to identify the group or groups of telephone numbers allocated for subscribers served within a specific geographic area
CON	1	Y	Consecutive indicator. Indicates that consecutive TNs are desired.
CONFIRM	1	Y	Confirmation indicator. Confirms that a proposed action should take place.
CORSFX	1-2	Alpha/Num	Correction suffix on an order
CPEMAN	1-20	Alpha/Num	CPE manufacturer

SNS FCIF Tag Descriptions (3 of 14)			
Tag	Size	Code Set	Description
CPEMOD	1-20	Alpha/Num	CPE model
CPENAME	1-30	Alpha/Num	CPE name
CPEREG	1-17	Alpha/Num	CPE registration number
CPRC	5	Alpha/Num	Customer premises equipment return code. Indicates the processing error.
CTC	1	B,C,R,I	Control code: build (B), change (C), remove (R), or inquiry (I)
CTX	1-18	Numeric	Centrex group identifier
CUST	1-20	Alpha/Num	Customer name
DAY	1-2	Numeric	Day portion of the date
DDRC	5		Description data return code. Indicates the results of name description data processing.
DESC	1-50		Description name. The long name of the feature or feature group.
DESCRIP	2-50	Alpha/Num	Descriptive address
DIR	1-9	Alpha/Num	A code to identify a telephone directory area for listing and delivery purposes
DIS	1	Y,N	Display flag. Indicates if CPE can support features that require a display.
DPA	1-15	Alpha/Num	Different premises address identifier used to identify a circuit termination (e.g., DPA 1)
ECHO	unlimited	Alpha/Num	Echo data is used to hold data that is to be returned to the originator untouched.
EID	1-10	Alpha/Num	The actual elevation identifier of the location ETYP (e.g., FLR)

SNS FCIF Tag Descriptions (4 of 14)			
Tag	Size	Code Set	Description
ELACTIND	1	B, D, E, N	Electronic set activation indicator: buttonable (B), dial accessed (D), either (E), or not applicable (N).
ELECSET	1	S, D, P, U	Identifies the feature: electronic business set feature (S), electronic business set subset feature (D), assignable only to the primary number (P), or unavailable as an electronic business set feature (U).
EMBFLG	1	Y	Indicates whether a switching entity has been embargoed.
EMBLVL	3	GSG or RNG	Indicates the level at which the embargo is set. This tag is required if the embargo aggregate (EMB) exists.
EMBRMK	1-72	Alpha/Num	The explanation of the embargo.
ETYP	1-4	Alpha/Num	The type of elevation to which the EID data field applies.
EXCH	1-4	Alpha/Num	Exchange is the code for a geographic area where an approved rate structure for basic service applies.
FAI	1	B,D,E,N	Feature activation indicator: buttonable (B), dial accessed (D), either buttonable or dial accessed (E), or not dial accessed or buttonable (N).
FERC	5	Alpha/Num	Feature exception return code. Indicates the results of feature exception processing.
FGRP	8		Feature group tag. Identifies the group that the feature belongs to.
FO	1	Y	Foreign office indicator
FPKG	1-15	Alpha/Num	Feature package name.

SNS FCIF Tag Descriptions (5 of 14)			
Tag	Size	Code Set	Description
FPRC	5		Feature package return code. Indicates the results of feature package data processing.
FTR	1-8	See Feature Catalog.	Network element feature name.
FTRDES	1-50	Alpha/Num	Feature description
FTRSCP	1	B,S,D,P	Scope of feature on an electronic set: business set feature (B), subset feature (S), directory number feature (D), or primary number feature (P).
GRPRC	5	Numeric	Indicates the results of the CTX database validations.
GRPTYP	2	NC, CC, RC	Group type: non-Centrex (NC), combined (CC), or regular Centrex (RC)
HHV	1-13	Alpha/Num	High house number value in a numbered address range
HILN	4	Numeric	High line number in a TN range
HKEY	1	Y,N	Dedicated hold key flag
HOUR	1-2	Numeric	Hour portion of the time
HTNERR	5	Numeric	Error code associated with the specific occurrence of HTN aggregate for a hunt group
HTYP	1-3	RG,CIR	Hunting type: regular (RG) or circular (CIR)
IERC	3-5	Alpha/Num	Input error return code. Indicates why the input request is invalid.

SNS FCIF Tag Descriptions (6 of 14)			
Tag	Size	Code Set	Description
INQOPT	3	SAG, NEI, PMI, NEG	Service Negotiation Support Inquiry Option that identifies the type of inquiry: Street Address Validation Inquiry (SAG), Network Element Inquiry (NEI), Product Marketing Inquiry (PMI), or Negotiation Inquiry (NEG).
INTCPT	3	CNT, CTC, DNT, DTC	Intercept status: operator intercept for change order (CNT), machine intercept for change order (CTC), operator intercept for disconnect (DNT), or machine intercept for disconnect (DTC).
LCC	3	Alpha/Num	Line class code
LCL	1-10	Alpha/Num	Identifies local information associated with a particular geographic area
LHV	1-13	Alpha/Num	Low house number value in a numbered address range
LINE	4	Numeric	Line associated with a telephone number
LISTTHRS	1-4	Numeric	List threshold
LOLN	4	Numeric	Low line number in a TN range
LPRC	3	Alpha/Num	Loop return code. Indicates the results of any loop inquiries performed.
LURC	3	Alpha/Num	Living unit return code. Indicates the results of living unit validation.
MADN	1	Y,N	MADN flag. Indicates a multiple appearance directory number.

SNS FCIF Tag Descriptions (7 of 14)			
Tag	Size	Code Set	Description
MAXCA	1-3	Numeric	Maximum number of call appearances allowed
MAXKEY	1-3	Numeric	Maximum key number on CPE.
MIN	1-2	Numeric	Minute portion of the time
MKSEG	1	R = Residence, P = Business, M = Major, C = Coin, G = General, I = Interlata carrier, A = Mobile communications	Market segment indicator; criteria used in identifying spare loops
MODE	4-5	CONV, MAINT	Contract origin
MONTH	1-2	Numeric	Month portion of the date
MTNRC	5	Numeric	Indicates the results of the TNLIST database validations.
MXSCH	1-5	Numeric	Maximum members in a series completion hunt group
MXSCHP	1-5	Alpha/Num	Maximum SCH groups in which a single TN may participate.
NDIOPT	2-5	CUST, NE, FPKG, FGRP, SCH, CPE	Network data inquiry option
NDRC	3,5	Alpha/Num	Network data return code
NEGACT	1	A,C	Negotiation activity: add lines (A), change existing service (C)

SNS FCIF Tag Descriptions (8 of 14)			
Tag	Size	Code Set	Description
NEGEN	1-10	4.2, 5, 6, BCS 28, BCS 29, BCS 30, BCS 31	Network element generic
NERC	3	Alpha/Num	Network element return code. Indicates the results of determining network element accessibility.
NETYP	1-15	5ESS, DMS100	Network element type
NOTICE	1	Y	Confirmation notice indicator used in loop reservations
NPA	3	Numeric	The numbering plan area identifies the area code for a particular geographic area.
NUMCF	1-2	Numeric	Number of spare/reserved loops that are connected facilities
NUMLP	1-2	Numeric	Number of loops to inquire about or reserve
NUMRET	1-5	Numeric	Number of TNs returned
NUMRSV	1-2	Numeric	Number of loops reserved
NUMSEL	1-5	Numeric	Number of TNs selected
NUMSP	1-2	Numeric	Number of spare loops that are available to support the service
NUMTN	1-5	Numeric	Number of TNs to select
NXX	3	Numeric	NXX associated with a telephone number

SNS FCIF Tag Descriptions (9 of 14)			
Tag	Size	Code Set	Description
OFFHOLD	1	Y	Off hold indicator. Indicates that the negotiation dialogue should be taken off hold.
ONETOUCH	1	Y,N	One touch flag. Indicates CPE has speakerphone feature.
OPT	1	Y,N	Optional flag. Indicates that feature is optional in a feature package.
ORDNUM	1-12	Alpha/Num	Order number
ORDPASS	3	PRE, PCN, CAN	Order pass: pre-completion (PRE), post-completion (PCN), or cancellation (CAN)
ORDTYP	1	C	Order type: change (C)
PC	1-9	Alpha/Num	Identifies local information associated with a particular geographic area.
PD	1-9	Alpha/Num	Plant district identifies the plant installation district for a geographic area.
PFO	1-13	Alpha/Num	Planned facilities order number used in placing a loop reservation
PIC	3-4	Alpha/Num	Predesignated interexchange carrier
PMRC	3 or 5	Alpha/Num	Product marketing return code. Indicates the results of determining product marketing conditions.
PROD	1-30	Any value *except* NONE.	Product name. **Note** that in the SNS Release 2.0 and below, the product is restricted to 25 characters only.

SNS FCIF Tag Descriptions (10 of 14)			
Tag	Size	Code Set	Description
PROP	1	Y, N, A	Propagate option indicator. Indicates whether to propagate changes to higher generics (Y), a specific generic (N), or all generics (A).
PSAGA	2-12	Alpha/Num	PREMIS SAG Area identifies the name associated with a geographic area served by an RSC or BSC.
RGIN	1	E, O, B, S, T, X	Range indicator. Indicates whether the addresses in a *numbered* address range are even (E), odd (O) or both (B). In a Street Name/Address Range Menu, this indicator may also indicate whether the addresses in an *unnumbered* address range are assigned by PREMIS (S), the user (T) or that the unnumbered area does not have AHNs (X).
RKEY	1	Y,N	Dedicated release key flag
RSVRMK	1-50	Alpha/Num	Loop reservation remark
RTZ	5	Alpha/Num	Rate zone is a code for the mileage charges that should be assessed to telephone customers in a specific geographic area.
RVRC	3,5	Alpha/Num	Retrieve return code. Indicates the results of retrieving negotiation data held in SNS.
SAGA	2-12	Alpha/Num	SAG Area identifies the name associated with a geographic area served by an RSC or BSC.
SARC	3,5	Alpha/Num	Street address return code. Indicates the results of street address validation.

SNS FCIF Tag Descriptions (11 of 14)			
Tag	Size	Code Set	Description
SCHRC	3,5	Alpha/Num	Series completion hunt return code
SEC	1-2	Numeric	Seconds portion of the time
SELERR	1	U,K,S,I	TN selection error. Indicates reason why a specific TN could not be selected: TN is unselectable (U), TN is undesignated (K), TN is already selected (S), or TN is invalid (I).
SERVICE	1	C,R,B	Type of service: Digital Centrex (C), residence (R), or business (B)
SID	1-10	Alpha/Num	The actual structure identifier of the location STYP
SIG	1	L, G, B	Signaling OEC: L = loop start, G = ground start, B = loop or ground start
SNRC	3,5	Alpha/Num	Service negotiation return code. Indicates a service request timing problem.
SO	1-13	Alpha/Num	Service order number used in placing a loop reservation
SRMK1	1-72	Alpha/Num	SAG remark 1
SRMK2	1-72	Alpha/Num	SAG remark 2
SRMK3	1-72	Alpha/Num	SAG remark 3
SROPT	1	E,M,C	Service request option: establish (E), modify (M), or cancel (C).
SRRC	3,5	Alpha/Num	Service request return code. Indicates whether SNS was successful in establishing, modifying, or cancelling the service request.

SNS FCIF Tag Descriptions (12 of 14)			
Tag	Size	Code Set	Description
SSRC	3,5	Alpha/Num	Service specification return code. Indicates whether SNS was successful in performing the requested service specification activities.
STAT	2	AV, HA, RS, SL, US, UD	Current TN status: available (AV), held for administration (HA), restricted (RS), selected (SL), unselectable (US), undesignated (UD).
STN	2	Alpha/Num	State name is the approved postal abbreviation of the state name.
STNRQ	1	Y	State name required indicator is a positive indicator to identify whether the PREMIS state name is required on the service order for PREMIS service order processing.
STR	1-50	Alpha/Num	Street name including directional and thoroughfare or descriptive address
STYP	4	BLDG, WING, PIER	The type of structure to which the SID data field applies
SUBTYP	3	Alphabetic	Attributes to a telephone number
SVCSPEC	1	S,A	Service specification data retrieval flag: retrieve service specification data for *specific* orders (S) or retrieve service specification data for *all* orders (A).
SVCTYP	1	C = Change service	Service type

SNS FCIF Tag Descriptions (13 of 14)			
Tag	Size	Code Set	Description
TAGID	8		Tag ID. Indicates the tag associated with a feature or feature group.
TAGTYP	1	F, G	Tag type indicator: feature (F) or group (G)
TAR	1-6	Alpha/Num	Tax area code for the taxes levied on telephone service within a specific geographic area
TELF	1-5	Alpha/Num	Telephone features. Identifies the special telephone capabilities that are available in a specific geographic area.
TEXT	unlimited	Alpha/Num	Text associated with an LFACS report
TIECODE	11	Alpha/Num	Centrex customer ID
TNACT	1	S,R	TN activity code: selection (S) or return (R)
TNERRCDE	5	Numeric	Error code associated with a specific occurrence of the TNLIST aggregate
TNRC	3,5	Alpha/Num	TN return code. Indicates the results of TNLIST processing.
TTA	3	Numeric	The terminating traffic area (foreign office)
TYPE	1	Alphabetic	Type of service for a specific telephone number
UID	1-10	Alpha/Num	The actual unit identifier of the location UTYP
UPDIND	1	Y,N	Update indicator for confirmation that the specified change is desired.
USERID	1-8	Alpha/Num	ID that identifies the end user

SNS FCIF Tag Descriptions (14 of 14)			
Tag	Size	Code Set	Description
UTYP	4	APT, RM, LOT, SUIT, SLIP, UNIT	The unit type identifies the type of unit.
VDATA	unlimited	Alpha/Num	Variable data is used to hold data that is to be returned to the originator untouched.
WC	1-8	Alpha/Num	PREMIS Wire Center code for a geographic area served by telephone plant through a single Main Distribution Frame (MDF) or multiple MDFs connected by tie cables and administered as one MDF
YEAR	4	Numeric	Year portion of the date
ZIP	5	Alpha/Num	Zip code for a particular geographic area assigned by the U.S. Post Office

C. Appendix C — Rules for the ADDR Data Aggregate

Four different types of addresses can be provided as input to SNS. The following rules apply to each type of input address:

1. Numbered Addresses
2. Descriptive Addresses
3. Unnumbered Addresses
4. Unnamed Addresses.

1. Numbered Addresses

Data items for a numbered street address are as follows:

```
ADDR{                       Address
   BADR{                    Basic address
      BAD=...;              Basic address designation
      STR=...;              Street name
      CNA=...;              Community name [opt]
      STN=...;              State name [opt]
   }
   SUPL{                    Supplemental address
      SID=...;              Structure ID [opt]
      STYP=...;             Structure type [opt]
      EID=...;              Elevation ID [opt]
      ETYP=...;             Elevation type [opt]
      UID=...;              Unit ID [opt]
      UTYP=...;             Unit type [opt]
   }
}
```

BAD Data

This data (basic address designation) can take three different formats. The first format is a simple house number, which can be a maximum of 8 characters:

Example: BAD = 12345678;

The second format is a suffixed house number. For this format, a suffix is separated from the base number by a hyphen (-) and can be from 1 to 4 characters; but to be a valid suffix, the characters must comprise a field that is either alphabetic, alphanumeric, or contain a fraction (number/number).

Examples: BAD = 1234-1/2;
BAD = 1234-1A;
BAD = 123-A;
BAD = 1-ABC;

The third format is a hyphenated house number. For this format, the hyphenated part is separated from the base number by a hyphen (-) and can be from 1 to 4 numbers (the hyphenated part must be all numeric).

Examples: BAD = 1234-1111;
BAD = 1-105;
BAD = 20-1;
BAD = 54AB-336;

STR Data

The street name can contain a directional sign and a thoroughfare name. If a directional sign is input, it must be separated from the street name by one (1) space. A directional sign may be one of the following:

N = north	NW = northwest
S = south	NE = northeast
E = east	SW = southwest
W = west	SE = southeast

If a thoroughfare name is input, it must be separated from the street name by one space.

Examples:
STR = W State St;
STR = S Sixth St;
STR = Haven Cove HY;
STR = Shore Rd;
STR = Omaha Ave;
STR = White Pine Lane;

CNA and STN Data

The community name (CNA) and state name (STN) tags are optional.

SUPL Data

The supplemental (additional) address data (SUPL) is optional input data used to identify the living unit for those contracts involving LFACS. If supplemental data is required, there are three different levels of location data that can be provided.

Examples:

SUPL {UID = 33A; UTYP = APT;}
SUPL {UID = 1; UTYP = RM;}
SUPL {EID = 3; ETYP = FLR; UID = 10; UTYP = APT;}
SUPL {SID = 5; STYP = BLDG; EID = 2; ETYP = FLR;
UID = 205; UTYP = APT;}

The valid identification names for each level of supplemental data with a restricted code set are:

UTYP = APT
RM
LOT
SUIT
SLIP
UNIT

ETYP = FLR

STYP = BLDG
WNG
PIER

2. **Descriptive Addresses**

Data items for a descriptive address are as follows:

```
ADDR{                       Address
   BADR{                    Basic address
      STR = ...;            Street name
      CNA = ...;            Community name [opt]
      STN = ...;            State name [opt]
   }
   SUPL{                    Supplemental address
      SID = ...;            Structure ID [opt]
      STYP = ...;           Structure type [opt]
      EID = ...;            Elevation ID [opt]
      ETYP = ...;           Elevation type [opt]
      UID = ...;            Unit ID [opt]
      UTYP = ...;           Unit type [opt]
   }
}
```

STR Data

The street name data for this type of address would be the name of a building or location. No BAD or AHN data should be input for this type of address or value will be considered a street name.

Examples:
```
STR = EMPIRE STATE BUILDING;
STR = PEACHTREE GARDENS;
STR = DORAL COUNTRY CLUB;
STR = OFFUTT AIRFORCE BASE;
```

Note: No @ symbol should be included with the input data.

CNA and STN Data

The community name (CNA) and state name (STN) tags are optional.

SUPL Data

The supplemental address (SUPL) data aggregate is optional. (See the previous description.)

3. **Unnumbered Addresses**

An unnumbered street address has a street name, but does not have a house number. Each living unit that has an unnumbered street address is identified by an Assigned House Number (AHN).

Data items for an unnumbered street address are as follows:

```
ADDR{                       Address
   BADR{                    Basic address
      AHN=...;              Assigned house number
      STR=...;              Street name
      CNA=...;              Community name [opt]
      STN=...;              State name [opt]
   }
   SUPL{                    Supplemental address
      SID=...;              Structure ID [opt]
      STYP=...;             Structure type [opt]
      EID=...;              Elevation ID [opt]
      ETYP=...;             Elevation type [opt]
      UID=...;              Unit ID [opt]
      UTYP=...;             Unit type [opt]
   }
}
```

AHN Data

This data can be a maximum of 8 characters.

Examples:
```
AHN = 1501;
AHN = 56;
AHN = 123401;
```

STR Data

The street name data should be input following the same guidelines described for the numbered address section. No @ symbol should be input.

CNA and STN Data

The community name (CNA) and state name (STN) data item tags are optional.

SUPL Data

The supplemental address (SUPL) data aggregate is optional. (See the previous numbered address description.)

4. **Unnamed Addresses**

An unnamed address has no street name and no house number. In PREMIS, each unnamed street address is identified by an Assigned House Number (AHN) and a street name (STR) consisting of a comma followed by the community name.

Data items for an unnamed address are as follows:

```
ADDR{                    Address
   BADR{                 Basic address
      AHN=...;           Assigned house number
      STR=...;           Street name
      CNA=...;           Community name [opt]
      STN=...;           State name [opt]
   }
   SUPL{                 Supplemental address
      SID=...;           Structure ID [opt]
      STYP=...;          Structure type [opt]
      EID=...;           Elevation ID [opt]
      ETYP=...;          Elevation type [opt]
      UID=...;           Unit ID [opt]
      UTYP=...;          Unit type [opt]
   }
}
```

Examples:

```
STR = ,NORFOLK;
STR = ,OAKDALE;
STR = ,BROKEN BOW;
```

In all of the above examples, the street name data is the name of the community in which the unnamed street exists.

CNA and STN Data

The community name (CNA) and state name (STN) tags are optional.

SUPL Data

The supplemental address (SUPL) data aggregate is optional.

SNS Address Terminology

In SNS, the *street address* refers to all address data, except the SUPL data. This includes ZIP, SAGA, BAD, AHN, STR, CNA and STN. A street address is determined to be valid when it falls within an address *range* in the PREMIS SAG. As a result of partial matching, alternate street names, and descriptive processing, PREMIS may "modify" the input street address in order to match a *primary* street address in its SAG database. Once PREMIS has identified the primary street address, this address should be used during the remainder of the negotiation.

The *living unit address* refers to the complete address data (street address plus optional SUPL). A living unit address is determined to be valid when it identifies a particular *service address* in LFACS. When SNS interfaces with LFACS, it supplies LFACS with the primary street address obtained from PREMIS (when available), as well as any SUPL data provided on input. LFACS may use partial matching techniques to obtain a match on the living unit address. In this situation, the modified living unit address should be used during the remainder of the negotiation.

D. Appendix D — SNS Return Codes

This appendix explains the return codes for the negotiation contracts and the system administration table maintenance contracts.

D.1 Negotiation Contract Return Codes

The following sections list the return codes that may appear in the response messages of the negotiation dialogue and stand-alone contracts. These return codes are organized by the contract section in which they might appear.

The input error return codes (IERCs) indicate an incorrect format in the FCIF request message or the associated tags. See Section 3 and Appendix B in this document for the correct format.

D.1.1 *SNSR Section Return Codes

IERC	General Input Error Condition
000	The message received does not conform to a valid Service Negotiation Support request (e.g., *RSNS section was not provided).

IERC	SVCLOC Input Error Condition
001	SAGA or Zip Code is required input, but neither was found.
002	Basic address (e.g., street name) is required address data, but was not provided.
003	Basic address data is in error. It could be that SNS received both an AHN and a house number.
004	Address data is required input, but was not provided.
005	SAGA data is invalid.
006	Zip Code data is invalid.
007	Supplemental address data is invalid.

IERC	CTL Input Error Condition
101	Control data is required input, but was not provided.
102	Control Code is required input, but was not provided.
103	Control Code is invalid.
104	Inquiry option is invalid.
105	Inquiry option is required input, but was not provided.
106	Service type is invalid.
107	Service type is required input, but was not provided.
108	Control information provided is incompatible.

*SNSR Section Return Codes

IERC	ACL Input Error Condition
201	ACL is required input, but was not provided.
202	Reserved for future use.
203	Action Code is invalid.
204	Product name/service is required input, but was not provided.
205	A circuit identifier (TN or CLS) is required input, but was not provided.
206	Reserved for future use.
207	Reserved for future use.
208	Reserved for future use.
209	Main TN format is invalid.
210	Reserved for future use.
211	MADN flag is invalid.
212	TN format is invalid.
213	Both TN and CLS/TID were provided on input. Only one circuit identifier is allowed.
214	Both DPA and CKL were provided on input. Only one circuit termination identifier is allowed.
215	Product is invalid.
216	CLS is invalid.
217	DPA is invalid.
218	CKL is invalid.
219	Reserved for future use.
220	Reserved for future use.
221	Reserved for future use.
222	Reserved for future use.
223	Reserved for future use.
224	WC is invalid.
225	FO is invalid.
226	SIG is invalid.

*SNSR Section Return Codes

SARC	Street Address Verification Error Condition
000	An error occurred in PREMIS. Notify the SNS System Administrator to check the SNS system error log for more information.
001	Input SAGA is not supported by this SNS entity. Street address validation was not performed. (The input SAGA does not exist in the PREMIS Destination Table).
002	Input Zip Code is not supported by this SNS entity. Street address validation was not performed. (The input Zip Code does not exist in the PREMIS Destination Table).
003	Verify Street Name entry – no exact or partial match found. (PREMIS RC = 105-3)
004	Verify Street Name entry – two or more partial matches found. (PREMIS RC = 105-2)
005	Verify Descriptive Address entry – no exact or partial match found. (PREMIS RC = 106-3)
006	Verify Descriptive Address entry – two or more partial matches found. (PREMIS RC = 106-2)
007	Verify House number or AHN entry. (PREMIS RC = 107)
008	Verify Community and State, address duplicated. (PREMIS RC = 108)
009	Verify Street Name entry and House Number or AHN. (PREMIS RC = 109)
010	Input Zip Code is associated with more than one SAGA.
011	Reserved for future use.
012	More than one basic address is associated with input descriptive address – exact match on input descriptive. (PREMIS RC = 111)
013	More than one basic address is associated with input descriptive address – one partial match on input descriptive. (PREMIS RC = 111-1)

*SNSR Section Return Codes

SARC	Street Address Verification Error Condition
014	Verify house number or AHN entry – one or more assigned house number ranges exist for the street. (PREMIS RC = 117)
015	Could not complete SAG validations. (PREMIS RC = 115)
016	No exact match was found on address entry – more than 50 similar addresses to output. (PREMIS RC = 116)

*SNSR Section Return Codes

SARC	Successful Street Address Processing Condition
101	Exact street name was matched in PREMIS. (PREMIS RC = 301)
102	The exact street name was not found in PREMIS. One partial street name match was found. (PREMIS RC = 301-1)
103	An alternate street name or an alternate basic address was specified on input. Exact street name was matched in PREMIS. (PREMIS RC = 301-8)
104	An alternate street name or an alternate basic address was specified on input. The exact street name was not found in PREMIS – one partial street name match was found. (PREMIS RC = 301-9)
105	Exact input descriptive address name was matched in PREMIS. (PREMIS RC = 507)
106	The exact input descriptive address name was not found in PREMIS – one partial descriptive address name match was found. (PREMIS RC = 507-1)

A "-1" suffix is appended to the end of the return code to indicate that the input street/descriptive was found in a different community/state. (PREMIS RC 301---> 308 and 507---> 508)

*SNSR Section Return Codes

NERC	Network Element Processing Condition
001	Network element information is not available (in PREMIS) for the wire center associated with the street address.
002	SNS has identified the network elements that exist in the wire center associated with the street address in PREMIS.
003	SNS has determined that no network elements exist in the wire center associated with the street address in PREMIS.
004	SNS has identified the network element serving the customer, based on its Centrex group in TNLIST.
005	Main TN does not identify a Centrex group in TNLIST – network element information could not be obtained for the particular *customer*.

SNS returns multiple NERC return codes when SNS returns the NERC = 005. SNS also returns a NERC with a value between 001 and 003.

*SNSR Section Return Codes

PMRC	Product Marketing Processing Condition
001	Product is available in the serving office. An embargo condition *may* exist at the SGS or range levels and also *may* exist at any of the network elements. (PREMIS RC = 350)
002	Product is unavailable in the serving office. (PREMIS RC = 351)
003	Reserved for future use.
004	There is at least one foreign office that can provide the requested product. An embargo condition *may* exist at any of the network elements. (PREMIS RC = 352)
005	There are no foreign offices to provide the requested product. (PREMIS RC = 353)
006	SNS obtained a list of products marketed at the service address from the serving office. SNS will also obtain any GSG, address range and/or network element embargo data associated with those products. (PREMIS RC = 356)
007	No products are being marketed at the service address from the serving office. (PREMIS RC = 358)
008	Main TN does not identify a valid Centrex group. Product marketing information could not be filtered for the customer.
009	Product marketing information is not available in this wire center. (PREMIS RC = 357)
010	SNS obtained a list of products marketed at the serving address from a foreign office(s). An embargo condition *may* exist at any of the network elements. (PREMIS RC = 354)
011	No products are being marketed at the service address from a foreign office(s). (PREMIS RC = 355)

A "-1" suffix is appended to the end of the return code (PMRC = 001 through 007 and 010 through 011) to indicate that SNS has filtered the service availability information from PREMIS, based on the MAIN TN provided on input (or the CLLI code for the INQCHG contract).

SNS returns multiple PMRC return codes when SNS returns the PMRC = 008 and when the foreign office indicator has been specified on input.

*SNSR Section Return Codes

LURC	Living Unit Validation Condition
000	An error occurred in LFACS. Notify the SNS System Administrator to check the SNS system error log for more information.
001	An exact match was found on the living unit.
002	A partial match was found on the living unit – one partial match found.
003	A match was not found on the living unit. A neighborhood report of nearby living units was generated.
004	No exact match on street name – more than one partial match. (LFACS Similar Street Name Report)
005	Unable to perform living unit address validation. SNS-LFACS interface is not supported in this wire center. (The PREMIS WC does not exist in the LFACS WC Table.)

LPRC	Loop Availability Processing Condition
001	Reserved for future use.
002	Circuit ID was not found at the specified service location.
003	Service is regradable on the existing circuit.
004	Service is not regradable on the existing circuit.
005	Reserved for future use.
006	Reserved for future use.
007	Reserved for future use.
008	Reserved for future use.
009	Reserved for future use.
010	Reserved for future use.
011	Reserved for future use.
012	Outside plant transmission requirements could not be determined for the requested service. Loop processing could not be performed.

D.1.2 *OSPR Section Return Codes

IERC	General Input Error Condition
000	The message received does not conform to a valid Loop Availability Inquiry and Reservation request (e.g., *ROSP section was not provided).

IERC	SVCLOC Input Error Condition
001	SAGA or Zip Code is required input, but neither was found.
002	Basic address (e.g., street name) is required address data, but was not provided.
003	Basic address data is invalid. It could be that SNS received both an AHN and a house number.
004	Address data is required input, but was not provided.
005	SAGA data is invalid.
006	Zip Code data is invalid.
007	Supplemental address data is invalid.

IERC	CTL Input Error Condition
101	Control data is required input, but was not provided.
102	Control Code is required input, but was not provided.
103	Control Code is invalid.

*OSPR Section Return Codes

IERC	ACL Input Error Condition
201	ACL is required input, but was not provided.
202	Action Code is required input, but was not provided.
203	Action Code is invalid.
204	Product name/service is required input, but was not provided.
205	Service Order, Planned Facilities Order, or Circuit ID is required input, but was not provided.
206	Number of loops is required input, but was not provided.
207	Number of loops is invalid (e.g., not numeric or not appropriate for type of reservation key provided).
208	Reservation due date is required.
209	Reservation due date is invalid.
210	Confirmation notice indicator is invalid.
211	Too many reservation keys were provided. Specify *either* a service order number, a planned facilities order number, *or* a circuit identifier (TN or CLS).
212	MADN flag is invalid.
213	TN format is invalid.
214	Reserved for future use.
215	Product is invalid.
216	Customer account is invalid.
217	Market segment indicator is invalid.
218	CLS is invalid.
219	DPA is invalid.
220	CKL is invalid.
221	PFO is invalid.
222	SO is invalid.
223	Reservation remark is invalid.
224	WC is invalid.
225	FO is invalid.
226	SIG is invalid.

On a loop reservation *update*:

- A "-1" suffix is appended to the end of the return code to indicate that the ACL error occurred with respect to the *old* ACL.
- A "-2" suffix is appended to the end of the return code to indicate that the ACL error occurred with respect to the *new* ACL.

*OSPR Section Return Codes

SARC	Street Address Verification Error Condition
000	An error occurred in PREMIS. Notify the SNS System Administrator to check the SNS system error log for more information.
001	Input SAGA is not supported by this SNS entity. Street address validation was not performed. (The input SAGA does not exist in the PREMIS Destination Table.)
002	Input Zip Code is not supported by this SNS entity. Street address validation was not performed. (The input Zip Code does not exist in the PREMIS Destination Table.)
003	Verify Street Name entry – no exact or partial match was found. (PREMIS RC = 105-3)
004	Verify Street Name entry – two or more partial matches were found. (PREMIS RC = 105-2)
005	Verify Descriptive Address entry – no exact or partial match was found. (PREMIS RC = 106-3)
006	Verify Descriptive Address entry – two or more partial matches were found. (PREMIS RC = 106-2)
007	Verify House number or AHN entry. (PREMIS RC = 107)
008	Verify Community and State, address duplicated. (PREMIS RC = 108)
009	Verify Street Name entry and House Number or AHN. (PREMIS RC = 109)
010	Input Zip Code is associated with more than one SAGA.
011	Reserved for future use.
012	More than one basic address associated with input descriptive address – exact match on input descriptive. (PREMIS RC = 111)
013	More than one basic address associated with input descriptive address – one partial match on input descriptive. (PREMIS RC = 111-1)
014	Verify house number or AHN entry – one or more assigned house number ranges exist for the street. (PREMIS RC = 117)
015	Could not complete SAG validations. (PREMIS RC = 115)
016	No exact match was found on address entry – more than 50 similar addresses to output. (PREMIS RC = 116)

*OSPR Section Return Codes

SARC	Successful Street Address Processing Condition
101	Exact street name was matched in PREMIS. (PREMIS RC = 301)
102	The exact street name was not found in PREMIS. Only one partial street name match was found. (PREMIS RC = 301-1)
103	An alternate street name or an alternate basic address was specified on input. Exact street name was matched in PREMIS. (PREMIS RC = 301-8)
104	An alternate street name or an alternate basic address was specified on input. The exact street name was not found in PREMIS. Only one partial street name match was found. (PREMIS RC = 301-9)
105	Exact input descriptive address name was matched in PREMIS. (PREMIS RC = 507)
106	The exact input descriptive address name was not found in PREMIS. Only one partial descriptive address name match was found. (PREMIS RC = 507-1)

A "-1" suffix is appended to the end of the return code to indicate that the input street/descriptive was found in a different community/state. (PREMIS RC 301---> 308 and 507---> 508)

LURC	Living Unit Validation Condition
000	An error occurred in LFACS. Notify the SNS System Administrator to check the SNS system error log for more information.
001	An exact match was found on the living unit.
002	A partial match was found on the living unit – one partial match found.
003	A match was not found on the living unit. A neighborhood report of nearby living units was generated.
004	No exact match was found on street name – more than one partial match. (LFACS Similar Street Name Report)
005	Unable to perform living unit address validation. SNS-LFACS interface is not supported in this wire center. (The PREMIS WC does not exist in the LFACS WC Table.)

*OSPR Section Return Codes

LPRC	Loop Processing Condition
001	Address is not associated with a serving terminal in LFACS. Loop processing could not be performed.
002	The service requested does not require loop facility assignments. (LFACS encountered an assignment rule with a STOP condition.)
003	Outside plant transmission requirements could not be determined for the requested service. Loop processing could not be performed.

LPRC	Loop Availability Processing Condition
101	Adequate assignable loops are available to support the requested service.
102	Assignable loops are available to support only a subset of the requested loops.
103	Assignable loops are not available to support the requested service.

LPRC	Loop Reservation Processing Condition
201	All requested loops were reserved.
202	Only a subset of the requested loops were reserved.
203	None of the requested loops were reserved.
204	All requested loop reservation(s) were removed. If the actual number of loops reserved in LFACS is less than the number requested, LFACS removes the reservations against those found. (In LFACS 18.6, this condition results in LPRC = 205.)
205	None of the requested loop reservation(s) were removed. (LFACS 18.6)
206	No reservations were found for the specified circuit ID. Loop reservation update could not be performed.
207	No reservations were found for the specified service order number. Loop reservation update could not be performed.
208	No reservations were found for the specified planned facilities order number. Loop reservation update could not be performed.

*OSPR Section Return Codes

LPRC	Loop Processing Condition
209	LFACS has determined the format of the circuit identifier (TN or CLS and optional DPA or CKL) to be invalid. The loop reservation update could not be performed.

On a loop reservation modification, SNS may return multiple LPRC return codes. If SNS returns LPRC = 204, it will also return another LPRC with a value between 201 and 203.

D.1.3 *TNLR Section Return Codes

IERC	General Input Error Condition
000	The message received does not conform to a valid TN List Selection/Return request (e.g., *RTNL section was not provided).

IERC	CTL Input Error Condition
001	Control data is required input, but was not provided.
002	TN activity code is invalid.
003	TN activity code is required input, but was not provided.

IERC	ACL Input Error Condition
101	ACL is required input, but was not provided.
102	Main TN is required input, but was not provided.
103	Reserved for future use.
104	Reserved for future use.
105	TN range(s) format is invalid.
106	TN format(s) is invalid.
107	Main TN format is invalid.
108	Number of TNs to select is invalid.
109	Consecutive indicator is invalid.
110	Either the NPA or NXX was specified as a criteria for selecting unspecified TNs. Specify both the NPA and NXX or neither.
111	Number of TNs to select is required for unspecified TN selection.
112	A TN or TN range is required for specified TN selection or return.
113	NPA-NXX format is invalid.

*TNLR Section Return Codes

TNRC	TN Processing Condition
001	Main TN does not identify a valid Centrex group.

TNRC	TN Selection Processing Condition
101	Reserved for future use.
102	Reserved for future use.
103	Reserved for future use.
104	All unspecified TNs were selected.
105	None of the unspecified TNs were selected.
106	Only a subset of the unspecified TNs were selected.
107	All requested *consecutive* unspecified TNs were selected, but a single block of consecutive TNs was not available. More than one block of consecutive TNs were selected instead.
108	Only a subset of the requested *consecutive* unspecified TNs were selected, but a single block of consecutive TNs was not available. More than one block of consecutive TNs were selected instead.

A "-1" suffix is appended to the end of the TN Selection Return Code when the input main TN differs from the main TN associated with the regular Centrex group to which the input TN belongs.

TNRC	TN Return Processing Condition
201	All specified TNs were returned.
202	Only a subset of the specified TNs were returned.
203	None of the specified TNs were returned.

D.1.4 *SRAR Section Return Codes

IERC	CTL Input Error Condition
001	Control data is required input, but was not provided.
002	Control Code is required input, but was not provided.
003	Control Code is invalid.

IERC	ACL Input Error Condition
101	ACL is required input, but was not provided.
102	Reserved for future use.
103	Negotiation activity is required input, but was not provided.
104	SAGA or Zip Code is required input, but neither was found. (If the living unit is brand new, the SAGA is always required).
105	Basic address (e.g., street name) is required address data, but was not provided.
106	Basic address data is in error. It could be that SNS received both an AHN and a house number.
107	Address data is required input, but was not provided.
108	SAGA data is invalid.
109	Zip Code data is invalid.
110	Supplemental address data is invalid.
111	Main TN format is invalid.
112	Main TN format is required, but was not provided.
113	Product is invalid.
114	Negotiation activity is invalid.
115	Service is required, but was not provided.
116	Service is invalid.
117	Confirmation indicator is invalid.

*SRAR Section Return Codes

SRRC	Service Request Processing Condition
001	The requested service request administration activity was successful.
002	The service request was not established or modified as requested. SNS was unable to determine the serving network element for the main TN.
003	Reserved for future use.
004	Reserved for future use.
005	Reserved for future use.
006	Warning – The main TN exists in a Centrex group, but is not the main TN for that group.
007	SNS returned all inventory selected during the negotiation of this service request.
008	The service request modification was not performed, since network resources were selected for this service request. To proceed, confirm that SNS should return these resources.
009	Warning – Network element characteristics have changed.
010	Warning – Customer system data has changed.
011	Warning – Feature packages *may* have changed.
012	Warning – Feature groups *may* have changed.
013	Reserved for future use.
014	Warning – Compatible CPE *may* have changed.
015	Reserved for future use.
016	The service request was not canceled because orders have already been issued.
017	Reserved for future use.
018	The requested service modification is not supported.
019	The service request was not established or modified as requested. The service type associated with the main TN does not match the service type provided on input.

D.1.5 *NDIR Section Return Codes

IERC	General Input Error Condition
000	The *RNDI section provided on input does not conform to the contract specifications and could not be processed.

IERC	CTL Input Error Condition
001	Control data is required input, but was not provided.
002	Network Data Inquiry option is required input, but was not provided.
003	Network Data Inquiry option is invalid.

IERC	ACL Input Error Condition
101	ACL is required input, but was not provided.
102	Reserved for future use.
103	Feature group name is invalid.
104	CPE manufacturer is invalid.
105	CPE model is invalid.
106	Both CPE manufacturer and model are required input.
107	Reserved for future use.
108	Reserved for future use.
109	TN format is invalid.
110	Either a specific feature package name *or* all feature packages may be requested, but not both.
111	All indicator is invalid.
112	Feature package name is invalid.

*NDIR Section Return Codes

NDRC	Network Data Inquiry Processing Condition
001	Characteristics were returned for the serving network element.
002	SNS was unable to determine the characteristics of the serving network element.
003	Customer system data was returned for the Centrex group.
004	Reserved for future use.
005	Reserved for future use.
006	There are no available feature packages in SNS for the serving network element and requested product.
007	A list of available feature package(s) was returned.
008	Information on the requested feature package was returned.
009	The requested feature package was not available in SNS.
010	Available feature package(s) and their sub-features were returned.
011	A list of available feature group(s) was returned.
012	There are no available feature groups in SNS for the serving network element and type of service.
013	Information on the requested feature group was returned.
014	The requested feature group was not available in SNS.
015	Reserved for future use.
016	Reserved for future use.
017	Reserved for future use.
018	Reserved for future use.
019	Reserved for future use.
020	Reserved for future use.
021	The CPE compatible with the serving network element was returned.
022	There is no CPE in SNS that is compatible with the serving network element.
023	Information on the requested CPE was returned.

*NDIR Section Return Codes

NDRC	Network Data Inquiry Processing Condition
024	The requested CPE was not available in SNS for the serving network element type.
025	Reserved for future use.
026	Reserved for future use.
027	Reserved for future use.
028	Information on the requested series completion hunt group was returned.
029	The requested series completion hunt group was not in SNS.

D.1.6 *TNIR Section Return Codes

IERC	General Input Error Condition
000	The *RTNI section provided on input does not conform to the contract specifications and could not be processed.

IERC	CTL Input Error Condition
001	Control data is required input, but was not provided.
002	TN activity code is invalid.
003	TN activity code is required input, but was not provided.

IERC	ACL Input Error Condition
101	ACL is required input, but was not provided.
102	Reserved for future use.
103	Reserved for future use.
104	Reserved for future use.
105	TN range(s) format is invalid.
106	TN format(s) is invalid.
107	Reserved for future use.
108	Number of TNs to select is invalid.
109	Consecutive indicator is invalid.
110	Either NPA or NXX was specified as a criteria for selecting unspecified TNs. Specify both NPA-NXX or neither.
111	Number of TNs to select is required for unspecified TN selection.
112	A TN or TN range is required for specified TN selection.
113	NPA-NXX unspecified TN selection criteria is invalid.
114	Reserved for future use.
115	All TNs required indicator is invalid.
116	Neither specific nor non-specific TNs were requested. Specify either form of TN selection.
117	Both specific and non-specific TNs were requested. Only one form of TN selection is allowed per request.
118	A TN or TN ranges is required on a TN return.

*TNIR Section Return Codes

TNRC	TN Selection Processing Condition
101	All specified TNs were selected.
102	Only a subset of the specified TNs were selected.
103	None of the specified TNs were selected.
104	All unspecified TNs were selected.
105	None of the unspecified TNs were selected.
106	Only a subset of the unspecified TNs were selected.
107	All requested *consecutive* unspecified TNs were selected, but a single block of consecutive TNs was not available. More than one block of consecutive TNs were selected instead.
108	Only a subset of the requested *consecutive* unspecified TNs were selected, but a single block of consecutive TNs was not available. More than one block of consecutive TNs were selected instead.

TNRC	TN Return Processing Condition
201	All specified TNs were returned.
202	Only a subset of the specified TNs were returned.
203	None of the specified TNs were returned.

D.1.7 *SVCSPEC Section Return Codes

SSRC	Unsuccessful Service Specification Processing Condition
000	A service specification record is required input, but was not provided.
001	ID is required input, but was not provided.
002	ID data is in error.

SSRC	Successful Service Specification Processing Condition
101	The service specification was stored in SNS.

IDRC	ID Error Condition
001	Order identifier is required input, but was not provided.
002	Order identifier is invalid.

D.1.8 *SRDR Section Return Codes

IERC	General Input Error Condition
000	The message received does not conform to a valid Retrieve request (e.g., *RSRD section was not provided).

IERC	CTL Input Error Condition
001	Control data is required input, but was not provided.
002	Off hold indicator and/or retrieve service specification flag were not provided on input. At least one is required.
003	Off hold indicator is invalid.
004	Retrieve service specification data flag is invalid.

IERC	ACL Input Error Condition
101	An order identifier is required input, but was not provided.
102	One or more order identifiers are invalid.

RVRC	Retrieve Processing Condition
001	The negotiation dialogue was taken off hold.
002	The negotiation dialogue is not currently on hold.
003	All of the requested service specification data was retrieved.
004	Only some of the requested service specification data was retrieved.
005	None of the requested service specification data was retrieved.

D.1.9 *ORD Section Return Codes

IERC	General Input Error Condition
000	The message received does not conform to a valid Order Completion request (e.g., *ORD section was not provided).

IERC	CTL Input Error Condition
001	Order identifier is required input, but was not provided.
002	Order identifier is invalid.
003	Correction suffix is invalid.
004	Order pass is required input, but was not provided.
005	Order pass is invalid.

D.1.10 *SCH Section Return Codes

SCHRC	SCH Structure Errors
000	A record is required input, but was not provided.
001	Control Code is required input, but was not provided.
002	Control Code is invalid.
003	An *old* ACL is required input, but was not provided.
004	A *new* ACL is required input, but was not provided.
005	Both an *old* and *new* ACL are required input, but either or both were not provided.

SCHRC	SCH ACL Error Condition
101	Hunt TN format is invalid.
102	Hunting type is invalid.
103	At least one TN is required in the SCH group.
104	One or more TNs is duplicated in the hunt group.
105	Hunting type is required on input, but was not provided.

One of the following suffixes is appended to the return code:

- A "-1" suffix is appended to the end of the return code to indicate that the error occurred in the *old* ACL.
- A "-2" suffix is appended to the end of the return code to indicate that the error occurred in the *new* ACL.

SCHRC	SCH Processing Condition
201	SCH update was "successful."
202	Reserved for future use.
203	Old SCH view was not found in the TNLIST database.
204	One or more TNs in the new SCH view already exist as a member in another SCH group.
205	One or more TNs in the new SCH view are not working or selected.

D.1.11 *TNL Section Return Codes

TNRC	TNL Structure Error
000	A record is required input, but was not provided.
001	Control Code is required input, but was not provided.
002	Control Code is invalid.
003	An *old* ACL is required input, but was not provided.
004	A *new* ACL is required input, but was not provided.
005	Both an *old* and *new* ACL are required input. One or both were not provided.

TNRC	TNL ACL Error Condition
101	TN format is invalid.
102	TN is required input, but was not provided.

One of the following suffixes is appended to the return code:

- A "-1" suffix is appended to the end of the return code to indicate that the error occurred in the *old* ACL.
- A "-2" suffix is appended to the end of the return code to indicate that the error occurred in the *new* ACL.

D.2 System Administration Table Maintenance Contract Return Codes

The table maintenance contract return codes include the input error return codes (IERCs) and the section processing return codes (GRPRC, MTNRC, SCHRC, NDRC, FERC, CDRC, DDRC, FPRC, and CPRC). The following sections present the IERC codes organized by the table maintenance contracts to which they apply and list the section processing return codes.

D.2.1 IERC Codes for the INQTNL Contract

The input error return codes shown in this section apply to the INQTNL contract. Each IERC consists of five bytes. The first three bytes represent the specific message. The following two-byte suffix indicates which ACL aggregate encountered the error. The suffix equals "00" when only one ACL appears. The suffix is "01" if the error occurred in the "old" ACL, and the suffix is "02" if the error was found in the "new" ACL.

IERC Message Code	Description
001	CTC must be B,C,R, or I.
002	Contract name is not compatible with CTC.
003	At least one REC aggregate is required in the contract.
008	ACT tag is required.
009	CTC tag is required.
010	CTL aggregate is required.
606	Invalid TIECODE
607	Invalid CLLI
608	Invalid CTX
612	Invalid LISTTHRS
615	Invalid PROD
619	Invalid HILN
621	Invalid HTYP
622	Invalid LINE
623	Invalid LOLN
624	Invalid NPA
626	Invalid NXX
635	Requested STATUS count is invalid.
651	On CTX chg/dlt/inq, CLLI/CTX or TIECODE or MAINTN may be required.
656	CLLI, CTX, SERVICE, PROD or MAINTN is required.
657	ACL aggregate is required.
690	A TN aggregate is required.
701	TNs in the range do not exist in the database.

D.2.2 IERC Codes for the MTCTNL Contract

The input error return codes shown in this section apply to the MTCTNL contract. Each IERC consists of five bytes. The first three bytes represent the specific message. The following two-byte suffix indicates which ACL aggregate encountered the error. The suffix equals "00" when only one ACL appears. The suffix is "01" if the error occurred in the "old" ACL, and the suffix is "02" if the error was found in the "new" ACL.

IERC Message Code	Description
001	CTC must be B,C,R, or I.
002	Contract name is not compatible with CTC.
003	At least one REC aggregate is required in the contract.
004	ACT tag must be "N" for a BUILD.
005	Both "O" and "N" are required for CHANGE.
006	ACT tag must be "O" and "N" or "R".
007	ACT tag must be "O" for a REMOVE.
008	ACT tag is required.
009	CTC tag is required.
010	CTL aggregate is required.
011	If ACT = R, then only one ACL is allowed.
012	Invalid number of ACLs for this CTC code.
601	MODE must be CONV/MAINT.
603	CTX Group Type must be RC/MC/CC.
606	Invalid TIECODE
607	Invalid CLLI
608	Invalid CTX
609	INTCPT must be CTC/CNT/DTC/DNT.
610	Invalid PIC
611	Invalid CAT
612	Invalid LISTTHRS
613	Invalid LCC
615	Invalid PROD
617	Invalid GRPST
619	Invalid HILN
622	Invalid LINE
623	Invalid LOLN
624	Invalid NPA
625	Invalid NXTST

IERC Message Code	Description
626	Invalid NXX
627	Invalid OPT
630	Invalid STAT
631	Invalid SUBTYP
633	Invalid TYPE
634	RC_DATA is invalid for simple business and residence.
635	Requested STATUS count is invalid.
646	CTXTYPE required in add.
650	On CTX add, CLLI/CTX and MAINTN are all required.
651	On CTX chg/dlt/inq, CLLI/CTX or TIECODE or MAINTN may be required.
654	Combined CTX is currently not supported.
655	MODE is required.
656	CLLI, CTX, SERVICE, PROD or MAINTN is required.
657	ACL aggregate is required.
659	Entered TNs are overlapping.
661	TNLIST aggregate is required.
701	TNs in the range do not exist in the database.
702	TNs in the range exist in the database.
703	TNs in the range are in an active Hunt Group.
704	TNs in the range are not available.
705	TNs in OLD ACL have subtypes that do not match subtypes in database.
706	TNs in OLD ACL have types that do not match types in database.
707	TNs in OLD ACL have status codes that do not match status codes in database.
708	Cannot delete a MAIN_TN.
800	Existing group in new ACL of a change is not supported.
801	Group in new ACL must be same as group in old ACL.
802	TN in new ACL does not match TN in old ACL.

D.2.3 IERC Codes for the MTCHNT Contract

The input error return codes shown in this section apply to the MTCHNT contract. Each IERC consists of five bytes. The first three bytes represent the specific message. The following two-byte suffix indicates which ACL aggregate encountered the error. The suffix equals "00" when only one ACL appears. The suffix is "01" if the error occurred in the "old" ACL, and the suffix is "02" if the error was found in the "new" ACL.

IERC Message Code	Description
001	CTC must be B,C,R, or I.
002	Contract name is not compatible with CTC.
003	At least one REC aggregate is required in the contract.
004	ACT tag must be "N" for a BUILD.
005	Both "O" and "N" are required for CHANGE.
006	ACT tag must be "O" and "N" or "R".
007	ACT tag must be "O" for a REMOVE.
008	ACT tag is required.
009	CTC tag is required.
010	CTL aggregate is required.
011	ACT = R, then only one ACL is allowed.
012	Invalid number of ACLs for this CTC code.
621	Invalid HTYP
622	Invalid LINE
624	Invalid NPA
626	Invalid NXX
655	MODE is required.
657	ACL aggregate is required.
660	Hunt Groups must consist of at least two TN lines.
664	Hunt Unit TN STATUS must equal SL or WK.
668	A Hunt Unit must exist on CTX_LIST Table.
689	TN aggregate is duplicated in entered Hunt Group.
690	A TN aggregate is required.
693	Old ACL has more TNs than the database.
694	Last Hunt Unit of a regular SCH contains a non-null hunt-to entry.

IERC Message Code	Description
695	Delete process of a change - FAILED.
696	ADD process of a change - FAILED.
697	Old ACL Hunt Type does not match database Hunt Type.
698	Old ACL NPA/NXX/LINE not = database NPA/NXX/LINE.
699	Expected Hunt Unit not found in database – Integrity Problem – Contact your DBA.
700	OLD ACL has fewer Hunt Units than database.

D.2.4 IERC Codes for the INQCPE and MTCCPE Contracts

The input error return codes shown in this section apply to INQCPE and MTCCPE contracts. Each IERC consists of five bytes. The first three bytes represent the specific message. The following two-byte suffix indicates which ACL aggregate encountered the error. The suffix equals "00" when only one ACL appears. The suffix is "01" if the error occurred in the "old" ACL, and the suffix is "02" if the error was found in the "new" ACL.

IERC Message Code	Description
001	CTC must be B,C,R, or I.
002	Contract name is not compatible with CTC.
003	At least one REC aggregate is required in the contract.
004	ACT tag must be "N" for a BUILD.
005	Both "O" and "N" are required for CHANGE.
006	ACT tag must be "O" and "N" or "R".
007	ACT tag must be "O" for a REMOVE.
008	ACT tag is required.
009	CTC tag is required.
011	ACT = R, then only one ACL is allowed.
012	Invalid number of ACLs for this CTC code.
100	NETYP is invalid
112	NETYP is not supported.
115	NETYP in old ACL does not match value on database record.
200	CPEMAN is required.
201	CPEMOD is required.
202	DIS is required.
203	ONETOUCH is required.
204	MAXKEY is required.
205	HKEY is required.
206	RKEY is required.
207	MAXKEY must be greater than or equal to MAXCA.
208	CPEMAN is invalid.
209	CPEMOD is invalid.
210	CPENAME is invalid.

IERC Message Code	Description
211	CPEREG is invalid.
212	DIS is invalid.
213	ONETOUCH is invalid.
214	MAXKEY is invalid.
215	MAXCA is invalid.
216	HKEY is invalid.
217	RKEY is invalid.
222	Duplicate NETYP entry.
223	DIS does not match database value.
224	ONETOUCH does not match database value.
225	MAXKEY does not match database value.
226	HKEY does not match database value.
227	RKEY does not match database value.
228	MAXCA does not match database value.
229	CPENAME does not match database value.
230	CPEREG does not match database value.
235	NETYP values exist in database that were not specified on input.

D.2.5 IERC Codes for the INQCAT and MTCCAT Contracts

The input error return codes shown in this section apply to the INQCAT and MTCCAT contracts. Each IERC consists of five bytes. The first three bytes represent the specific message. The following two-byte suffix indicates which ACL aggregate encountered the error. The suffix equals "00" when only one ACL appears. The suffix is "01" if the error occurred in the "old" ACL, and the suffix is "02" if the error was found in the "new" ACL.

IERC Message Code	Description
001	CTC must be B,C,R, or I.
002	Contract name is not compatible with CTC.
003	At least one REC aggregate is required in the contract.
004	ACT tag must be "N" for a Build.
005	Both "O" and "N" are required for CHANGE.
006	ACT tag must be "O" and "N" or "R".
007	ACT tag must be "O" for a Remove.
008	ACT tag is required.
009	CTC tag is required.
011	ACT = R, then only one ACL is allowed.
012	Invalid number of ACLs for this CTC code.
109	NETYP is a required tag.
110	NEGEN is a required tag.
112	NETYP is not supported.
113	NEGEN is not supported.
115	NETYP in old ACL does not match value on database record.
122	Feature exceptions exist that are not valid for new switch type/generic.
153	Only one service tag is allowed.
155	PROP is a required tag.
157	FTR is a required tag.
158	Duplicate FTR entry.
160	SVC type res. does not match database value.

IERC Message Code	Description
161	SVC type bus. does not match database value.
162	SVC type CTX does not match database value.
163	FTR does not match database value.
167	SERVICE must be C, I, B, R.
169	FTR is invalid.
173	PROP must be Y, N, or A.
302	SERVICE duplicated on input.
350	CATOPT tag must be Y or N.
351	UPDIND tag must be Y or N.
352	FGRP tag is not alphanumeric.
353	ACTIND must be B, D, E, or N.
354	ELACTIND must be B, D, E, or N.
355	REGSET tag must be A or U.
356	FTRSCP tag must be S, D, P, or U.
358	FGRP and FTR tags cannot both be input.
360	ACTIND tag is a required tag.
361	ELACTIND tag is a required tag.
362	REGSET tag is a required tag.
363	FTRSCP tag is a required tag.
364	ACTIND tag value does not match database value.
365	ELACTIND tag value does not match database value.
366	REGSET tag value does not match database value.
367	FTRSCP tag value does not match database value.
368	TAGTYPE tag value must be F or G.
369	TAGID tag value is invalid.
370	DESC tag value is invalid.
371	TAGTYPE tag is a required tag.
372	TAGID tag is a required tag.
373	DESC tag is a required tag.
374	No update data was provided on input.
375	Description does not match database value.
376	Product name does not match database value.
377	Service type indicator does not match database value.
378	NETYPE new key is not same as old value.
379	TAGTYPE new key is not same as old value.

IERC Message Code	Description
380	TAGID new key is not same as old value.
381	PROD in database, but did not come back in with old data.
382	Service type in database did not come back in with old data.
383	Switch type: old key, new key not same.
384	Switch generic: old key, new key not same.
385	Feature tag: old key, new key not same.
386	Feature group tag: old key, new key not same.

D.2.6 IERC Codes for the INQFPK and MTCFPK Contracts

The input error return codes shown in this section apply to the INQFPK and MTCFPK contracts. Each IERC consists of five bytes. The first three bytes represent the specific message. The following two-byte suffix indicates which ACL aggregate encountered the error. The suffix equals "00" when only one ACL appears. The suffix is "01" if the error occurred in the "old" ACL, and the suffix is "02" if the error was found in the "new" ACL.

IERC Message Code	Description
001	CTC must be B,C,R, or I.
002	Contract name is not compatible with CTC.
003	At least one REC aggregate is required in the contract.
004	ACT tag must be "N" for a BUILD.
005	Both "O" and "N" are required for CHANGE.
006	ACT tag must be "O" and "N" or "R".
007	ACT tag must be "O" for a REMOVE.
008	ACT tag is required.
009	CTC tag is required.
011	ACT = R, then only one ACL is allowed.
012	Invalid number of ACLs for this CTC code.
109	NETYP is a required tag.
110	NEGEN is a required tag.
112	NETYP is not supported.
113	NEGEN is not supported.
114	NETYP/NEGEN combination is not valid.
115	NETYP in old ACL does not match value on database record.
116	NEGEN in old ACL does not match value on database record.
150	PROD is a required tag.
151	FPKG is a required tag.
152	OPT is a required tag.
154	Key combination is invalid for remove.
155	PROP is a required tag.

IERC Message Code	Description
156	FTR is not supported.
157	FTR is a required tag.
158	Duplicate FTR entry.
159	OPT does not match database value.
160	SVC type res. does not match database value.
161	SVC type bus. does not match database value.
162	SVC type CTX does not match database value.
163	FTR does not match database value.
164	FPKG does not match database value.
165	OPT must be Y or N.
166	PROD is invalid.
167	SERVICE must be C, I, B, R.
168	FPKG is invalid.
169	FTR is invalid.
170	FTRDES is invalid.
171	BUTTON is invalid.
172	ALL must be Y or N.
173	PROP must be Y, N, or A.
174	PRODUCT NAME: old key, new key not same.
175	Feature Package name: old key, new key not same.
302	SERVICE duplicated on input.
383	Switch type: old key, new key not same.
384	Switch generic: old key, new key not same.

D.2.7 IERC Codes for the INQNED and MTCNED Contracts

The input error return codes shown in this section apply to the INQNED and MTCNED contracts. Each IERC consists of five bytes. The first three bytes represent the specific message. The following two-byte suffix indicates which ACL aggregate encountered the error. The suffix equals "00" when only one ACL appears. The suffix is "01" if the error occurred in the "old" ACL, and the suffix is "02" if the error was found in the "new" ACL.

IERC Message Code	Description
001	CTC must be B,C,R, or I.
002	Contract name is not compatible with CTC.
003	At least one REC aggregate is required in the contract.
004	ACT tag must be "N" for a BUILD.
005	Both "O" and "N" are required for CHANGE.
006	ACT tag must be "O" and "N" or "R".
007	ACT tag must be "O" for a REMOVE.
008	ACT tag is required.
009	CTC tag is required.
011	ACT = R, then only one ACL is allowed.
012	Invalid number of ACLs for this CTC code.
100	NETYP is invalid
101	NEGEN is invalid.
102	WC is invalid.
107	CLLI is invalid.
108	CLLI is a required tag.
109	NETYP is a required tag.
110	NEGEN is a required tag.
111	WC is a required tag.
112	NETYP is not supported.
113	NEGEN is not supported.
114	NETYP/NEGEN combination is not valid.

IERC Message Code	Description
115	NETYP in old ACL does not match value on database record.
116	NEGEN in old ACL does not match value on database record.
117	WC in old ACL does not match value on database record.
122	Feature exceptions exist that are not valid for new switch type/generic.
156	FTR is not supported.
157	FTR is a required tag.
160	SVC type res. does not match database value.
161	SVC type bus. does not match database value.
162	SVC type CTX does not match database value.
163	FTR does not match database value.
167	SERVICE must be C, I, B, R.
169	FTR is invalid.
300	SERVICE is a required tag for this CTC.
301	Network element must already exist for this action.
302	SERVICE duplicated on input.

D.2.8 Table Maintenance Section Processing Codes

Section processing codes are return and/or error codes that may appear in the response message of a table maintenance contract. These codes accompany the following tags: GRPRC, MTNRC, SCHRC, NDRC, FERC, CDRC, DDRC, FPRC, and CPRC.

Each code consists of five bytes. The first three bytes represent the specific message. The two-byte suffix refers to the database table that is affected by the message. The section processing codes apply to all table maintenance contracts.

Message Code	Description
000	Entry not found; database rollback
001	Entry already exists; database rollback
002	Successful add
003	Successful delete
004	Successful update
005	Successful inquiry
007	Database does not match original input; database rollback
008	Update failed; database rollback

Table Suffix	Description
00	Multiple Tables
01	Network Element Table
02	Switch Parameter Table
03	Feature Package Table
04	Feature Group Catalog Table
05	Feature Catalog Table
06	Feature Name Table
07	Switch Feature Exception Table
08	CPE Information Table
09	CPE Reference Table
10	Reserved for future use.
11	Reserved for future use.
12	Centrex Group Table
13	Centrex TN List Table
14	Customer Centrex Table

Table Suffix	Description
15	Group List Table
16	Reserved for future use.
17	Reserved for future use.
18	Recent Change Data Table
19	Telephone Range Table
20	Hunt Device Table
21	Hunt Group Table
22	Hunt Unit Table

D.2.8.1 Examples

The following table contains some examples of section processing codes and explains their meanings.

Table D-1. Section Code Examples

Code	Meaning
00015	Entry not found in Group List Table.
00112	Entry already exists in Centrex Group Table.
00401	Successful update to Network Element Table.
00308	Successful delete in CPE Information Table.

E. Appendix E — SNS Contract Examples

The following pages contain examples of the different types of request and response messages that may be submitted to and returned from SNS.

E.1 Negotiation Contract Examples

The negotiation contract examples are divided into two groups: the negotiation stand-alone and the negotiation dialogue.

E.1.1 Negotiation Stand-Alone Contract Examples

This section contains examples of the different types of negotiation stand-alone request and response messages that may be submitted to and returned from SNS.

E.1.1.1 Fatal Error Encountered (Request)

```
*C1 = INQSAG                ABNS   SNS          U 0;%
*PLHDR{
        USERID = KKAHL;
        LCLID = APP;
}%
*RSNS{
        SVCLOC{
                ACL{
                        ZIP = 07921;
                        ADDR{
                                BADR{
                                        BAD = 26;
                                        STR = ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC = I;
                INQOPT = SAG;
        }
}%
```

E.1.1.2 Fatal Error Encountered (Response)

```
*C1 = INQSAG                SNS    ABNS          S 0;%
*PLHDR{
        USERID = KKAHL;
        LCLID = APP;
}%
*UMSG{
        MSGTEXT = Contract failed - Security not authorized;
}%
*RSNS{
        SVCLOC{
                ACL{
                        ZIP = 07921;
                        ADDR{
                                BADR{
                                        BAD = 26;
                                        STR = ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC = I;
                INQOPT = SAG;
        }
}%
```

E.1.1.3 SNS – Street Address Validation Inquiry; Input Error (Request)

```
*C1 = INQSAG                ABNS   SNS          U 0;%
*PLHDR{
        USERID = KKAHL;
        LCLID = APP;
}%
*RSNS{
        SVCLOC{
                ACL{
                        ADDR{
                                BADR{
                                        BAD = 26;
                                        STR = ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC = I;
                INQOPT = SAG;
        }
}%
```

E.1.1.4 SNS – Street Address Validation Inquiry; Input Error (Response)

```
*C2= INQSAG900410121440        SNS    ABNS          S 0;%
*PLHDR{
        USERID=KKAHL;
        LCLID=APP;
}%
*SNSHDR{
        DATE{
                YEAR=1990;
                MONTH=04;
                DAY=10;
        }
        TIME{
                HOUR=12;
                MIN=15;
                SEC=00;
        }
}%
*SNSR{
        SVCLOC{
                ACL{
                        ADDR{
                                BADR{
                                        BAD=26;
                                        STR=ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC=I;
                INQOPT=SAG;
                IERC=001;
        }
}%
```

E.1.1.5 Street Address Validation Inquiry; Invalid Street Address (Request)

```
*CI = INQSAG                ABNS   SNS          U 0;%
*PLHDR{
        USERID = KKAHL;
        LCLID = APP;
}%
*RSNS{
        SVCLOC{
                ACL{
                        ZIP = 99999;
                        ADDR{
                                BADR{
                                        BAD = 26;
                                        STR = ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC = I;
                INQOPT = SAG;
        }
}%
```

E.1.1.6 Street Address Validation Inquiry; Invalid Street Address (Response)

```
*C2= INQSAG900410121440        SNS    ABNS          S 0;%
*PLHDR{
        USERID=KKAHL;
        LCLID=APP;
}%
*SNSHDR{
        DATE{
                YEAR=1990;
                MONTH=04;
                DAY=10;
        }
        TIME{
                HOUR=12;
                MIN=15;
                SEC=00;
        }
}%
*SNSR{
        SVCLOC{
                ACL{
                        ZIP=99999;
                        ADDR{
                                BADR{
                                        BAD=26;
                                        STR=ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC=I;
                INQOPT=SAG;
                SARC=002;
        }
}%
```

E.1.1.7 Street Address Validation Inquiry (Request)

```
*C1 = INQSAG                ABNS   SNS          U  0;%
*PLHDR{
        USERID = KKAHL;
        LCLID = APP;
}%
*RSNS{
        SVCLOC{
                ACL{
                        ZIP = 07921;
                        ADDR{
                                BADR{
                                        BAD = 26;
                                        STR = ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC = I;
                INQOPT = SAG;
        }
}%
```

E.1.1.8 Street Address Validation Inquiry (Response)

```
*C2= INQSAG900410121440        SNS    ABNS          S 0;%
*PLHDR{
        USERID=KKAHL;
        LCLID=APP;
}%
*SNSHDR{
        DATE{
                YEAR=1990;
                MONTH=04;
                DAY=10;
        }
        TIME{
                HOUR=12;
                MIN=15;
                SEC=00;
        }
}%
```

E.1.1.9 Street Address Validation Inquiry; Valid Street Address (Response, continued)

```
*SNSR{
        SVCLOC{
                ACL{
                        ZIP=07921;
                        ADDR{
                                BADR{
                                        BAD=26;
                                        STR=ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC=I;
                INQOPT=SAG;
                SARC=101;
        }
        SAGINFO{
                SAGA=NFRK;
                EXCH=PDM;
                WC=PDMT,921;
                RTZ=N25;
                TAR=NF010;
                ZIP=05714;
                NPA=304;
                TELF=TT;
                BO=NTHFRK;
                DIR=N127;
                PD=OT;
                PC=PARK;
                CO=921;
                CNA=BEDMINSTER;
                STN=NJ;
        }
}%
```

E.1.1.10 Network Element Inquiry (Request)

```
*C1 = INQNEI                ABNS   SNS          U 0;%
*PLHDR{
        USERID = KKAHL;
        LCLID = APP;
}%
*RSNS{
        SVCLOC{
                ACL{
                        ZIP = 07921;
                        ADDR{
                                BADR{
                                        BAD = 26;
                                        STR = ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC = I;
                INQOPT = NEI;
        }
}%
```

E.1.1.11 Network Element Inquiry (Response)

```
*C2= INQNEI900410121440        SNS    ABNS          S 0;%
*PLHDR{
        USERID=KKAHL;
        LCLID=APP;
}%
*SNSHDR{
        DATE{
                YEAR=1990;
                MONTH=04;
                DAY=10;
        }
        TIME{
                HOUR=12;
                MIN=15;
                SEC=00;
        }
}%
```

E.1.1.12 Network Element Inquiry; Network Elements Determined (Response, continued)

```
*SNSR{
        SVCLOC{
                ACL{
                        ZIP=07921;
                        ADDR{
                                BADR{
                                        BAD=26;
                                        STR=ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC=I;
                INQOPT=PMI;
                SARC=101;
                NERC=002;
        }
        SAGINFO{
                SAGA=NFRK;
                EXCH=PDM;
                WC=PDMT,921;
                RTZ=N25;
                TAR=NF010;
                ZIP=05714;
                NPA=304;
                TELF=TT;
                BO=NTHFRK;
                DIR=N127;
                PD=OT;
                PC=PARK;
                CO=921;
                CNA=BEDMINSTER;
                STN=NJ;
        }
        NEINFO{
                SOD{
                        NE{
                                CLLI=ABCDEFGH001;
                                NETYP=5E;
                                NEGEN=4.2;
                        }
                }
        }
}%
```

E.1.1.13 Product Marketing Inquiry; Specific Product (Request)

```
*Cl = INQPMI                ABNS   SNS          U 0;%
*PLHDR{
        USERID = KKAHL;
        LCLID = APP;
}%
*RSNS{
        SVCLOC{
                ACL{
                        ZIP = 07921;
                        ADDR{
                                BADR{
                                        BAD = 26;
                                        STR = ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC = I;
                INQOPT = PMI;
        }
        ACL{
                PROD = INTELLIPATHII;
        }
}%
```

E.1.1.14 Product Marketing Inquiry; Service is Available (Response)

```
*C2= INQPMI900410121440        SNS    ABNS          S 0;%
*PLHDR{
        USERID=KKAHL;
        LCLID=APP;
}%
*SNSHDR{
        DATE{
                YEAR=1990;
                MONTH=04;
                DAY=10;
        }
        TIME{
                HOUR=12;
                MIN=15;
                SEC=00;
        }
}%
*SNSR{
        SVCLOC{
                ACL{
                        ZIP=07921;
                        ADDR{
                                BADR{
                                        BAD=26;
                                        STR=ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC=I;
                INQOPT=PMI;
                SARC=101;
                PMRC=001;
        }
        ACL{
                PROD=INTELLIPATHII;
        }
        SAGINFO{
                SAGA=NFRK;
                EXCH=PDM;
                WC=PDMT,921;
                RTZ=N25;
                TAR=NF010;
                ZIP=05714;
                NPA=304;
                TELF=TT;
                BO=NTHFRK;
                DIR=N127;
```

```
                PD = OT;
                PC = PARK;
                CO = 921;
                CNA = BEDMINSTER;
                STN = NJ;
        }
        PMINFO{
                SOD{
                        MKTPROD{
                                PROD = INTELLIPATHII;
                                NE{
                                        CLLI = ABCDEFGH001;
                                        NETYP = 5E;
                                        NEGEN = 4.2;
                                }
                        }
                }
        }
}%
```

E.1.1.15 Product Marketing Inquiry; Service is Unavailable (Response)

```
*C2= INQPMI900410121440        SNS    ABNS          S 0;%
*PLHDR{
        USERID = KKAHL;
        LCLID = APP;
}%
*SNSHDR{
        DATE{
                YEAR = 1990;
                MONTH = 04;
                DAY = 10;
        }
        TIME{
                HOUR = 12;
                MIN = 15;
                SEC = 00;
        }
}%
*SNSR{
        SVCLOC{
                ACL{
                        ZIP = 07921;
                        ADDR{
                                BADR{
                                        BAD = 26;
                                        STR = ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC = I;
                INQOPT = PMI;
                SARC = 101;
                PMRC = 002;
        }
        ACL{
                PROD = INTELLIPATHII;
        }
        SAGINFO{
                SAGA = NFRK;
                EXCH = PDM;
                WC = PDMT,921;
                RTZ = N25;
                TAR = NF010;
                ZIP = 05714;
                NPA = 304;
                TELF = TT;
                BO = NTHFRK;
                DIR = N127;
```

```
                PD = OT;
                PC = PARK;
                CO = 921;
                CNA = BEDMINSTER;
                STN = NJ;
        }
}%
```

E.1.1.16 Product Marketing Inquiry; All Products (Request)

```
*C1 = INQPMI                ABNS   SNS          U 0;%
*PLHDR{
        USERID = KKAHL;
        LCLID = APP;
}%
*RSNS{
        SVCLOC{
                ACL{
                        ZIP = 07921;
                        ADDR{
                                BADR{
                                        BAD = 26;
                                        STR = ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC = I;
                INQOPT = PMI;
        }
        ACL{
                PROD = ALL;
        }
}%
```

E.1.1.17 Product Marketing Inquiry; All Products (Response)

```
*C2= INQPMI900410121440        SNS    ABNS          S 0;%
*PLHDR{
        USERID=KKAHL;
        LCLID=APP;
}%
*SNSHDR{
        DATE{
                YEAR=1990;
                MONTH=04;
                DAY=10;
        }
        TIME{
                HOUR=12;
                MIN=15;
                SEC=00;
        }
}%
*SNSR{
        SVCLOC{
                ACL{
                        ZIP=07921;
                        ADDR{
                                BADR{
                                        BAD=26;
                                        STR=ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC=I;
                INQOPT=PMI;
                SARC=101;
                PMRC=006;
        }
        ACL{
                PROD=ALL;
        }
        SAGINFO{
                SAGA=NFRK;
                EXCH=PDM;
                WC=PDMT,921;
                RTZ=N25;
                TAR=NF010;
                ZIP=05714;
                NPA=304;
                TELF=TT;
                BO=NTHFRK;
                DIR=N127;
```

```
            PD = OT;
            PC = PARK;
            CO = 921;
            CNA = BEDMINSTER;
            STN = NJ;
        }
        PMINFO{
            SOD{
                MKTPROD{
                    PROD = INTELLIPATHII;
                    NE{
                        CLLI = ABCDEFGH001;
                        NETYP = 5E;
                        NEGEN = 4.2;
                    }
                }
                MKTPROD{
                    PROD = INTELLIDIAL;
                    NE{
                        CLLI = ABCDEFGH001;
                        NETYP = 5E;
                        NEGEN = 4.2;
                    }
                }
            }
        }
}%
```

E.1.1.18 Change Service Inquiry (Request)

```
*CI = INQCHG                ABNS   SNS          U 0;%
*PLHDR{
        USERID = KKAHL;
        LCLID = APP;
}%
*RSNS{
        SVCLOC{
                ACL{
                        ZIP = 07921;
                        ADDR{
                                BADR{
                                        BAD = 26;
                                        STR = ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC = I;
                INQOPT = NEG;
                SVCTYPE = C;
        }
        ACL{
                PROD = INTELLIPATHII;
                TN{
                        NPA = 201;
                        NXX = 699;
                        LINE = 3920;
                }
        }
}%
```

E.1.1.19 Change Service Inquiry; Service is Regradable (Response)

```
*C2= INQCHG900410121440        SNS    ABNS          S 0;%
*PLHDR{
        USERID=KKAHL;
        LCLID=APP;
}%
*SNSHDR{
        DATE{
                YEAR=1990;
                MONTH=04;
                DAY=10;
        }
        TIME{
                HOUR=12;
                MIN=15;
                SEC=00;
        }
}%
*SNSR{
        SVCLOC{
                ACL{
                        ZIP=07921;
                        ADDR{
                                BADR{
                                        BAD=26;
                                        STR=ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC=I;
                INQOPT=NEG;
                SARC=101;
                PMRC=001;
                LURC=001;
                LPRC=003;
        }
        ACL{
                PROD=INTELLIPATHII;
                TN{
                        NPA=201;
                        NXX=699;
                        LINE=3920;
                }
        }
        SAGINFO{
                SAGA=NFRK;
                EXCH=PDM;
                WC=PDMT,921;
```

```
                RTZ = N25;
                TAR = NF010;
                ZIP = 05714;
                NPA = 304;
                TELF = TT;
                BO = NTHFRK;
                DIR = N127;
                PD = OT;
                PC = PARK;
                CO = 921;
                CNA = BEDMINSTER;
                STN = NJ;
        }
        PMINFO{
                SOD{
                        MKTPROD{
                                PROD = INTELLIPATHII;
                                NE{
                                        CLLI = ABCDEFGH001;
                                        NETYP = 5E;
                                        NEGEN = 4.2;
                                }
                        }
                }
        }
}%
```

E.1.1.20 Change Service Inquiry; Service is Not Regradable (Response)

```
*C2= INQCHG900410121440        SNS    ABNS          S 0;%
*PLHDR{
        USERID=KKAHL;
        LCLID=APP;
}%
*SNSHDR{
        DATE{
                YEAR=1990;
                MONTH=04;
                DAY=10;
        }
        TIME{
                HOUR=12;
                MIN=15;
                SEC=00;
        }
}%
*SNSR{
        SVCLOC{
                ACL{
                        ZIP=07921;
                        ADDR{
                                BADR{
                                        BAD=26;
                                        STR=ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC=I;
                INQOPT=NEG;
                SARC=101;
                PMRC=001;
                LURC=001;
                LPRC=004;
        }
        ACL{
                PROD=INTELLIPATHII;
                TN{
                        NPA=201;
                        NXX=699;
                        LINE=3920;
                }
        }
        SAGINFO{
                SAGA=NFRK;
                EXCH=PDM;
                WC=PDMT,921;
```

```
                RTZ = N25;TAR = NF010;
                ZIP = 05714;
                NPA = 304;
                TELF = TT;
                BO = NTHFRK;
                DIR = N127;
                PD = OT;
                PC = PARK;
                CO = 921;
                CNA = BEDMINSTER;
                STN = NJ;
        }
        PMINFO{
                SOD{
                        MKTPROD{
                                PROD = INTELLIPATHII;
                                NE{
                                        CLLI = ABCDEFGH001;
                                        NETYP = 5E;
                                        NEGEN = 4.2;
                                }
                        }
                }
        }
}%
```

E.1.1.21 Loop Availability Inquiry (Request)

```
*C1 = INQLAI                ABNS   SNS          U 0;%
*PLHDR{
        USERID = KKAHL;
        LCLID = APP;
}%
*ROSP{
        SVCLOC{
                ACL{
                        ZIP = 07921;
                        ADDR{
                                BADR{
                                        BAD = 26;
                                        STR = ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC = I;
        }
        ACL{
                PROD = INTELLIPATHII;
                NUMLP = 10;
                WC = PDMT,921;
        }
}%
```

E.1.1.22 Loop Availability Inquiry; Adequate Loops are Assignable (Response)

```
*C2= INQLAI900410121440        SNS    ABNS          S 0;%
*PLHDR{
        USERID=KKAHL;
        LCLID=APP;
}%
*SNSHDR{
        DATE{
                YEAR=1990;
                MONTH=04;
                DAY=10;
        }
        TIME{
                HOUR=12;
                MIN=15;
                SEC=00;
        }
}%
*OSPR{
        SVCLOC{
                ACL{
                        ZIP=07921;
                        ADDR{
                                BADR{
                                        BAD=26;
                                        STR=ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC=I;
                LURC=001;
                LPRC=001;
        }
        ACL{
                PROD=INTELLIPATHII;
                NUMLP=10;
                WC=PDMT,921;
        }
        LOOPINFO{
                NUMSP=10;
                NUMCF=2;
        }
}%
```

E.1.1.23 Loop Availability Inquiry; Subset of Loops are Assignable (Response)

```
*C2= INQLAI900410121440        SNS    ABNS          S 0;%
*PLHDR{
        USERID=KKAHL;
        LCLID=APP;
}%
*SNSHDR{
        DATE{
                YEAR=1990;
                MONTH=04;
                DAY=10;
        }
        TIME{
                HOUR=12;
                MIN=15;
                SEC=00;
        }
}%
*OSPR{
        SVCLOC{
                ACL{
                        ZIP=07921;
                        ADDR{
                                BADR{
                                        BAD=26;
                                        STR=ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC=I;
                LURC=001;
                LPRC=002;
        }
        ACL{
                PROD=INTELLIPATHII;
                NUMLP=10;
                WC=PDMT,921;
        }
        LOOPINFO{
                NUMSP=5;
                NUMCF=2;
        }
}%
```

E.1.1.24 Loop Availability Inquiry; No Loops are Assignable (Response)

```
*C2= INQLAI900410121440        SNS    ABNS          S 0;%
*PLHDR{
        USERID=KKAHL;
        LCLID=APP;
}%
*SNSHDR{
        DATE{
                YEAR=1990;
                MONTH=04;
                DAY=10;
        }
        TIME{
                HOUR=12;
                MIN=15;
                SEC=00;
        }
}%
*OSPR{
        SVCLOC{
                ACL{
                        ZIP=07921;
                        ADDR{
                                BADR{
                                        BAD=26;
                                        STR=ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC=I;
                LURC=001;
                LPRC=003;
        }
        ACL{
                PROD=INTELLIPATHII;
                NUMLP=10;
                WC=PDMT,921;
        }
}%
```

E.1.1.25 Loop Reservation (Request)

```
*C1 = UPDRSV                ABNS   SNS          U 0;%
*PLHDR{
        USERID = KKAHL;
        LCLID = APP;
}%
*ROSP{
        SVCLOC{
                ACL{
                        ZIP = 07921;
                        ADDR{
                                BADR{
                                        BAD = 26;
                                        STR = ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC = B;
        }
        ACL{
                ACT = N
                PROD = INTELLIPATHII;
                NUMLP = 10;
                WC = PDMT,921;
                SO = N69123;
                ACCT = IBM;
                MKSEG = P;
                NOTICE = Y;
                RSVDATE{
                        YEAR = 1990;
                        MONTH = 04;
                        DAY = 10;
                }
                RSVRMK = RESERVATION MADE BY KAREN KAHL;
        }
}%
```

E.1.1.26 Loop Reservation; All Loops Reserved (Response)

```
*C2= UPDRSV900410121440        SNS    ABNS          S 0;%
*PLHDR{
        USERID=KKAHL;
        LCLID=APP;
}%
*SNSHDR{
        DATE{
                YEAR=1990;
                MONTH=04;
                DAY=10;
        }
        TIME{
                HOUR=12;
                MIN=15;
                SEC=00;
        }
}%
*OSPR{
        SVCLOC{
                ACL{
                        ZIP=07921;
                        ADDR{
                                BADR{
                                        BAD=26;
                                        STR=ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC=B;
                LURC=001;
                LPRC=004;
        }
        ACL{
                ACT=N
                PROD=INTELLIPATHII;
                NUMLP=10;
                WC=PDMT,921;
                SO=N69123;
                ACCT=IBM;
                MKSEG=P;
                NOTICE=Y;
                RSVDATE{
                        YEAR=1990;
                        MONTH=04;
                        DAY=10;
                }
                RSVRMK=RESERVATION MADE BY KAREN KAHL;
```

```
        }
        LOOPINFO{
                NUMRSV = 10;
                NUMCF = 2;
        }
}%
```

E.1.1.27 Loop Reservation; Subset of Loops Reserved (Response)

```
*C2= UPDRSV900410121440      SNS    ABNS          S 0;%
*PLHDR{
        USERID=KKAHL;
        LCLID=APP;
}%
*SNSHDR{
        DATE{
                YEAR=1990;
                MONTH=04;
                DAY=10;
        }
        TIME{
                HOUR=12;
                MIN=15;
                SEC=00;
        }
}%
*OSPR{
        SVCLOC{
                ACL{
                        ZIP=07921;
                        ADDR{
                                BADR{
                                        BAD=26;
                                        STR=ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC=B;
                LURC=001;
                LPRC=005;
        }
        ACL{
                ACT=N
                PROD=INTELLIPATHII;
                NUMLP=10;
                WC=PDMT,921;
                SO=N69123;
                ACCT=IBM;
                MKSEG=P;
                NOTICE=Y;
                RSVDATE{
                        YEAR=1990;
                        MONTH=04;
                        DAY=10;
                }
                RSVRMK=RESERVATION MADE BY KAREN KAHL;
```

```
        }
        LOOPINFO{
                NUMRSV = 6;
                NUMCF = 0;
        }
}%
```

E.1.1.28 Loop Reservation; No Loops Reserved (Response)

```
*C2= UPDRSV900410121440        SNS    ABNS          S 0;%
*PLHDR{
        USERID=KKAHL;
        LCLID=APP;
}%
*SNSHDR{
        DATE{
                YEAR=1990;
                MONTH=04;
                DAY=10;
        }
        TIME{
                HOUR=12;
                MIN=15;
                SEC=00;
        }
}%
*OSPR{
        SVCLOC{
                ACL{
                        ZIP=07921;
                        ADDR{
                                BADR{
                                        BAD=26;
                                        STR=ASHLEY COURT;
                                }
                        }
                }
        }
        CTL{
                CTC=B;
                LURC=001;
                LPRC=006;
        }
```

```
        ACL{
                ACT = N
                PROD = INTELLIPATHII;
                NUMLP = 10;
                WC = PDMT,921;
                SO = N69123;
                ACCT = IBM;
                MKSEG = P;
                NOTICE = Y;
                RSVDATE{
                        YEAR = 1990;
                        MONTH = 04;
                        DAY = 10;
                }
                RSVRMK = RESERVATION MADE BY KAREN KAHL;
        }
}%
```

E.1.1.29 TN Selection; Unspecified TNs (Request)

```
*Cl = UPDTNL                ABNS   SNS          U 0;%
*PLHDR{
        USERID = KKAHL;
        LCLID = APP;
}%
*RTNL{
        CTL{
                TNACT = S;
        }
        ACL{
                MAINTN{
                        NPA = 201;
                        NXX = 699;
                        LINE = 1000;
                }
                UNSPTN{
                        NUMTN = 15;
                        NPA = 201;
                        NXX = 699;
                }
        }
}%
```

E.1.1.30 TN Selection; All Unspecified TNs Selected (Response)

```
*C2= UPDTNL900410121440        SNS    ABNS          S 0;%
*PLHDR{
        USERID = KKAHL;
        LCLID = APP;
}%
*SNSHDR{
        DATE{
                YEAR = 1990;
                MONTH = 04;
                DAY = 10;
        }
        TIME{
                HOUR = 12;
                MIN = 15;
                SEC = 00;
        }
}%
*TNLR{
        CTL{
                TNACT = S;
                TNRC = 104;
        }
        ACL{
                MAINTN{
                        NPA = 201;
                        NXX = 699;
                        LINE = 1000;
                }
                UNSPTN{
                        NUMTN = 15;
                        NPA = 201;
                        NXX = 699;
                }
        }
        UNSPTNINFO{
                TNS{
                        NUMSEL = 15;
                        TN{
                                NPA = 201;
                                NXX = 699;
                                LINE = 7001;
                        }
                        TN{
                                NPA = 201;
                                NXX = 699;
                                LINE = 7004;
                        }
                        TNRNG{
                                NPA = 201;
```

```
                        NXX = 699;
                        LOLN = 8050;
                        HILN = 8052;
                }
                TNRNG{
                        NPA = 201;
                        NXX = 699;
                        LOLN = 8060;
                        HILN = 8069;
                }
        }
    }
}%
```

E.1.1.31 TN Selection; No Unspecified TNs Selected (Response)

```
*C2= UPDTNL900410121440        SNS    ABNS          S 0;%
*PLHDR{
        USERID=KKAHL;
        LCLID=APP;
}%
*SNSHDR{
        DATE{
                YEAR=1990;
                MONTH=04;
                DAY=10;
        }
        TIME{
                HOUR=12;
                MIN=15;
                SEC=00;
        }
}%
*TNLR{
        CTL{
                TNACT=S;
                TNRC=105;
        }
        ACL{
                MAINTN{
                        NPA=201;
                        NXX=699;
                        LINE=1000;
                }
                UNSPTN{
                        NUMTN=15;
                        NPA=201;
                        NXX=699;
                }
        }
}%
```

E.1.1.32 TN Return (Request)

```
*C1 = UPDTNL                ABNS   SNS          U 0;%
*PLHDR{
        USERID = KKAHL;
        LCLID = APP;
}%
*RTNL{
        CTL{
                TNACT = R;
        }
        ACL{
                SPTN{
                        TN{
                                NPA = 201;
                                NXX = 699;
                                LINE = 3001;
                        }
                        TN{
                                NPA = 201;
                                NXX = 699;
                                LINE = 3007;
                        }
                        TNRNG{
                                NPA = 201;
                                NXX = 699;
                                LOLN = 3010;
                                HILN = 3018;
                        }
                }
        }
}%
```

E.1.1.33 TN Return; All TNs Returned (Response)

```
*C2= UPDTNL900410121440        SNS    ABNS          S 0;%
*PLHDR{
        USERID=KKAHL;
        LCLID=APP;
}%
*SNSHDR{
        DATE{
                YEAR=1990;
                MONTH=04;
                DAY=10;
        }
        TIME{
                HOUR=12;
                MIN=15;
                SEC=00;
        }
}%
*TNLR{
        CTL{
                TNACT=R;
                TNRC=201;
        }
        ACL{
                SPTN{
                        TN{
                                NPA=201;
                                NXX=699;
                                LINE=3001;
                        }
                        TN{
                                NPA=201;
                                NXX=699;
                                LINE=3007;
                        }
                        TNRNG{
                                NPA=201;
                                NXX=699;
                                LOLN=3010;
                                HILN=3018;
                        }
                }
        }
}%
```

E.1.2 Negotiation Dialogue Contract Examples

This section contains examples of the different types of negotiation dialogue request and response messages that may be submitted to and returned from SNS.

E.1.2.1 Establish Service Request Coupled with TN Selection - Request Message

```
*C1 = SNSNEG                ULBB1  SNS          CU  0;%
*PLHDR{
        USERID = TKSMD04;
}%
*SNSHDR{
        ECHO = ESTABLISH SR COUPLED WITH TN SELECTION - MAIN TN NOT IN SNS;
        IDATE{ MONTH = 11; DAY = 13; YEAR = 1991; }
        ITIME{ HOUR = 08; MIN = 25; SEC = 11; }
}%
*RSRA{
        CTL{
                SROPT = E;
        }
        ACL{
                NEGACT = A;
                MAINTN{
                        NPA = 806;
                        NXX = 222;
                        LINE = 4900;
                }
                CUST = DELIA;
                SA{
                        SAGA = KING;
                        ADDR{
                                BADR{
                                        BAD = 10017;
                                        STR = CARISSA CIR;
                                        CNA = EARTH POLE;
                                        STN = SR;
                                }
                        }
                }
                SERVICE = C;
        }
}%
```

```
*RTNI{
        REC{
                CTL{
                        TNACT = S;
                }
                ACL{
                        SPTN{
                                TN{
                                        NPA = 806;
                                        NXX = 376;
                                        LINE = 4960;
                                }
                                ALLTN = N;
                        }
                }
        }
}%
```

E.1.2.2 Establish Service Request Coupled with TN Selection - Unsuccessful Response Message

```
*C2= SNSNEG911113082510        SNS    ULBB1        CS 0;%
*PLHDR{
        USERID=TKSMD04;
}%
*SNSHDR{
        ECHO=ESTABLISH SR COUPLED WITH TN SELECTION - MAIN TN NOT IN SNS;
        MSG=TNRC101;
        IDATE{ MONTH=11; DAY=13; YEAR=1991; }
        ITIME{ HOUR=08; MIN=25; SEC=10; }
        DATE{ YEAR=1991; MONTH=11; DAY=13; }
        ITIME{ HOUR=08; MIN=25; SEC=11; }
}%
*SRAR{
        CTL{
                SROPT=E;
                SRRC=002;
        }
        ACL{
                NEGACT=A;
                MAINTN{
                        NPA=806;
                        NXX=222;
                        LINE=4900;
                }
                CUST=DELIA;
                SA{
                        SAGA=KING;
                        ADDR{
                                BADR{
                                        BAD=10017;
                                        STR=CARISSA CIR;
                                        CNA=EARTH POLE;
                                        STN=SR;
                                }
                        }
                }
                SERVICE=C;
        }
}%
```

```
*TNIR{
        REC{
                CTL{
                        TNACT = S;
                }
                ACL{
                        SPTN{
                                TN{
                                        NPA = 806;
                                        NXX = 376;
                                        LINE = 4960;
                                }
                                ALLTN = N;
                        }
                }
        }
}%
```

E.1.2.3 Establish Service Request - Request Message

```
*C1 = SNSNEG                ULBB1  SNS          CU  0;%
*PLHDR{
        USERID = TKSMD04;
}%
*SNSHDR{
        ECHO = ESTABLISH SR;
        IDATE{ MONTH = 11; DAY = 13; YEAR = 1991; }
        ITIME{ HOUR = 10; MIN = 21; SEC = 55; }
}%
*RSRA{
        CTL{
                SROPT = E;
        }
        ACL{
                NEGACT = A;
                MAINTN{
                        NPA = 806;
                        NXX = 376;
                        LINE = 4900;
                }
                CUST = FEELEY;
                SA{
                        SAGA = KING;
                        ADDR{
                                BADR{
                                        BAD = 8710;
                                        STR = KINGSPOINT;
                                }
                        }
                }
                SERVICE = C;
                PRODUCT = CENTURY;
        }
}%
```

E.1.2.4 Establish Service Request - Response Message

```
*C2= SNSNEG911113102156        SNS    ULBB1        CS 0;%
*PLHDR{
        USERID=TKSMD04;
}%
*SNSHDR{
        ECHO=ESTABLISH SR;
        IDATE{ MONTH=11; DAY=13; YEAR=1991; }
        ITIME{ HOUR=10; MIN=21; SEC=55; }
        DATE{ YEAR=1991; MONTH=11; DAY=13; }
        TIME{ HOUR=10; MIN=21; SEC=57; }
}%
*SRAR{
        CTL{
                SROPT=E;
                SRRC=001;
        }
        ACL{
                NEGACT=A;
                MAINTN{
                        NPA=806;
                        NXX=376;
                        LINE=4900;
                }
                CUST=FEELEY;
                SA{
                        SAGA=KING;
                        ADDR{
                                BADR{
                                        BAD=8710;
                                        STR=KINGSPOINT;
                                }
                        }
                }
                SERVICE=C;
                PRODUCT=CENTURY;
        }
}%
```

E.1.2.5 Customer System Data Inquiry - Request Message

```
*C1 = SNSNEG911113102156        ULBB1  SNS          CU  ;%
*PLHDR{
        USERID = TKSMD04;
}%
*SNSHDR{
        ECHO = CUSTOMER SYSTEM DATA INQUIRY;
        IDATE{ MONTH = 11; DAY = 13; YEAR = 1991; }
        ITIME{ HOUR = 10; MIN = 26; SEC = 30; }
}%
*RNDI{
        REC{
                CTL{
                        NDIOPT = CUST;
                }
        }
}%
```

E.1.2.6 Customer System Data Inquiry - Response Message

```
*C2= SNSNEG911108095357        SNS    ULBB1        CS 0;%
*PLHDR{
        USERID=TKSMD04;
}%
*SNSHDR{
        ECHO=CUSTOMER SYSTEM DATA INQUIRY;
        IDATE{ MONTH=11; DAY=13; YEAR=1991; }
        ITIME{ HOUR=10; MIN=26; SEC=30; }
        DATE{ YEAR=1991; MONTH=11; DAY=13; }
        TIME{ HOUR=10; MIN=26; SEC=31; }

}%
*NDIR{
        REC{
                CTL{
                        NDIOPT=CUST;
                        NDRC=003;

                }
                CUSTINFO{
                        CTXGRP{
                                CTX=RC;
                                CLLI=LTRYSRRP001;
                                INTCPT=DTC;

                        }

                }

        }

}%
```

E.1.2.7 Network Element Characteristics and CPE Inquiries - Request Message

```
*C1 = SNSNEG911113102156        ULBB1  SNS          CU  0;%
*PLHDR{
        USERID = TKSMD04;
}%
*SNSHDR{
        ECHO = NE CHARACTERISTICS AND CPE INQUIRIES;
        IDATE{ MONTH = 11; DAY = 13; YEAR = 1991; }
        ITIME{ HOUR = 10; MIN = 27; SEC = 09; }
}%
*RNDI{
        REC{
                CTL{
                        NDIOPT = NE;
                }
        }
        REC{
                CTL{
                        NDIOPT = CPE;
                }
        }
}%
```

E.1.2.8 Network Element Characteristics and CPE Inquiries - Response Message

```
*C2= SNSNEG911113102156        SNS    ULBB1        CS 0;%
*PLHDR{
        USERID=TKSMD04;
}%
*SNSHDR{
        ECHO=NE CHARACTERISTICS AND CPE INQUIRIES;
        IDATE{ MONTH=11; DAY=13; YEAR=1991; }
        ITIME{ HOUR=10; MIN=27; SEC=09; }
        DATE{ YEAR=1991; MONTH=11; DAY=13; }
        TIME{ HOUR=10; MIN=27; SEC=10; }
}%
*NDIR{
        REC{
                CTL{
                        NDIOPT=NE;
                        NDRC=001;
                }
                NEINFO{
                        NECHARS{
                                CLLI=LTRYSRRP001;
                                WC=806327;
                                NETYP=5ESS;
                                NEGEN=4.2;
                                MXSCH=32;
                        }
                }
        }
        REC{
                CTL{
                        NDIOPT=CPE;
                        NDRC=021;
                }
                CPEINFO{
                        CLLI=LTRYSRRP001;
                        CPE{
                                SET{
                                        CPEMAN=NTI;
                                        CPEMOD=M5009;
                                }
                                CPENAME=MERIDIAN CENTREX SET;
                                CPEREG=ETG488-71846-XT-N;
                        }
                        CPE{
                                SET{
                                        CPEMAN=NTI;
                                        CPEMOD=M5209;
                                }
                                CPENAME=MERIDIAN CENTREX DISPLAY SET;
```

```
                        CPEREG = ETG488-71846-XT-N;
                    }
                    CPE{
                        SET{
                            CPEMAN = NTI;
                            CPEMOD = M52112;
                        }
                        CPENAME = MERIDIAN CENTREX SPEAKER SET;
                        CPEREG = ETG488-71846-XT-N;
                    }
                    CPE{
                        SET{
                            CPEMAN = NTI;
                            CPEMOD = M5312;
                        }
                        CPENAME = MERIDIAN CENTREX POWER SET;
                        CPEREG = ETG488-71846-XT-N;
                    }
                }
            }
}%
```

E.1.2.9 CPE Inquiry - Request Message

```
*C1 = SNSNEG911113102156        ULBB1  SNS          CU  0;%
*PLHDR{
        USERID = TKSMD04;
}%
*SNSHDR{
        ECHO = CPE INQUIRY;
        IDATE{ MONTH = 11; DAY = 13; YEAR = 1991; }
        ITIME{ HOUR = 10; MIN = 29; SEC = 15; }
}%
*RNDI{
        REC{
                CTL{
                        NDIOPT = CPE;
                }
                ACL{
                        SET{
                                CPEMAN = NTI;
                                CPEMOD = M5312;
                        }
                }
        }
}%
```

E.1.2.10 CPE Inquiry - Response Message

```
*C2= SNSNEG911114140935        SNS    ULBB1        CS 0;%
*PLHDR{
        USERID=TKSMD04;
}%
*SNSHDR{
        ECHO=CPE INQUIRY;
        IDATE{ MONTH=11; DAY=13; YEAR=1991; }
        ITIME{ HOUR=10; MIN=29; SEC=15; }
        DATE{ YEAR=1991; MONTH=11; DAY=13; }
        TIME{ HOUR=10; MIN=29; SEC=16; }
}%
*NDIR{
        REC{
                CTL{
                        NDIOPT=CPE;
                        NDRC=023;
                }
                ACL{
                        SET{
                                CPEMAN=NTI;
                                CPEMOD=M5312;
                        }
                }
                CPEINFO{
                        CPE{
                                SET{
                                        CPEMAN=NTI;
                                        CPEMOD=M5312;
                                }
                                CPENAME=MERIDIAN CENTREX POWER SET;
                                CHARS{
                                        CPEREG=ETG488-71846-XT-N;
                                        DIS=Y;
                                        ONETOUCH=Y;
                                        MAXKEY=10;
                                        MAXCA=10;
                                        HKEY=Y;
                                        RKEY=Y;
                                }
                        }
                        CLLI=LTRYSRRP001;
                }
        }
}%
```

E.1.2.11 TN Selection - Request Message

```
*C1 = SNSNEG911113102156        ULBB1  SNS          CU  0;%
*PLHDR{
        USERID = TKSMD04;
}%
*SNSHDR{
        ECHO = TN SELECTION;
        IDATE{ MONTH = 11; DAY = 13; YEAR = 1991; }
        ITIME{ HOUR = 10; MIN = 30; SEC = 1; }
}%
*RTNI{
        REC{
                CTL{
                        TNACT = S;
                }
                ACL{
                        UNSPTN{
                                NUMTN = 5;
                                CON = Y;
                                ALLTN = N;
                        }
                }
        }
        REC{
                CTL{
                        TNACT = S;
                }
                ACL{
                        SPTN{
                                TN{
                                        NPA = 806;
                                        NXX = 376;
                                        LINE = 4915;
                                }
                        }
                }
        }
}%
```

E.1.2.12 TN Selection - Response Message

```
*C2= SNSNEG911113102156        SNS     ULBB1          CS 0;%
*PLHDR{
        USERID=TKSMD04;
}%
*SNSHDR{
        ECHO=TN SELECTION;
        IDATE{ MONTH=11; DAY=13; YEAR=1991; }
        ITIME{ HOUR=10; MIN=30; SEC=1; }
        DATE{ YEAR=1991; MONTH=11; DAY=13; }
        TIME{ HOUR=10; MIN=30; SEC=2; }
}%
*TNIR{
        REC{
                CTL{
                        TNACT=S;
                        TNRC=104;
                }
                ACL{
                        UNSPTN{
                                NUMTN=5;
                                CON=Y;
                                ALLTN=N;
                        }
                }
                UNSPTNINFO{
                        TNS{
                                TNRG{
                                        NPA=806;
                                        NXX=376;
                                        LOLN=4990;
                                        HILN=4994;
                                }
                        }
                        NUMSEL=5;
                        CLLI=LTRYSRRP001;
                        SERVICE=C;
                        CTX=RC;
                }
        }
```

```
        REC{
                CTL{
                        TNACT = S;
                        TNRC = 101;
                }
                ACL{
                        SPTN{
                                TN{
                                        NPA = 806;
                                        NXX = 376;
                                        LINE = 4915;
                                }
                        }
                }
                SPTNINFO{
                        TNS{
                                TN{
                                        NPA = 806;
                                        NXX = 376;
                                        LINE = 4915;
                                }
                                NUMSEL = 1;
                        }
                        CLLI = LTRYSRRP001;
                        SERVICE = C;
                        CTX = RC;
                }
        }
}%
```

E.1.2.13 Feature Package Inquiry - Request Message

```
*C1= SNSNEG911113102156        ULBB1  SNS          CU  0;%
*PLHDR{
        USERID=TKSMD04;
}%
*SNSHDR{
        ECHO=FEATURE PACKAGE INQUIRY;
        IDATE{ MONTH=11; DAY=13; YEAR=1991; }
        ITIME{ HOUR=10; MIN=43; SEC=22; }
}%
*RNDI{
        REC{
                CTL{
                        NDIOPT=FPKG;
                }
        }
}%
```

E.1.2.14 Feature Package Inquiry - Response Message

```
*C2= SNSNEG911113102156        SNS    ULBB1        CS 0;%
*PLHDR{
        USERID=TKSMD02;
}%
*SNSHDR{
        ECHO=FEATURE PACKAGE INQUIRY;
        IDATE{ MONTH=11; DAY=13; YEAR=1991; }
        ITIME{ HOUR=10; MIN=43; SEC=22; }
        DATE{ MONTH=11; DAY=13; YEAR=1991; }
        TIME{ HOUR=10; MIN=43; SEC=23; }
}%
*NDIR{
        REC{
                CTL{
                        NDIOPT=FPKG;
                        NDRC=007;
                }
                FPKGINFO{
                        NE{
                                PROD=PLEXAR-I;
                                CLLI=LTRYSRRP001;
                                FTRPKG{
                                        FPKG=JIMFEELEY2;
                                }
                        }
                }
        }
}%
```

E.1.2.15 Feature Group Inquiry - Request Message

```
*CI = SNSNEG911113102156        ULBB1  SNS          CU  0;%
*PLHDR{
        USERID = TKSMD04;
}%
*SNSHDR{
        ECHO = FEATURE GROUP INQUIRY;
        IDATE{ MONTH = 11; DAY = 13; YEAR = 1991; }
        ITIME{ HOUR = 10; MIN = 52; SEC = 11; }
}%
*RNDI{
        REC{
                CTL{
                        NDIOPT = FGRP;
                }
                ACL{
                }
        }
}%
```

E.1.2.16 Feature Group Inquiry - Request Message

```
*C2= SNSNEG911113102156        SNS    ULBB1        CS 0;%
*PLHDR{
        USERID=TKSMD04;
}%
*SNSHDR{
        ECHO=FEATURE GROUP INQUIRY;
        IDATE{ MONTH=11; DAY=13; YEAR=1991; }
        ITIME{ HOUR=10; MIN=52; SEC=11; }
        DATE{ YEAR=1991; MONTH=11; DAY=13; }
        TIME{ HOUR=10; MIN=52; SEC=12; }
}%
*NDIR{
        REC{
                CTL{
                        NDIOPT=FGRP;
                        NDRC=011;
                }
                FGRPINFO{
                        NE{
                                SERVICE=C;
                                CLLI=LTRYSRRP001;
                                FGRP{
                                        FGRP=ACB;
                                        FGRPDES=AUTOMATIC CALLBACK;
                                }
                                FGRP{
                                        FGRP=ACCTCODE;
                                        FGRPDES=ACCOUNT CODE;
                                }
                                FGRP{
                                        FGRP=ARS;
                                        FGRPDES=AUTOMATIC ROUTE SELECTION;
                                }
                                FGRP{
                                        FGRP=AUTHCODE;
                                        FGRPDES=AUTHORIZATION CODE;
                                }
                                FGRP{
                                        FGRP=CFW;
                                        FGRPDES=CALL FORWARDING;
                                }
                                FGRP{
                                        FGRP=CPU;
                                        FGRPDES=CALL PICKUP;
                                }
                                FGRP{
                                        FGRP=CW;
                                        FGRPDES=CALL WAITING;
                                }
```

```
                        FGRP{
                                FGRP = DP;
                                FGRPDES = DISPLAY AND PRIVACY;
                        }
                        FGRP{
                                FGRP = DR;
                                FGRPDES = DISTINCTIVE RINGING;
                        }
                        FGRP{
                                FGRP = IDP;
                                FGRPDES = INDIVIDUALIZED DIALING PLAN;
                        }
                        FGRP{
                                FGRP = LASS;
                                FGRPDES = LOCAL AREA SIGNALING SERVICES;
                        }
                        FGRP{
                                FGRP = LSF;
                                FGRPDES = LASS SELECTIVE FEATURES;
                        }
                        FGRP{
                                FGRP = MDRD;
                                FGRPDES = MESSAGE DETAILED RECORDING;
                        }
                        FGRP{
                                FGRP = MSS;
                                FGRPDES = MESSAGE SERVICE;
                        }
                        FGRP{
                                FGRP = MWC;
                                FGRPDES = MULTIWAY CALLING;
                        }
                        FGRP{
                                FGRP = PFA;
                                FGRPDES = PRIVATE FACILITIES ACCESS;
                        }
                        FGRP{
                                FGRP = TGSR;
                                FGRPDES = TERMINAL GROUP AND STATION RESTRICTION;
                        }
                        FGRP{
                                FGRP = TOD;
                                FGRPDES = TIME OF DAY;
                        }
                }
        }
}
}%
```

E.1.2.17 Cancel Service Request - Request Message

```
*C1 = SNSNEG911113102156        ULBB1  SNS          CU  0;%
*PLHDR{
        USERID = TKSMD04;
}%
*SNSHDR{
        ECHO = CANCEL SERVICE REQUEST;
        IDATE{ MONTH = 11; DAY = 13; YEAR = 1991; }
        ITIME{ HOUR = 13; MIN = 27; SEC = 11; }
}%
*RSRA{
        CTL{
                SROPT = C;
        }
}%
```

E.1.2.18 Cancel Service Request - Response Message

```
*C2 = SNSNEG911113102156        SNS    ULBB1        CS  0;%
*PLHDR{
        USERID = TKSMD04;
}%
*SNSHDR{
        ECHO = CANCEL SERVICE REQUEST;
        IDATE{ MONTH = 11; DAY = 13; YEAR = 1991; }
        ITIME{ HOUR = 13; MIN = 27; SEC = 11; }
        DATE{ YEAR = 1991; MONTH = 11; DAY = 13; }
        TIME{ HOUR = 13; MIN = 27; SEC = 12; }
}%
*SRAR{
        CTL{
                SROPT = C;
                SRRC = 001;
        }
}%
```

E.1.2.19 Modify Service Request - Request Message

```
*CI = SNSNEG911113102156        ULBB1  SNS          CU 0;%
*PLHDR{
        USERID = TKSMD04;
}%
*SNSHDR{
        ECHO = MODIFY SERVICE REQUEST;
        IDATE{ MONTH = 11; DAY = 13; YEAR = 1991; }
        ITIME{ HOUR = 08; MIN = 25; SEC = 11; }
}%
*RSRA{
        CTL{
                SROPT = M;
        }
        ACL{
                NEGACT = A;
                MAINTN{
                        NPA = 806;
                        NXX = 325;
                        LINE = 4900;
                }
                CUST = DELIA;
                SA{
                        SAGA = KING;
                        ADDR{
                                BADR{
                                        BAD = 10017;
                                        STR = CARISSA CIR;
                                        CNA = EARTH POLE;
                                        STN = SR;
                                }
                        }
                }
                SERVICE = C;
                CONFIRM = Y;
        }
}%
```

```
*RTNI{
        REC{
                CTL{
                        TNACT = S;
                }
                ACL{
                        UNSPTN{
                                NUMTN = 5;
                                CON = Y;
                                ALLTN = N;
                        }
                }
        }
}%
```

E.1.2.20 Modify Service Request - Response Message

```
*C2= SNSNEG911112151507        SNS    ULBB1        CS 0;
%*PLHDR{
        USERID=TKSMD04;
}%
*SNSHDR{
        ECHO=MODIFY SERVICE REQUEST;
        IDATE{ MONTH=11; DAY=13; YEAR=1991; }
        ITIME{ HOUR=08; MIN=25; SEC=11; }
        DATE{ YEAR=1991; MONTH=11; DAY=13; }
        TIME{ HOUR=15; MIN=19; SEC=50; }
}%
*SRAR{
        CTL{
                SROPT=M;
                SRRC=010;
                SRRC=009;
                SRRC=011;
                SRRC=012;
                SRRC=014;
                SRRC=007;
                SRRC=001;
        }
        ACL{
                NEGACT=A;
                MAINTN{
                        NPA=806;
                        NXX=325;
                        LINE=4900;
                }
                CUST=DELIA;
                SA{
                        SAGA=KING;
                        ADDR{
                                BADR{
                                        BAD=10017;
                                        STR=CARISSA CIR;
                                        CNA=EARTH POLE;
                                        STN=SR;
                                }
                        }
                }
                SERVICE=C;
                CONFIRM=Y;
        }
        RETINV{
                TNI{
                        TNRNG{
                                NPA=806;
                                NXX=376;
```

```
                        LOLN = 4945;
                        HILN = 4949;
                }
        }
    }
}%
*TNIR{
    REC{
        CTL{
            TNACT = S;
            TNRC = 104;
        }
        ACL{
            UNSPTN{
                NUMTN = 5;
                CON = Y;
                ALLTN = N;
            }
        }
        UNSPTNINFO{
            TNS{
                TNRG{
                    NPA = 806;
                    NXX = 699;
                    LOLN = 1005;
                    HILN = 1009;
                }
            }
            NUMSEL = 5;
            CLLI = LTRYSRRP001;
            SERVICE = C;
            CTX = XY;
        }
    }
}%
```

E.1.2.21 Service Specification - Request Message

```
*C1 = SVCSPC911113102156        ULBB1  SNS          CU  0;%
*PLHDR{
        USERID = TKSMD04;
}%
*SNSHDR{
        ECHO = SERVICE SPECIFICATION WITH 2 ORDERS;
        IDATE{ MONTH = 11; DAY = 13; YEAR = 1991; }
        ITIME{ HOUR = 12; MIN = 35; SEC = 22; }
}%
*SVCSPEC{
        REC{
                ID{
                        ORDID{
                                ORDTYP = C;
                                ORDNUM = 123456;
                        }
                }
                ORDPASS = PRE;
        }
        REC{
                ID{
                        ORDID{
                                ORDTYP = C;
                                ORDNUM = 987654;
                        }
                }
                ORDPASS = PRE;
        }
}%
```

E.1.2.22 Service Specification - Response Message

```
*C2= SVCSPC911113102156        SNS    ULBB1        CS 0;%
*PLHDR{
        USERID=TKSMD04;
}%
*SNSHDR{
        ECHO=SERVICE SPECIFICATION WITH 2 ORDERS;
        IDATE{ MONTH=11; DAY=13; YEAR=1991; }
        ITIME{ HOUR=12; MIN=35; SEC=22; }
        DATE{ YEAR=1991; MONTH=11; DAY=13; }
        TIME{ HOUR=11; MIN=35; SEC=23; }
}%
*SVCSPEC{
        REC{
                CTL{
                        SSRC=101;
                }
                ID{
                        ORDID{
                                ORDTYP=C;
                                ORDNUM=123456;
                        }
                }
                ORDPASS=PRE;
        }
        REC{
                CTL{
                        SSRC=101;
                }
                ID{
                        ORDID{
                                ORDTYP=C;
                                ORDNUM=987654;
                        }
                }
                ORDPASS=PRE;
        }
}%
```

E.1.2.23 Order Completion - Request Message

```
*C1 = ORDCMP                SOP    SNS          CU  0;%
*PLHDR{
        USERID = TKSMD02;
}%
*SNSHDR{
        ECHO = ORDER COMPLETION WITH TN FORMAT ERROR;
        IDATE{ MONTH = 11; DAY = 17; YEAR = 1991; }
        ITIME{ HOUR = 12; MIN = 35; SEC = 22; }
}%
*ORD{
        ORDID{
                ORDTYP = C;
                ORDNUM = 123456;
        }
        ORDPASS = PCN;
}%
*TNL{
        REC{
                CTL{
                        CTC = B;
                }
                ACL{
                        ACT = N;
                        TN{
                                NPA = 806;
                                NXX = 376;
                        }
                }
        }
        REC{
                CTL{
                        CTC = B;
                }
                ACL{
                        ACT = N;
                        TN{
                                NPA = 806;
                                NXX = 376;
                                LINE = 4992;
                        }
                }
        }
        REC{
                CTL{
                        CTC = B;
                }
                ACL{
                        ACT = N;
                        TN{
```

```
                                NPA = 806;
                                NXX = 376;
                                LINE = 4993;
                        }
                }
        }
}%
```

E.1.2.24 Order Completion - Unsuccessful Response Message

```
*C2= ORDCMP911113102156        SNS    ORDERERR      CS 0;%
*PLHDR{
        USERID=TKSMD02;
}%
*SNSHDR{
        ECHO=ORDER COMPLETION WITH TN FORMAT ERROR;
        IDATE{ MONTH=11; DAY=17; YEAR=1991; }
        ITIME{ HOUR=12; MIN=35; SEC=22; }
        DATE{ MONTH=11; DAY=17; YEAR=1991; }
        TIME{ HOUR=12; MIN=35; SEC=23; }
}%
*ORD{
        ORDID{
                ORDTYP=C;
                ORDNUM=123456;
        }
        ORDPASS=PCN;
}%
*TNL{
        REC{
                CTL{
                        CTC=B;
                        TNRC=102-1;
                }
                ACL{
                        ACT=N;
                        TN{
                                NPA=806;
                                NXX=376;
                        }
                }
        }
        REC{
                CTL{
                        CTC=B;
                }
                ACL{
                        ACT=N;
                        TN{
                                NPA=806;
                                NXX=376;
                                LINE=4992;
                        }
                }
        }
        REC{
                CTL{
                        CTC=B;
                }
```

```
                ACL{
                        ACT = N;
                        TN{
                                NPA = 806;
                                NXX = 376;
                                LINE = 4993;
                        }
                }
        }
}%
```

E.1.2.25 Hold - Request Message

```
*C1= HOLDSR911113102156        ULBB1  SNS          CU 0;%
*PLHDR{
        USERID=TKSMD04;
}%
*SNSHDR{
        ECHO=HOLD SERVICE REQUEST IN SNS;
        IDATE{ MONTH=11; DAY=13; YEAR=1991; }
        ITIME{ HOUR=04; MIN=25; SEC=11; }
}%
*HOLD{
        ANYAGG{
                ANYTAG=ANYVALUE;
        }
}%
```

E.1.2.26 Hold - Response Message

```
*C2= HOLDSR911113102156        SNS    ULBB1        CS 0;%
*PLHDR{
        USERID=TKSMD04;
}%
*SNSHDR{
        ECHO=HOLD SERVICE REQUEST IN SNS;
        IDATE{ MONTH=11; DAY=13; YEAR=1991; }
        ITIME{ HOUR=04; MIN=25; SEC=11; }
        DATE{ YEAR=1991; MONTH=11; DAY=13; }
        TIME{ HOUR=10; MIN=30; SEC=42; }
}%
```

E.1.2.27 Retrieve - Request Message

```
*C1 = RTRVSR911113102156        ULBB1  SNS          CU  0;%
*PLHDR{
        USERID = TKSMD04;
}%
*SNSHDR{
        ECHO = RETRIEVE SERVICE REQUEST;
        IDATE{ MONTH = 11; DAY = 13; YEAR = 1991; }
        ITIME{ HOUR = 14; MIN = 25; SEC = 11; }
}%
*RSRD{
        CTL{
           OFFHOLD = Y;
        }
}%
```

E.1.2.28 Retrieve - Response Message

```
*C2 = RTRVSR911113102156        SNS    ULBB1        CS  0;%
*PLHDR{
        USERID = TKSMD04;
}%
*SNSHDR{
        ECHO = RETRIEVE SERVICE REQUEST;
        IDATE{ MONTH = 11; DAY = 13; YEAR = 1991; }
        ITIME{ HOUR = 14; MIN = 25; SEC = 11; }
        DATE{ YEAR = 1991; MONTH = 11; DAY = 13; }
        TIME{ HOUR = 10; MIN = 34; SEC = 47; }
}%
*SRDR{
        CTL{
                OFFHOLD = Y;
                RVRC = 001;
        }
}%
*HOLD{
        ANYAGG{
                ANYTAG = ANYVALUE;
        }
}%
```

E.2 System Administration Table Maintenance Contract Examples

The table maintenance contract examples shown in this section are organized into subsections based on table maintenance contract type.

E.2.1 TNLIST Maintenance Contract Examples

This section contains examples of the different types of TNLIST Maintenance contracts that may be submitted to SNS.

E.2.1.1 Build a CTX GROUP

```
*RGRP{
        REC{
                CTL{
                        CTC = B;
                        MODE = MAINT;
                }
                ACL{
                        ACT = N;
                        TIECODE = NYNY0000010;
                        GROUP{
                                CLLI = LTRYSRRP001;
                                CTX = 9244900P001;
                                MAINTN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1900;
                                }
                                GRPTYP = RC;
                                INTCPT = DTC;
                                LISTTHRS = 10;
                                RCDATA{
                                        PIC = ATT;
                                        LCC = J34;
                                        CAT = 21;
                                }
                        }
                }
        }
}%
```

E.2.1.2 Inquire Against a TIECODE (Return All CTX Groups)

```
*RGRP{
        REC{
                CTL{
                        CTC=I;
                }
                ACL{
                        TIECODE=NYNY0000010;
                }
        }
}%
```

E.2.1.3 Inquire Against a Specific CTX Group

```
*RGRP{
        REC{
                CTL{
                        CTC=I;
                }
                ACL{
                        GROUP{
                                CLLI=LTRYSRRP001;
                                CTX=9244900P001;
                        }
                }
        }
}%
```

E.2.1.4 Inquire Against a Specific Main TN

```
*RGRP{
        REC{
                CTL{
                        CTC = I;
                }
                ACL{
                        GROUP{
                                MAINTN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1900;
                                }
                        }
                }
        }
}%
```

E.2.1.5 Delete a Customer (Remove All CTX Groups)

```
*RGRP{
        REC{
                CTL{
                        CTC = R;
                        ALLSTAT = Y; (Delete all associated TNs regardless of status)
                }
                ACL{
                        TIECODE = NYNY0000010;
                }
        }
}%
```

E.2.1.6 Delete a Specific CTX Group (Remove the Entire Group)

```
*RGRP{
        REC{
                CTL{
                        CTC = R;
                        ALLSTAT = N; (Do not delete if associated TN status = SL)
                }
                ACL{
                        GROUP{
                                CLLI = LTRYSRRP001;
                                CTX = 9244900P001;
                        }
                }
        }
}%
```

E.2.1.7 Delete a Specific Main TN (Remove All Associated TNs)

```
*RGRP{
        REC{
                CTL{
                        CTC = R; (Do not delete if associated TN status = SL)
                }
                ACL{
                        GROUP{
                                MAINTN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1900;
                                }
                        }
                }
        }
}%
```

E.2.1.8 Change a CTX Group Entry (OLD/NEW)

```
*RGRP{
        REC{
                CTL{
                        CTC = C;
                }
                ACL{
                        ACT = O;
                        TIECODE = NYNY0000010
                        GROUP{
                                CLLI = LTRYSRRP001;
                                CTX = 9244900P001;
                                GRPTYP = RC;
                                INTCPT = DTC;
                                LISTTHRS = 10;
                                RCDATA{
                                        PIC = AT&T;
                                        LCC = J34;
                                        CAT = R1;
                                }
                        }
                }
                ACL{
                        ACT = N;
                        TIECODE = NYNY0000010
                        GROUP{
                                CLLI = LTRYSRRP001;
                                CTX = 9244900P001;
                                MAINTN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1000;
                                }
                                GRPTYP = RC;
                                INTCPT = DTC;
                                LISTTHRS = 35;
                                RCDATA{
                                        PIC = ATT;
                                        LCC = Z15;
                                        CAT = 21;
                                }
                        }
                }
        }
}%
```

E.2.1.9 Replace CTX Group Entry (REPL)

```
*RGRP{
        REC{
                CTL{
                        CTC = C;
                }
                ACL{
                        ACT = R;
                        TIECODE = NYNY0000010
                        GROUP{
                                CLLI = LTRYSRRP001;
                                CTX = 9244900P001;
                                INTCPT = CTC;
                        }
                }
        }
}%
```

E.2.1.10 Build a TN Entry

```
*RMTN{
        REC{
                CTL{
                        CTC = B;
                        MODE = MAINT;
                }
                ACL{
                        ACT = N;
                        GROUP{
                                CLLI = LTRYSRRP001;
                                CTX = 9244900P001;
                        }
                        TNLIST{
                                NPA = 718;
                                NXX = 358;
                                LOLN = 1900;
                                HILN = 1950;
                                STAT = AV;
                                TYPE = Q;
                        }
                        TNLIST{
                                NPA = 718;
                                NXX = 358;
                                LOLN = 1951;
                                HILN = 1999;
                                STAT = SL;
                                TYPE = Q;
                                SUBTYP = BBB;
                        }
                }
        }
}%
```

E.2.1.11 Inquire Against All TN Entries Associated with a CTX Group (Return TN Ranges)

```
*RMTN{
        REC{
                CTL{
                        CTC = I;
                }
                ACL{
                        GROUP{
                                MAINTN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1900;
                                }
                        }
                }
        }
}%
```

E.2.1.12 Inquire Against TN Entries (Return Line Data)

```
*RMTN{
        REC{
                CTL{
                        CTC = I;
                }
                ACL{
                        GROUP{
                                CLLI = LTRYSRRP001;
                                CTX = 9244900P001;
                        }
                        TNLIST{
                                NPA = 718;
                                NXX = 358;
                                LOLN = 1900;
                                HILN = 1950;
                        }
                        TNLIST{
                                NPA = 718;
                                NXX = 358;
                                LOLN = 1951;
                                HILN = 1999;
                        }
                }
        }
}%
```

E.2.1.13 Delete All TN Entries Associated with a CTX Group

```
*RMTN{
        REC{
                CTL{
                        CTC = R;
                        ALLSTAT = Y;  (Delete regardless of TN status)
                }
                ACL{
                        GROUP{
                                MAINTN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1900:
                                }
                        }
                }
        }
}%
```

E.2.1.14 Delete Only a Range of Individual TNs

```
*RMTN{
        REC{
                CTL{
                        CTC = R; (Do not delete if TN status = SL)
                }
                ACL{
                        GROUP{
                                CLLI = LTRYSRRP001;
                                CTX = 9244900P001;
                        }
                        TNLIST{
                                NPA = 718;
                                NXX = 358;
                                LOLN = 1900;
                                HILN = 1950;
                        }
                }
        }
}%
```

E.2.1.15 Change a TN Entry (OLD/NEW)

```
*RMTN{
        REC{
                CTL{
                        CTC = C;
                }
                ACL{
                        ACT = O;
                        GROUP{
                                CLLI = LTRYSRRP001;
                                CTX = 9244900P001;
                        }
                        TNLIST{
                                NPA = 718;
                                NXX = 358;
                                LOLN = 1900;
                                HILN = 1950;
                                STAT = AV;
                                TYPE = Q;
                                SUBTYP = AAA;
                        }
                }
                ACL{
                        ACT = N;
                        GROUP{
                                CLLI = LTRYSRWK001;
                                CTX = 924490WK001;
                        }
                        TNLIST{
                                NPA = 718;
                                NXX = 358;
                                LOLN = 1900;
                                HILN = 1950;
                                SUBTYP = ZZZ;
                        }
                }
        }
}%
```

E.2.1.16 Replace a TN Entry (REPL)

```
*RMTN{
        REC{
                CTL{
                        CTC = C;
                }
                ACL{
                        ACT = R;
                        GROUP{
                                CLLI = LTRYSRRP001;
                                CTX = 9244900P001;
                        }
                        TNLIST{
                                NPA = 718;
                                NXX = 358;
                                LOLN = 1900;
                                HILN = 1950;
                                STAT = SL;
                                SUBTYP = MMM;
                        }
                }
        }
}%
```

E.2.1.17 Build a Series Completion Hunt (SCH) Group

```
*RSCH{
        REC{
                CTL{
                        CTC = B;
                        MODE = MAINT;
                }
                ACL{
                        ACT = N;
                        GROUP{
                                HTYP = RG;
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1900;
                                }
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1902;
                                }
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1904;
                                }
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1906;
                                }
                        }
                }
        }
}%
```

E.2.1.18 Inquire Against a SCH Group (Return the Entire SCH Group)

```
*RSCH{
        REC{
                CTL{
                        CTC = I;
                }
                ACL{
                        GROUP{
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1904;
                                }
                        }
                }
        }
}%
```

E.2.1.19 Delete a SCH Group (Must Use the PILOT_TN)

```
*RSCH{
        REC{
                CTL{
                        CTC = R;
                }
                ACL{
                        GROUP{
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1900;
                                }
                        }
                }
        }
}%
```

E.2.1.20 Change a SCH Group (OLD/NEW)

```
*RSCH{
        REC{
                CTL{
                        CTC = C;
                }
                ACL{
                        ACT = O;
                        GROUP{
                                HTYP = RG;
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1900;
                                }
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1902;
                                }
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1904;
                                }
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1906;
                                }
                        }
                }
                ACL{
                        ACT = N;
                        GROUP{
                                HTYP = CIR;
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1900;
                                }
```

```
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1902;
                                }
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1904;
                                }
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1906;
                                }
                        }
                }
        }
}%
```

E.2.1.21 Replace a SCH Group (REPL)

```
*RSCH{
        REC{
                CTL{
                        CTC = C;
                }
                ACL{
                        ACT = R;
                        GROUP{
                                HTYP = CIR;
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1900;
                                }
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1902;
                                }
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1904;
                                }
                                TN{
                                        NPA = 718;
                                        NXX = 358;
                                        LINE = 1906;
                                }
                        }
                }
        }
}%
```

E.2.2 Catalog Data Maintenance Contract Examples

E.2.2.1 Feature Catalog Inquiry

```
*C1 = INQCAT                ODS    SNS          U  0;%
*PLHDR{
        USERID = LYANG;
        LCLID = APP;
}%
*SNSHDR{
        IDATE{
                YEAR = 1991;
                MONTH = 09;
                DAY = 26;
        }
        ITIME{
                HOUR = 10;
                MIN = 01;
                SEC = 00;
        }
}%
*RCAT{
        REC{
                CTL{
                        CTC = I;
                        CATOPT = F;
                }
                ACL{
                        NETYP = 5ESS;
                        NEGEN = 4.2;
                        FTR = FEAT1;
                }
        }
}%
```

E.2.2.2 Feature Catalog Response

```
*C2= INQCAT910926100108        SNS    ODS          S 0;%
*PLHDR{
        USERID=LYANG;
        LCLID=APP;
}%
*SNSHDR{
        IDATE{
                YEAR=1991;
                MONTH=09;
                DAY=26;
        }
        ITIME{
                HOUR=10;
                MIN=01;
                SEC=00;
        }
        DATE{
                YEAR=1991;
                MONTH=09;
                DAY=26;
        }
        TIME{
                HOUR=10;
                MIN=01;
                SEC=08;
        }
}%
*CATR{
        REC{
                CTL{
                        CTC=I;
                        CATOPT=F;
                        CDRC=00505;
                }
                ACL{
                        NETYP=5ESS;
                        NEGEN=4.2;
                        FTR=FEAT1;
                }
```

```
                FEATDATA{
                        FGRP = GRP1;
                        GDESCR{
                                SERVICE = B;
                                DESC = BUSGRP1;
                        }
                        FTR = FEAT1;
                        FDESCR{
                                SERVICE = B;
                                DESC = BUSFEAT1;
                        }
                        ACTIND = Y;
                }
        }
}%
```

E.2.3 CPE Data Maintenance Contract Examples

E.2.3.1 CPE Inquiry (Request)

```
*C1 = INQCPE                ODS    SNS          U 0;%
*PLHDR{
        USERID = LYANG;
        LCLID = APP;
}%
*SNSHDR{
        IDATE{
                YEAR = 1991;
                MONTH = 09;
                DAY = 26;
        }
        ITIME{
                HOUR = 10;
                MIN = 01;
                SEC = 00;
        }
}%
*RCPE{
        REC{
                CTL{
                        CTC = I;
                }
                ACL{
                        CPEMAN = MANUF1;
                        CPEMOD = 12345;
                }
        }
}%
```

E.2.3.2 CPE Inquiry (Response)

```
*C2= INQCPE910926100108        SNS    ODS          S 0;%
*PLHDR{
        USERID=LYANG;
        LCLID=APP;
}%
*SNSHDR{
        IDATE{
                YEAR=1991;
                MONTH=09;
                DAY=26;
        }
        ITIME{
                HOUR=10;
                MIN=01;
                SEC=00;
        }
        DATE{
                YEAR=1991;
                MONTH=09;
                DAY=26;
        }
        TIME{
                HOUR=10;
                MIN=01;
                SEC=08;
        }
}%
*CPER{
        REC{
                CTL{
                        CTC=I;
                        CPRC=00508;
                }
                ACL{
                        CPEMAN=MANUF1;
                        CPEMOD=12345;
                }
                CPEDATA{
                        CPENAME=MANUFACTURER 1;
                        CPEREG=S12153458;
                        DIS=Y;
                        ONETOUCH=Y;
                        HKEY=N;
                        RKEY=Y;
                        NETYP=5ESS;
                }
        }
}%
```

E.2.4 Switch-Related Data Maintenance Contract Examples

E.2.4.1 Network Element Inquiry (Request)

```
*C1 = INQNED                ODS    SNS          U  0;%
*PLHDR{
        USERID = LYANG;
        LCLID = APP;
}%
*SNSHDR{
        IDATE{
                YEAR = 1991;
                MONTH = 09;
                DAY = 26;
        }
        ITIME{
                HOUR = 10;
                MIN = 01;
                SEC = 00;
        }
}%
*RNED{
        REC{
                CTL{
                        CTC = I;
                }
                ACL{
                        CLLI = CLLISWITCH1;
                }
        }
}%
```

E.2.4.2 Network Element Inquiry (Response)

```
*C2= INQNED910926100108        SNS    ODS          S 0;%
*PLHDR{
        USERID=LYANG;
        LCLID=APP;
}%
*SNSHDR{
        IDATE{
                YEAR=1991;
                MONTH=09;
                DAY=26;
        }
        ITIME{
                HOUR=10;
                MIN=01;
                SEC=00;
        }
        DATE{
                YEAR=1991;
                MONTH=09;
                DAY=26;
        }
        TIME{
                HOUR=10;
                MIN=01;
                SEC=08;
        }
}%
*NEDR{
        REC{
                CTL{
                        CTC=I;
                        NDRC=00501;
                }
                ACL{
                        CLLI=CLLISWITCH1;
                }
                NEDATA{
                        CLLI=CLLISWITCH1;
                        NETYP=5ESS;
                        NEGEN=4.2;
                        WC=WIRERCENTER1;
                        MXSCH=32;
                        MXSCHP=32;
                }
        }
}%
```

E.2.4.3 Switch Feature Exception (Request)

```
*C1 = INQNED                    ODS    SNS          U  0;%
*PLHDR{
        USERID = LYANG;
        LCLID = APP;
}%
*SNSHDR{
        IDATE{
                YEAR = 1991;
                MONTH = 09;
                DAY = 26;
        }
        ITIME{
                HOUR = 10;
                MIN = 01;
                SEC = 00;
        }
}%
*RXCP{
        REC{
                CTL{
                        CTC = I;
                }
                ACL{
                        CLLI = CLLISWITCH2;
                }
        }
}%
```

E.2.4.4 Switch Feature Exception (Response)

```
*C2= INQNED910926100108        SNS    ODS          S 0;%
*PLHDR{
        USERID=LYANG;
        LCLID=APP;
}%
*SNSHDR{
        IDATE{
                YEAR=1991;
                MONTH=09;
                DAY=26;
        }
        ITIME{
                HOUR=10;
                MIN=01;
                SEC=00;
        }
        DATE{
                YEAR=1991;
                MONTH=09;
                DAY=26;
        }
        TIME{
                HOUR=10;
                MIN=01;
                SEC=08;
        }
}%
*XCPR{
        REC{
                CTL{
                        CTC=I;
                        FERC=00507;
                }
                ACL{
                        CLLI=CLLISWITCH2;
                }
                XCPDATA{
                        FTR=FEAT1;
                        SVC{
                                SERVICE=B;
                                FTRDES=BUS FEAT1;
                        }
                        SVC{
                                SERVICE=R;
                                FTRDES=RES FEAT1;
                        }
                }
```

```
                XCPDATA{
                        FTR = FEAT2;
                        SVC{
                                SERVICE = R;
                                FTRDES = RES FEAT2;
                        }
                }
        }
}%
```

E.2.4.5 Feature Package Inquiry (Request)

```
*C1 = INQFPK                ODS    SNS          U 0;%
*PLHDR{
        USERID = NPATEL;
        LCLID = APP;
}%
*SNSHDR{
        IDATE{
                YEAR = 1991;
                MONTH = 09;
                DAY = 26;
        }
        ITIME{
                HOUR = 10;
                MIN = 01;
                SEC = 00;
        }
}%
*RFPK{
        REC{
                CTL{
                        CTC = I;
                }
                ACL{
                        PROD = PLEXARI;
                        NETYP = 5ESS;
                        NEGEN = 4.2;
                        FPKG = STANDARD PACKAGE I;
                }
        }
}%
```

E.2.4.6 Feature Package Inquiry (Response)

```
*C2= INQFPK910926100108        SNS    ODS          S 0;%
*PLHDR{
        USERID=NPATEL;
        LCLID=APP;
}%
*SNSHDR{
        IDATE{
                YEAR=1991;
                MONTH=09;
                DAY=26;
        }
        ITIME{
                HOUR=10;
                MIN=01;
                SEC=00;
        }
        DATE{
                YEAR=1991;
                MONTH=09;
                DAY=26;
        }
        TIME{
                HOUR=10;
                MIN=01;
                SEC=08;
        }
}%
*FPKR{
        REC{
                CTL{
                        CTC=I;
                        FPROC=00503;
                }
                ACL{
                        PROD=PLEXARI;
                        NETYP=5ESS;
                        NEGEN=4.2;
                        FPKG=STANDARD PACKAGE I;
                }
                PRODUCT{
                        PROD=PLEXARI;
                        NETYP=5ESS;
                        NEGEN=4.2;
                        FPDATA{
                                FPKG=STANDARD PACKAGE I;
                                SERVICE=C;
                                FEATURE{
                                        FTR=CPU;
                                        OPT=N;
```

```
                                DESC{
                                        SERVICE = C;
                                        FTRDES = CALL PICKUP;
                                }
                        }
                        FEATURE{
                                FTR = CFW;
                                OPT = Y;
                                DESC{
                                        SERVICE = C;
                                        FTRDES = CALL FORWARDING;
                                }
                        }
                }
        }
}%
```

E.2.4.7 Feature Group Inquiry (Request)

```
*C1 = INQCAT                ODS    SNS          U  0;%
*PLHDR{
        USERID = LYANG;
        LCLID = APP;
}%
*SNSHDR{
        IDATE{
                YEAR = 1991;
                MONTH = 09;
                DAY = 26;
        }
        ITIME{
                HOUR = 10;
                MIN = 01;
                SEC = 00;
        }
}%
*RCAT{
        REC{
                CTL{
                        CTC = I;
                        CATOPT = G;
                }
                ACL{
                        NETYP = 5ESS;
                        NEGEN = 4.2;
                        FGRP = GRP1;
                }
        }
}%
```

E.2.4.8 Feature Group Inquiry (Response)

```
*C2= INQCAT910926100108        SNS    ODS          S 0;%
*PLHDR{
        USERID=LYANG;
        LCLID=APP;
}%
*SNSHDR{
        IDATE{
                YEAR=1991;
                MONTH=09;
                DAY=26;
        }
        ITIME{
                HOUR=10;
                MIN=01;
                SEC=00;
        }
        DATE{
                YEAR=1991;
                MONTH=09;
                DAY=26;
        }
        TIME{
                HOUR=10;
                MIN=01;
                SEC=08;
        }
}%
*CATR{
        REC{
                CTL{
                        CTC=I;
                        CATOPT=G;
                        CDRC=00504;
                }
                ACL{
                        NETYP=5ESS;
                        NEGEN=4.2;
                        FGRP=GRP1;
                }
                FGRPDATA{
                        FGRP=GRP1;
                        GDESCR{
                                SERVICE=B;
                                DESC=BUSGRP1;
                        }
                }
        }
}%
```

E.2.4.9 Feature Name Inquiry (Request)

```
*C1 = INQCAT                ODS    SNS          U 0;%
*PLHDR{
        USERID = LYANG;
        LCLID = APP;
}%
*SNSHDR{
        IDATE{
                YEAR = 1991;
                MONTH = 09;
                DAY = 26;
        }
        ITIME{
                HOUR = 10;
                MIN = 01;
                SEC = 00;
        }
}%
*RDES{
        REC{
                CTL{
                        CTC = I;
                }
                ACL{
                        NETYP = 5ESS;
                        TAGTYP = F;
                        TAGID = FEAT1;
                }
        }
}%
```

E.2.4.10 Feature Name Inquiry (Response)

```
*C2= INQCAT910926100108        SNS     ODS          S 0;%
*PLHDR{
        USERID=LYANG;
        LCLID=APP;
}%
*SNSHDR{
        IDATE{
                YEAR=1991;
                MONTH=09;
                DAY=26;
        }
        ITIME{
                HOUR=10;
                MIN=01;
                SEC=00;
        }
        DATE{
                YEAR=1991;
                MONTH=09;
                DAY=26;
        }
        TIME{
                HOUR=10;
                MIN=01;
                SEC=08;
        }
}%
*DESR{
        REC{
                CTL{
                        CTC=I;
                        DDRC=00506;
                }
                ACL{
                        NETYP=5ESS;
                        TAGTYP=F;
                        TAGID=FEAT1;
                }
                NAMES{
                        TAGID=FEAT1;
                        DESCR{
                                SERVICE=B;
                                DESC=BUSFEAT1;
                        }
                }
        }
}%
```

F. Appendix F — Guide to Acronyms

AIN	Advanced Intelligent Network
BAE	Bellcore Application Environment
BCC	Bellcore Client Company
CAT	Centrex Access Treatment
CCF	Customized Calling Feature
CMT	Communication Terminal Table
CPU	Central Processing Unit
DAR	Data Access Routines
DASD	Direct Access Store Device
DBA	Database Administrator
DBD	Database Definition
DBMS	Database Management System
DBRC	Database Recovery Control
DBRM	Database Request Modules
DCL	Data Control Language
DDL	Data Definition Language
DPS	Display Processing System
FC	Functional Component
FCIF	Flexible Computer Interface Form
FID	Field Identifier
GOT	Generic Output Translator
GTS	Generic Table System
HDAM	Hierarchic Direct Access Method
IMP	Immediate Message Poster
IMS	Information Management System
ISDN	Integrated Services Digital Network
I/O	Input/Output
JCL	Job Control Language
LCC	Line Class Codes
LFACS	Loop Facilities Assignment and Control System
MVP	Multi-Variety Package
NMAG	Network Marketing Area Guide
ORT	Output Routing Table
PLBB	Processing Layer Building Block
PREMIS	Premises Information System
PSB	Program Specification Block
RAA	Root Addressable Area

RAP	Root Anchor Points
RBA	Relative Byte Address
RCU	Recent Change USOCs
RMF	Resource Measurement Facility
SAC	Service Activation Controller
SNS	Service Negotiation Support
SOE	Standard Operating Environment
SOP	Service Order Processor
SQL	Structured Query Language
STOGRP	Storage Group
TCIS	Telecommunications Interface System
TN	Telephone Number
TNLIST	Telephone Number List
TTS	TIRKS Table System
ULBB	User Layer Building Block
USOC	Universal Service Order Code
VSAM	Virtual Sequential Access Method
VTOC	Volume Table of Contents